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Regulatory arrangements for East West Cable One Ltd's two proposed GB-Irish electricity interconnectors

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Target audience: This document will be of interest to electricity generators, interconnector owners and operators, suppliers, customers and other interested parties.

Overview:

East West Cable One Limited ("EWC") has been granted two electricity interconnector licences by the Gas and Electricity Markets Authority (the "Authority"), authorising it to participate in the operation of two interconnectors between the Republic of Ireland and GB. EWC has applied for a full exemption from the application of rules relating to third party access and use of revenue requirements for each interconnector. These requirements are set out in standard licence conditions 9, 10 and 11 of the electricity interconnector licence and Article 6(6) of Regulation (EC) No. 1228/2003 (the "Regulation").

This document requests views on Ofgem's assessment of EWC's reasons for requesting an exemption and our initial view that EWC should be granted an exemption from the application of rules relating to third party access and use of revenue requirements for each licensed interconnector.

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Context

The Authority has the ability to grant licences to electricity interconnector operators under the Electricity Act 1989. The Authority can also exempt interconnector operators from regulatory requirements to offer terms for third party access and obtain regulatory approval for their charging methodologies (the regulated Third Party Access or "rTPA" requirements). The Authority can also exempt interconnector operators from regulatory requirements on use of revenue.

East West Cable One Limited (EWC), formerly Imera Power Limited, applied to the Authority for electricity interconnector licences in relation to two proposed interconnectors. Two interconnector licences were granted to EWC on 20 November 2007. The first licence was granted in relation to a 350MW interconnector between Arklow in the Republic of Ireland and Pentir in Wales (EW1). The second licence was granted in relation to a 350MW interconnector between Great Island in Co. Wexford in the Republic of Ireland and Pembroke in Wales (EW2).

The licence application was accompanied by a request for an exemption from the rTPA and use of revenue requirements. As the interconnectors will connect the transmission systems in Great Britain and the Republic of Ireland, EWC has also applied to the Irish Commission for Energy Regulation (CER) to obtain the relevant exemption under Irish law.

This consultation document outlines the criteria that EWC must satisfy in order for such an exemption to be granted. The document also outlines the evidence provided by EWC in its application in support of its view that it should be granted an exemption for both proposed interconnectors and Ofgem's views in this respect. Finally, this consultation document seeks views from interested parties on Ofgem's initial view that both exemptions should be granted.

Associated Documents

- Imera Limited. Application for EU Exemption. April 2008. www.ofgem.gov.uk
- LNG facilities and interconnectors, EU legislation and regulatory regime, DTI/Ofgem final views', DTI/Ofgem, November 2003. http://128.86.236.113/temp/ofgem/cache/cmsattach/5158_LNG_facilities_interconnters_EU_legis_reg_25nov03.pdf?wtfrom=/ofgem/whats-new/archive.jsp
- Imera Request for Exemption from EU Third Part Access Rules, 20 June 2008. CER. www.cer.ie

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Summary

The purpose of this document is to invite views from interested parties on Ofgem's initial view that an exemption from regulated third party access (rTPA) and use of revenue requirements should be granted to EWC in relation to two electricity interconnectors between GB and the Republic of Ireland.

Background

EWC submitted a formal application to the Authority for two electricity interconnector licences between Wales and the Republic of Ireland; these licences were granted on 20 November 2007 (the licences).

As part of its licence application, EWC submitted an application for an exemption from rTPA and use of revenue obligations. In its application, EWC provided details as to why it believes its project satisfies the criteria for such an exemption.

Given that the interconnectors will connect GB and the Republic of Ireland, EWC has also applied for an exemption to the relevant Irish regulatory authority, the Commission for Energy Regulation (CER). Ofgem is maintaining close contact with CER and the European Commission with respect to EWC's application (both national regulators must agree a final view on the exemption application).

On 19 July 2007 CER issued an initial consultation on EWC's application for an exemption. CER's initial view was that all the relevant exemption criteria were met and that CER was minded to "consider favourably EWC's request for exemption from the full application of EU rules for third party access for the two DC interconnectors it is planning to develop." Following the provision of an updated application from EWC, CER has published a further consultation[1] on its view that EWC should be granted an exemption for both interconnectors.

Under Article 7(5) of the Regulation, the Commission may, within two months after receiving notification of a decision to grant an exemption, request the relevant authority to amend or withdraw its decision. This two month period may be extended by one additional month where further information is sought by the Commission.

Ofgem's views

Following careful consideration of EWC's application we outline, in this document, our initial view that EWC's application meets all of the relevant criteria for an exemption under Article 7(1) of the Regulation and SLC 12(6) of the licence. The Authority is

[1] Imera Request for Exemption from EU Third Part Access Rules, 20 June 2008. www.cer.ie

therefore minded to grant such an exemption for both the EW1 and EW2 interconnectors.

Based on our analysis, we believe that this project will have an overall positive impact on competition in the GB electricity supply and generation markets, and the internal electricity market; and will improve security and diversity of electricity supply in GB. We consider that the proposed interconnectors will deliver real benefits for customers in connected markets by increasing competition and driving down prices. As a result of the level of competition in the relevant markets and the capacity allocation arrangements that EWC intends to put in place, we do not consider that the granting of an exemption will erode these benefits.

Way forward

We invite views on EWC's exemption application and on Ofgem's initial views on the application. Once we have received and considered respondents' views, we will issue a conclusions document setting out our decision. Our decision will be coordinated with that of the Irish authorities.

If we decide to grant an exemption, our decision will be sent to the European Commission who may request the relevant authority to amend or withdraw its decision.

1. Introduction

Chapter Summary

This chapter outlines the background to EWC's project to construct two interconnectors between GB and the Republic of Ireland and relevant market developments. It also outlines the structure of the remainder of this document and provides a way forward.

Question box

Question 1:
Do you agree with our proposal to treat the EW1 and EW2 interconnectors as a single project for the purpose of our evaluation of the exemption criteria?

The application

1.1. Ofgem has granted EWC[2] two interconnector licences to construct interconnectors between the Irish and GB electricity transmission systems.

1.2. As part of the licence applications EWC also submitted an application for an exemption from the rTPA and use of revenue requirements for each of the interconnectors. This original application has been modified as further information has come to light. A non-confidential version of the application is available on the Ofgem website[3].

1.3. EWC is seeking an exemption from the rTPA and use of revenue requirements for a period of 25 years for East-West Interconnector One (EW1) and a period of 20 years for East-West Interconnector Two (EW2).

1.4. EWC noted in its application that, since the interconnectors span two jurisdictions, exemptions in both Great Britain and the Republic of Ireland are necessary to make the project viable. For this reason, we have been liaising closely with the Irish authorities with respect to the process they are following for assessing the exemption application.

[2] Both interconnector licences were granted to Imera Power Ltd. Imera Power Ltd has (from 7 March 2008) changed its name to East West Cable One Ltd (EWC).
[3] Imera Ltd - Application for EU Exemption. April 2008. A public version can be found on the Ofgem website www.ofgem.gov.uk

The Project

1.5. EWC is proposing to build two high voltage DC electricity cables between GB and the Republic of Ireland. EW1 will connect at Pentir, Bangor in North Wales and at Arklow, Co. Wicklow in the Republic of Ireland. EW2 will connect at Pembroke in South Wales and Great Island in Co. Wexford in the Republic of Ireland. EWC has indicated that each interconnector will have a total capacity of 350MW, giving a total capacity of 700MW for the project[4].

1.6. EWC is a limited company incorporated in the Republic of Ireland. EWC is owned by Imera Ltd (35%) and Imera Holdings (65%). Further information on the company structure is set out in Chapter 3.

1.7. EWC has stated that it does not intend to buy or sell power itself, but instead it intends to build, own and operate both interconnectors. EWC intends to allocate all interconnector capacity on a long term basis with capacity offered for sale on long term contracts (i.e. with minimum term bids of 10 years).

1.8. EWC has stated that it will facilitate a secondary market for capacity trading through the establishment of an electronic bulletin board system. Parties will also have the option of using the electronic bulletin board to post offers to buy and sell capacity units.

1.9. EWC has also indicated that, in order to ensure the efficient use of the interconnector and to prevent capacity hoarding, all capacity contracted will be subject to Use-it-or-lose-it (UIOLI) provisions.

1.10. EWC has stated that, subject to the relevant exemptions being obtained, it is due to start construction of the interconnectors during 2008. It hopes to commence the operation of EW1 in 2010 and EW2 in 2011.

Consideration by Ofgem of EW1 and EW2 as a single project

1.11. As noted above, EWC applied for separate interconnector licences for EW1 and EW2 and these have been granted by Ofgem. Should exemptions be granted, it is necessary to issue them separately under each interconnector licence granted.

1.12. Given that separate licences have been granted, it could be argued that each interconnector should be considered as a separate project and therefore should be independently assessed to determine whether they should each be granted an exemption.

[4] Further information concerning the details of the proposed interconnectors is contained in EWC's application document.

1.13. However, EWC has stated that it considers EW1 and EW2 to be part of a single project (i.e. in terms of financing and tendering) under which both interconnectors will be constructed. For example, EWC has confirmed that the construction contract has been awarded on the basis that they will cover both interconnectors. We have therefore conducted our analysis of whether the exemption criteria has been met (set out in Chapter 3) by treating the investment in EW1 and EW2 as a single interconnection project rather than as two separate projects. We would welcome views on this approach.

1.14. In the event that the exemptions were to be granted, this would be done on the basis of the information provided by EWC in its application and further analysis undertaken by Ofgem. If there was a change to the commitments that EWC has provided in its application, or if there was any change to the information and data provided by EWC as part of its explanation as to how it meets the relevant criteria, this could be grounds for the Authority to review and potentially revoke the exemptions. For example, were only one of the interconnectors to subsequently be constructed, Ofgem would review the basis upon which the exemption had been granted and consider whether the exemption should be revoked or amended.

Market developments

1.15. Currently there is a single electricity interconnector (Moyle) which connects Scotland with Northern Ireland (NI). The Moyle interconnector has a technical 500MW export capacity from Scotland to NI and an 80MW import capacity from NI to Scotland.

1.16. The Irish Government has set out its commitment to developing interconnection between GB and Ireland. Its initial preference was for a merchant interconnector and it requested CER to canvas the degree of interest among potential investors in such a merchant project. However, following extensive consultations through the Irish and international press, CER received no indication of practical commitment to a merchant project and concluded in June 2004 that the only realistic way to ensure delivery of an interconnector was through a regulated model (i.e. where there would be some commitment of financial support from regulated transmission use of system revenues to underpin the necessary scale of investment).

1.17. In September 2006 the Irish Government requested CER to arrange for the design of a tender for the construction of a 500MW DC interconnector between Ireland and GB to be owned by EirGrid[5]. CER has confirmed that work on this tender is well under way. The decision of the Irish Government to construct a single 500MW interconnector has been informed by a study commissioned by CER in 2003[6]. The interconnector (referred to in this document as the EirGrid interconnector) is

[5] EirGrid plc is the independent electricity Transmission System Operator (TSO) in the Republic of Ireland and the Market Operator in the wholesale electricity trading system.
[6] http://www.cer.ie/CERDocs/cer03140.pdf

scheduled to be commissioned in late 2011. We understand that this is regardless of whether the EWC interconnectors will be built and whether they have been granted exemptions.

1.18. The principal grounds on which CER has actively promoted interconnection between GB and Ireland are:

- to enhance security of supply;
- to foster competition in the electricity wholesale and retail supply markets;
- to enable the integration of Ireland into a wider regional energy market; and
- to facilitate the export potential of the indigenous renewable generators.

1.19. In November 2007 the Republic of Ireland and Northern Ireland[7] wholesale markets were linked through the Single Electricity Market (SEM) arrangements. This is a key part of the "All-Island Project". Work is also underway to increase the level of interconnection between these two markets[8].

1.20. Whilst the generation market in Ireland is relatively small at the moment[9], there are proposals to significantly increase its size, in particular through the development of wind power. For example, the Irish government has set a target that 33% of its generation should be met from renewable sources (the majority of which is expected from wind power) by 2020.

Document structure and approach

1.21. Chapter 2 of this document provides a summary of the legal framework for interconnection including the arrangements for granting exemptions from rTPA and use of revenue requirements.

1.22. Chapter 3 of this document provides further details on EWC's application, including its assessment of why it believes it meets the criteria for an exemption. This chapter also sets out Ofgem's analysis and our initial views on whether EWC meets the criteria for an exemption. We welcome comments on our assessment of EWC's application against the relevant requirements as outlined in Chapter 3 of this document.

[7] Whilst Northern Ireland is part of the UK, its electricity market arrangements are completely separate from that of GB.
[8] There is a 275kV AC interconnector between the Republic of Ireland and Northern Ireland and two 110kV AC interconnectors used for system support. A second interconnector is in the planning process and is expected to be commissioned by 2012.
[9] In Northern Ireland the generation capacity is 2.1GW, in the Republic of Ireland it is 6.7GW. The GB generation capacity is currently 76.3GW.

1.23. Chapter 4 set outs the terms and conditions of the proposed exemption, including the scope and duration.

1.24. The draft exemption orders can be found in Appendix 5 and 6.

Way forward

1.25. We would welcome views from interested parties regarding EWC's application and our initial views. Responses should be sent to gb.market@ofgem.gov.uk and should be received no later than 12 August 2008. Details of how to respond can be found in Appendix 1.

1.26. Based on our analysis of the issues and responses to the consultation we will publish a final decision on the proposal. If our view remains that the exemptions should be granted we will then notify the European Commission of our decision, which may request the Authority to amend or withdraw its decision.

2. Legal Framework

Chapter Summary

This chapter provides a summary of the legal and policy regime for granting exemptions from the regulated third party access (rTPA) and use of revenue requirements.

The EU Electricity Directive and Regulation

2.1. The Directive[10] and Regulation[11] introduced, amongst other things, an rTPA regime for interconnectors. These texts also established the way in which interconnectors could be exempt from that regime, as set out in more detail below.

2.2. The requirements of the Directive were implemented in Great Britain via the Energy Act 2004, which introduced a licensing regime for all electricity interconnectors. The Regulation is directly applicable in UK law.

2.3. On 18 March 2005, the Secretary of State determined the Standard Licence Conditions for electricity interconnector licences.[12] The rTPA requirements of the Directive are reflected in Standard Licence Conditions 10 ("Charging methodology to apply to third party access to the licensee's interconnector") and 11 ("Requirement to offer terms for the access to the licensee's interconnector").

2.4. Article 6(6) of the Regulation contains provisions in relation to the use of revenues resulting from the allocation of interconnection. These provisions are mirrored in Standard Licence Condition 9 of the electricity interconnector licence ("Use of revenues").

2.5. An exemption order may be granted under Standard Licence Condition 12 of the interconnector licence such that any or all of Conditions 9, 10 and 11 are not in effect or are suspended from operation, provided that the requirements set out in paragraph 6 of Standard Licence Condition 12 are met.

2.6. Exemption from the use of revenue provisions of the Regulation may be granted under Article 7(1) of the Regulation provided the conditions set out in that Article are

[10] Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity.
[11] Regulation No 1228/2003 of the European Parliament and of the Council of 26 June 2003 on conditions for access to the network for cross-border exchanges in electricity.
[12] Electricity Interconnector Licence: Standard Conditions, Energy Act 2004 Determination of Standard Licence Conditions for Electricity Interconnector Licences.

met. These conditions are mirrored in the requirements set out in paragraph 6 of Standard Licence Condition 12.

2.7. The criteria for granting an exemption in relation to rTPA and use of revenue, as detailed in paragraph 6 of Standard Licence Condition 12 and Article 7 (1) of the Regulation are set out below:

(a) the investment must enhance competition in electricity supply;

(b) the level of risk attached to the investment is such that the investment would not take place unless the exemption is granted;

(c) the interconnector must be owned by a natural or legal person which is separate at least in terms of its legal form from the system operators to whose systems that interconnector will be connected;

(d) charges are levied on users of that interconnector;

(e) since the partial market opening referred to in Article 19 of Directive 96/92/EC, no part of the capital or operating costs of the interconnector has been recovered from any component of charges made for the use of the transmission or distribution systems linked by the interconnector; and

(f) the exemption is not detrimental to competition or the effective functioning of the internal electricity market, or the efficient functioning of the regulated system to which the interconnector is connected.

DTI/Ofgem exemption policy

2.8. In June 2003, the DTI and Ofgem issued a joint consultation document concerning new EU regulations relating to LNG facilities and interconnectors.[13] In November 2003, the DTI and Ofgem issued their final views in this area.[14] The final views document, by and large, confirmed and clarified the position set out in the initial views document.

2.9. In the final views document, DTI and Ofgem identified three important features for an exempt regime in addition to fulfilling the criteria specified in Standard

[13] 'LNG facilities and interconnectors, EU legislation and regulatory regime, DTI/Ofgem initial views', DTI/Ofgem, June 2003.
[14] LNG facilities and interconnectors, EU legislation and regulatory regime, DTI/Ofgem final views', DTI/Ofgem, November 2003.
http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/5158_LNG_facilities_intercnters_EU_legis_reg_25nov03.pdf

Licence Condition 12 of the electricity interconnector licence or Article 6(6) of the Regulation:

- to initially offer capacity to the market (though this condition might be loosened under specific circumstances);
- to have effective secondary trading and anti-hoarding mechanisms to ensure that capacity at a facility is offered to the market and not hoarded[15]; and
- for information to be made available to the regulator and/or published[16].

EU Guidance on exemptions from certain provisions of the third party access regime

2.10. In January 2004, DG Energy & Transport issued a non-binding implementation note on Directives 2003/54-55 and Regulation 1228/03 in the electricity and gas internal market[17]. This note provides additional information as to how the criteria for granting the exemption can be evaluated and the type of information that would be required for such exemption to be granted.

[15] It should be noted that Standard Licence Condition 13 of the interconnector licence requires the licence holder to publish on its website open, transparent and non-discriminatory capacity allocation mechanisms. This licence condition also requires the licence holder to take all reasonable steps to allow and facilitate capacity rights to be freely tradable in a secondary market. We believe that this licence condition provides further regulatory control on ensuring that there is an effective secondary capacity trading mechanism in place. Any failure to comply with the provisions of the licence could lead to enforcement action by the Authority under the powers granted to it in the Electricity Act 1989.

[16] Under Standard Licence Condition 4 of the interconnector licence the licensee is required to provide the Authority with information that it may reasonably require which may be necessary for the purpose of the Authority carrying out its functions under the Electricity Act 1989, the Utilities Act 2000 or the Energy Act 2004.

[17] Note of DG Energy and Transport on Directives 2003/54-55 and regulation 1228\03 in the electricity and gas internal market - Exemptions from certain provisions of the third party access regime, 30.1.2004.

3. Assessment against exemption criteria

Chapter Summary

This chapter provides a summary of EWC's application for an exemption under Article 7 of the Regulation and SLC 12 of the interconnector licence. This chapter also sets out Ofgem's initial views on whether EWC meets the relevant criteria for such an exemption to be granted.

Question box

Question 1:
Do you agree with our overall assessment that the exemption should be granted based on the examination of whether the exemption criteria have been met?

3.1. This chapter summarises the evidence presented in EWC's application to demonstrate that it meets the conditions required for the granting of an exemption. Further details of EWC's assessment against each of the conditions are contained in EWC's application. In this chapter we also set out Ofgem's initial views on each of those conditions, on the basis of the arguments put forward by EWC as well as our own analysis. Views are sought from consultation respondents as to whether those conditions are met.

Condition (a) - Enhancing competition in electricity supply

3.2. Under condition (a) it must be demonstrated that "the investment in the interconnector enhances competition in electricity supply."

EWC's view

3.3. In its application EWC states that the construction of EW1 and EW2 between GB and the Republic of Ireland will provide the necessary link to enable UK and Irish generators to compete in an expanded market. As set out below, EWC considers that (regardless of any access issues), the proposed interconnectors will enhance competition in electricity supply.

3.4. EWC considers that the construction of the interconnectors will have considerable benefits in terms of security of supply, competitiveness and sustainability of the electricity markets in both GB and Ireland.

3.5. Specifically, EWC suggests that the interconnectors, which will be accessible by all market players in an open, transparent and non-discriminatory basis, will:

- promote new market entry through reduced barriers to entry in both connected markets;
- increase import/export limits and thus provide more competition options to the marketplace;
- exert a downward pressure on wholesale electricity prices;
- allow markets on both sides of the Irish Sea to have efficient economic access to existing and new generation sources (such as wind farms);
- improve regional electric reliability for both the east coast of Ireland and Wales;
- facilitate competition in balancing and ancillary services;
- promote the optimal allocation of generation resources;
- assist to reduce pollution, as efficient, cleaner power stations are more likely to be dispatched;
- assist in the development of a meaningful regional market; and
- enhance security of supply.

3.6. In addition, EWC noted that both Ireland and Wales have some of the largest potential renewable energy generation resources in Europe, but that without an increase in interconnector capacity many of these resources will remain untapped. EWC considers that the availability of interconnection capacity will greatly enhance the available market for renewable energy.

Ofgem's view

3.7. In its application EWC has pointed out a number of areas where it considers that the construction of EW1 and EW2 will enhance competition. In the following section we highlight the areas where we consider that the benefits will be most apparent.

Effects of increase in interconnection

3.8. Currently, the only electricity interconnection between the GB and the Irish market is via the Moyle interconnector.[18] [19]

3.9. We therefore agree with EWC that the construction of EW1 and EW2 will provide a necessary link to enable GB and Irish generators to compete in an expanded market. In particular, we note that Irish generators will be able to compete more effectively in the GB market and retailers in GB will be able to procure power in Ireland, thus enhancing the potential for competition in the electricity generation and supply markets. Similar effects will be observed in the Irish market, depending on which way the power flows. The increase in the ability for generators and retailers

[18] We note that before the introduction of the All Island SEM, participants looking to access the Republic of Ireland market would also need to have acquired capacity in the North/South Interconnector (i.e. the interconnection between the Republic of Ireland and Northern Ireland electricity markets).
[19] We note that there is also interconnection between the GB/Northern Ireland and GB/Republic of Ireland gas markets, the implications of which we discuss below.

from GB to compete in the Irish market should increase the level of liquidity in both the generation and supply market in Ireland, and vice versa with respect to the GB market. Whilst this type of trading does currently exist via the existing interconnection, we consider that the construction of EW1 and EW2 will significantly enhance these opportunities.

3.10. As noted by EWC, an important effect of the interconnectors will be the increase in access to renewable energy sources that might otherwise not be exploited. The interconnectors will also enhance security of supply in both GB and Ireland. We would expect electricity to flow to the market with the highest price. In times of system stress we would therefore consider that the EWC interconnectors would be an additional source of supply. This would help to make it more certain that all reasonable demands for electricity will be met.

3.11. We also note that the total capacity of EW1 and EW2 is greater than the size of the proposed 500MW EirGrid interconnector identified as the market requirement by the Irish government. On its own we therefore consider that the EWC proposal will increase the competition benefits of additional interconnection between the GB and Irish markets. If the EirGrid interconnector becomes operational as well, the amount of interconnection between the two markets will increase substantially.

Effect on prices

3.12. In its application, EWC noted that EW1 and EW2 would exert a downward pressure on wholesale prices.

3.13. Whilst we recognise the point made, we do not necessarily agree that prices would fall in both interconnected markets. We consider it more likely that the interconnectors should enable more efficient prices to be set in both markets, with a tendency for some convergence of marginal prices. Such an outcome will result from the fact that power should flow across the interconnectors from the market with the lower wholesale price to the market with the higher wholesale price. As a result the previously most expensive marginal plant running in the market with the higher price would no longer be required to operate for a given period in time. This plant would instead be replaced by a less expensive plant generating on the other side of the interconnector. This may result in the wholesale price in the exporting country increasing slightly, but it is likely to be a smaller increase than the fall in the price in the importing country, as a result of the relative positions of these two generating plants in the overall merit order. This could result in lower average prices overall. This effect will obviously be limited by the capacity of the interconnectors. In addition, the effect of reducing the requirement for the higher cost marginal plant to generate should result in less volatile prices.

Development of a regional market

3.14. The GB transmission system is currently linked to the French system via the IFA. In addition, a new interconnector, BritNed, which will link GB to the Dutch transmission system, is under construction.

3.15. The European Commission, ERGEG and other stakeholders have made clear their vision for the creation of a single European electricity market. It is anticipated that this single market will be reached via the interim step of the establishment and further development of regional markets that span national borders.

3.16. The construction of EW1 and EW2 will not only enhance links between GB and Ireland, but will strengthen the development of the France - Ireland - UK electricity region, which will, in turn, increase competition and security of supply.

Interactions with the gas interconnectors

3.17. As noted above, the GB and Irish gas markets are also interconnected. With respect to possible interactions with the gas interconnectors, in the past concerns have been raised regarding the potential for market participants to game across electricity and gas interconnectors that connect the same markets. By gaming we mean manipulation of the market, in this case access to gas, electricity generation and interconnector capacity, with the aim of benefitting from a change in prices.

3.18. In respect of the proposed interconnection between the GB and Irish markets, we consider that such a situation is unlikely to arise, as the set of circumstances which could result in such behaviour is limited.[20] However, we are aware of the risk of such behaviour and will use our monitoring and enforcement powers, alongside those of the Irish authorities, to seek to prevent such behaviour.[21]

3.19. If the Authority, either through its own market monitoring work or through communication from market participants, becomes aware of anti-competitive

[20] We consider that the following type of situation would need to arise for such behaviour to be possible:
1) Company A has capacity on the Bord Gais gas interconnector and reduces its flows across it;
2) the Bord Gais interconnector is the marginal source of gas and therefore of electricity generation.
3) These circumstances are likely to lead to an increase in the price of electricity in Ireland as more expensive gas would be required to meet generation requirements.
4) the electricity price in Ireland is higher than that in GB, such that electricity will be exported from GB;
5) Company A holds capacity on the EW1 interconnector;
6) Company A has spare generation in GB that it can export across the EW1 interconnector; and
7) Company A can benefit from selling generation at the higher price in Ireland.

[21] It should be noted that the Authority's principal objective is to protect consumers, where appropriate by promoting effective competition. The Authority has a duty to monitor the gas and electricity markets in order to further this objective and ensure that those markets operate in an efficient and economic manner. In order to assist it in this duty, the Authority may, in certain circumstances, require the provision of information under EWC's interconnector licences.

behaviour in these markets, then it has powers to investigate and, where necessary, take enforcement action, for example under the Competition Act 1998.

EWC participation in the market

3.20. EWC intends only to build, own and operate the interconnectors, the capacity of which will be made available to the Irish and GB markets via an open season type of auction process for long term contracts. EWC has no ties with any existing player in either the GB or Irish electricity markets, and has stated that it will not itself be involved in either the generation or supply markets in GB or Ireland.

Additional safeguards

3.21. Concerns that the proposed access arrangements and use of infrastructure may confer advantages to particular market players are further mitigated by the fact that EWC is intending to[22]:

- allocate access to interconnector capacity via an open season process;
- implement UIOLI arrangements. UIOLI aims to reduce the risk of capacity hoarding. To avoid the risk of undermining the rights of primary capacity holders, EWC is also seeking to introduce a secondary market for capacity trading via an electronic bulletin board system; and
- introduce information transparency rules in accordance with those in place on the IFA interconnector.

3.22. Any aspects or specific conditions of the marketing of the interconnection capacity auction which might, arguably, be detrimental to competition (e.g. one party acquiring too great a share of capacity) are dealt with under criterion (f) below.

3.23. Given the above, Ofgem believes that the EWC interconnectors will enhance competition in electricity supply and that criterion (a) is therefore met.

Condition (b): Risk

3.24. Under condition (b) it must be demonstrated that "the level of risk attached to the investment is such that the investment would not take place unless an exemption was granted".

[22] In addition SLC13 and other interconnector licence conditions will continue to apply as well as general competition law.

EWC's view

3.25. EWC states in its application that developing EW1 and EW2 is a major investment project that would cost €184 per customer if paid for by Irish customers. The project's capital and operating costs will be met from risk capital, without mandated guarantees of future use of system charges or other forms of bankable advance sales, other than those freely negotiated in the market. EWC, as project developer, is therefore building both interconnectors at its own risk.

3.26. EWC considers that the exemption is essential to allow it to earn a return commensurate with the risk that it is taking. EWC states that it will not be in a position to proceed with what it considers to be a necessary and strategically important interconnector if the exemption is not granted. This is because it considers that it would not be able to finance the investment.

3.27. In its application, EWC states that the range and level of risk it will undertake is considerable. It provides details of the five main risks that it considers it will be subject to. These risks are: construction and technical risks; environmental opposition; operational risk (e.g. supply and credit risk); competing project risk; and regulatory risk outside the scope of the exemption. EWC argues that the individual and combined magnitude of these risks is significant. Further details are set out in the EWC application document.

3.28. In its application, EWC stated that its motivation for seeking an exemption is "related to the commercial and regulatory risk of the project". In relation to the regulatory risk EWC noted that even though the proposed access regime is in line with the current rTPA regime, an exemption from this rTPA regime is necessary to eliminate the risk that it changes during the period of the exemption.

3.29. In addition, EWC has stated that in terms of the commercial risk of the project investors need the assurance that they will not just face the downside risks to project returns but will also benefit fully from the potential upside. EWC considers that if the interconnector was subject to Article 6(6), SLC 9 and the relevant provisions in Irish law there would be a danger that, if the interconnector is commercially successful, the returns to investors would be capped, if not entirely removed. However, if it is unsuccessful, there is no mechanism for compensating investors. EWC therefore considers that proceeding without an exemption would present too great a risk to be able to secure investment.

Ofgem's view

3.30. An exemption application can be considered in order to mitigate the level of risk associated with the project and facilitate the investment.

3.31. We note that there are significant risks associated with the project to build two interconnectors and recognise those that EWC has highlighted in its application for an exemption. We consider that, to a degree, the risks highlighted by EWC are applicable to all construction projects of this type, in particular in relation to

construction, technical and environmental risks. However, we also believe that there are certain aspects of this particular project that do make it more risky than other similar types of infrastructure build. These are discussed in detail below.

Price and project risk

3.32. One of the key risks related to this project results from price risk. Revenue predictions are made more complex by a lack of price discovery in the Irish market resulting from the lack of knowledge about the impact of the newly formed SEM in Ireland. Likely changes to the generation mix in Ireland, particularly with additional wind generation and replacement of oil by gas generation, are also likely to add to this uncertainty. The EWC interconnectors will also face competition from the proposed EirGrid interconnector development[23] should it be constructed. Given this uncertainty on future prices in the two connected markets and possible competition from EirGrid, potential arbitrage opportunities are more difficult to envisage, which in turn make potential revenues for the EWC interconnectors more difficult to predict.

3.33. This uncertainty over potential revenues for the interconnectors is likely to be manifested in year on year revenue differentials. That is, the potential revenues of the interconnectors associated with arbitrage opportunities are likely to fluctuate significantly between years, dependent as they will be on the wholesale prices and thus market conditions in both the GB and Irish markets.

3.34. To secure finance EWC wishes to sell long term capacity rights at the start of the project through an open season process[24]. Without this action to mitigate the project revenue risk, EWC indicates that the project will not be funded. We consider that this view is reasonable given the lack of price discovery in the newly formed All Island SEM and the risk to interconnector revenues from the competing development of the EirGrid interconnector. We also note the difficulties in raising credit in the current Global financial conditions. Long-term contracts should provide a degree of confidence in future revenue streams to support investment.

3.35. In order to be able to finance the project on a merchant basis we also agree with EWC's view that it is appropriate to be exempt from the regulatory use of revenue requirements until payback is reached, as set out in its financial analysis. This would allow investors to be rewarded should the revenue received exceed expectations. In this way investors as well as being exposed to the downside risk would be able to benefit from any upside in revenue returns.

[23] It should be noted that the analysis provided by EWC does not consider the scenario with EirGrid being built.
[24] In addition, for the duration of the exemption, EWC intends to re-sell long-term contracts when capacity contracts expire.

3.36. We therefore consider that, in this instance it is appropriate that an exemption be granted from the requirements of SLC 10 and 11 in relation to the interconnector access and charging methodology as well the SLC 9 use of revenue requirements.

Financial analysis

3.37. EWC has provided Ofgem, on a confidential basis, with a financial model which we have been informed will be used as the basis for securing its finance. We have conducted a review of the model. This analysis is separately undertaken for both EW1 and EW2 interconnectors. EWC has used this model to provide analysis of the anticipated project payback period.

3.38. On the basis of the financial model and payback analysis provided the project would appear to have considerable risk attached to it.

3.39. We consider that the financial information submitted provides an anticipated project payback period that is equal or greater than the requested duration of each exemption.

3.40. In conclusion, for the reasons stated above, Ofgem therefore considers that this criterion is met.

Condition (c): Ownership

3.41. It is a requirement of this condition that "the interconnector will be owned by a natural or legal person which is separate at least in terms of its legal form from the relevant system operators to whose systems that infrastructure will be connected".

EWC's view

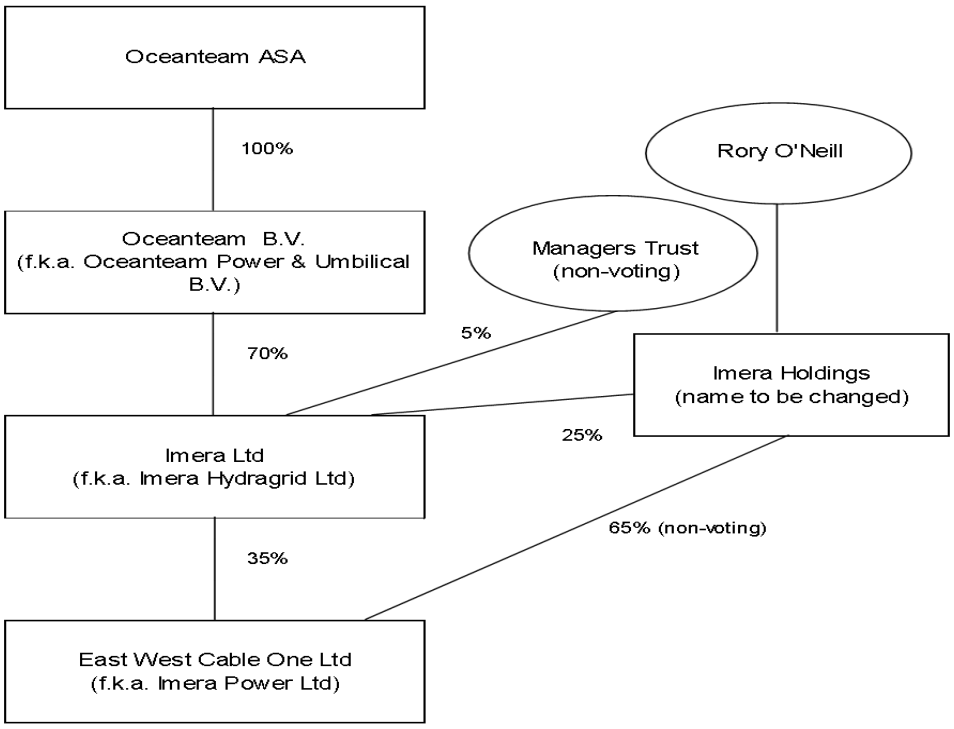
3.42. EWC will own both interconnectors (EW1 and EW2). EWC is a fully separate legal entity that is totally independent from the SOs in both the Republic of Ireland and GB.

Ofgem's view

3.43. Imera Ltd is an Irish limited company and the holding company of the Imera Group. Imera Ltd is a 70% owned subsidiary in the Oceanteam group. The company structure is illustrated in figure 1 below. EWC holds the interconnector licences for EW1 and EW2. EWC is owned by Imera Ltd (35%) and Imera Holdings (65%).

3.44. It is clear that the Imera Ltd, Imera Holdings and Oceanteam groups are fully independent from both SOs in both interconnected countries. Therefore, Ofgem's initial view is that this criterion is met.

Figure 1: Company Structure (Source: EWC)



3.45. We have been informed that a new company will be set up called East West Cable Two (EWC Two) and will be owned by Imera Ltd (35%) and Imera Holdings (65%). It is expected that a request to transfer the EW2 interconnector licence from EWC to this new company will be made. Once notified of such a request, Ofgem may agree to transfer the licence to the new company[25] and any exemption under the licence may also be transferred to the new company with the consent of the Authority (which will not be unreasonably withheld).

Condition (d): Charging

3.46. It is a requirement of this condition that "charges will be levied on users of the interconnector".

[25] In considering a request for the transfer of a licence the Authority is required under Section 7A(6) of the Electricity Act 1989 to apply the same criteria to the transferee as if it had applied for the licence in its own right. Where we are minded to give consent to a transfer, Section 7A(9) of the Electricity Act requires that the Authority consults on the proposal giving parties not less than two months to respond.

EWC's view

3.47. The East West interconnectors will be exclusively paid for by their users. Capacity will be reserved through an open season type of auction process. All of the capital investment and ongoing operational cost will be recovered through these mechanisms. No part of the EW1 or EW2 interconnector costs will be recovered through regulated transmission charges.

Ofgem's view

3.48. It is clear from EWC's application that charges will be levied on the users of the interconnectors; therefore, Ofgem's initial view is that this criterion is met.

Condition (e): Recovery of capital or operating costs

3.49. Under this condition it is a requirement that "since the partial opening referred to in Article 19 of Directive 96/92/EC, no part of the capital or operating costs of the interconnector has been recovered from any component of charges made for the use of transmission or distribution systems linked by the licensee's interconnector".

EWC's view

3.50. EWC has stated that no costs have been or will be recovered through use of system charges levied by a transmission or distribution system operator in either the Republic of Ireland or GB for either interconnector.

Ofgem's view

3.51. Ofgem's initial view is that this criterion is met. EW1 and EW2 are new interconnectors. It is therefore clear that no capital or operating costs of the interconnectors have been recovered from any charges made for the use of the transmission or distribution systems linked by the interconnectors.

Condition (f): Exemption is not detrimental

3.52. Under this condition it must be demonstrated that "the exemption is not detrimental to competition or the effective functioning of the internal electricity market, or the efficient functioning of the regulated system to which the interconnector is connected".

EWC's view

3.53. In setting out its view that the requested exemptions will not be detrimental to competition, EWC has highlighted its proposals for the allocation of capacity on the interconnector. Its proposed access regime, EWC considers, conforms with the

intention of the market access arrangements in the Congestion Management Guidelines, is non-discriminatory and is in-line with the rTPA regime.

3.54. In particular, EWC intends to fully allocate long-term capacity rights using an open season type of auction process. Under this process an independent third party will run the open season on behalf of EWC. Through the open season EWC intends to make capacity available to all market players on an open, transparent and non-discriminatory basis. Further details on the open season process that EWC intends to undertake is set out in its application.

3.55. On completion of the open season process EWC will publish a report that will include the identities of the parties that purchase capacity, the term and the amount of reserved capacity.

3.56. To mitigate any potential competition concerns EWC have indicated that, ESB (the largest player in the Irish market) will not be allowed to obtain more than 40% of the capacity on the EW1 & EW2 interconnectors. No other party will be allowed to obtain more than 70% of the capacity on the EW1 & EW2 interconnectors.

3.57. EWC intends to offer capacity rights with a reserve price through the open season. This reserve price will be reflective of operating costs, debt servicing requirements and a fair/reasonable rate of return. A reserve price is required, EWC argues, as the 700MW capacity of the project means that it will be less congested than had it decided to construct one 350MW interconnector. When an interconnector is not congested the auction to allocate capacity rights will not generate revenues. EWC argues that it will be incentivised to minimise the reserve price to ensure that there is demand for the use of capacity on both interconnectors.

3.58. To complement the open season initial capacity allocation, EWC intends to facilitate a secondary market.

3.59. EWC also intend to apply UIOLI it in the same way as the Moyle interconnector. They have indicated that are willing to discuss with the CER and Ofgem how this could be made more effective if concern were raised.

3.60. EWC has indicated that the arrangements that it will employ to allow capacity holders to trade between the SEM and GB markets will be based on those that are already used for the Moyle interconnector. It has also noted that it intends to introduce new and innovative services for those wanting to use the interconnector.

3.61. EWC has indicated that these arrangements will be in line with the provisions of the Congestion Management Guidelines. In its application, EWC states that it will comply with any future guidelines from the Commission, BERR or Ofgem as to how UIOLI or Use It Or Sell It (UIOSI) arrangements should best be put in place.

3.62. EWC has further confirmed that it will enter in to all the necessary agreements such as Grid Codes as required in both markets.

3.63. In its application EWC has set out its view that the 700MW capacity of the proposed interconnectors represents "the optimal trade off between project viability and the benefits to consumers". Individual interconnectors with a capacity of 350MW have been chosen for technological and grid connection reasons. It notes that a report commissioned for CER concluded that a single link of greater than 500MW would be difficult to accommodate given the scale of the Irish system.

3.64. EWC argues that developing more than one 350MW interconnector between Ireland and GB does not reduce the development costs per MW, but it does reduce the revenues per MW. This is supported by a report from K.U.Leuven provided to Ofgem in confidence as part of EWC's application for an exemption. The analysis provided in this report also indicates that the revenue potential (based on the potential generation savings from using the interconnector) drop significantly between 350MW and 700MW and even more so between 700MW and 1050MW.

3.65. EWC therefore concludes that a profit maximising merchant developer would build a 350MW interconnector. It argues that a 1050MW project would clearly not be viable, because the payback period would be too long. A 700MW interconnector, EWC considers, is therefore the optimal trade off between project viability and the benefits to consumers.

Ofgem's view

3.66. In this section we have set out our views on EWC's application against the three parts of the test in condition (f):

- the exemption is not detrimental to competition;
- the exemption is not detrimental to the effective functioning of the internal electricity market; and
- the exemption is not detrimental to the efficient functioning of the regulated system to which the interconnector is connected.

3.67. In its guidance on the application of exemption criteria, the Commission outlines that this condition has similarities with condition (a) but that, in this case, "the exemption itself should not be to the detriment of the competitive functioning of the market". We have therefore considered, for this section, what the impact is of granting exemptions for EW1 and EW2 compared to them operating as regulated interconnectors. For completeness, where appropriate we have also considered the situation where there is no investment in EW1 and EW2.

Condition (f): Test 1 - Impact of the exemption on competition

3.68. Our analysis of this test, which is divided into two parts, firstly focuses on a competition assessment. To do this we have analysed market concentration (using

HHI indices[26]) using a number of modelled scenarios to consider the impact on the electricity wholesale market and the electricity retail market.

3.69. In the second part of the analysis we consider the cross border transmission market. In particular we have considered the factors, such as EWC's information provision and capacity allocation measures, which are relevant to our understanding of the impact that granting an exemption would have.

Part 1 - Analysis of market concentration

3.70. The following section sets out our market definition, the assumptions that we have made (in particular in relation to the treatment of the proposed EirGrid interconnector), the analysis undertaken of differing market scenarios together with the counterfactuals considered and our detailed results.

Market definition

3.71. In our analysis we have considered a range of potential market definitions. For completeness, our approach has been to use all of the market definitions below to model our chosen market scenarios. We have considered both the wholesale and retail electricity markets as, like any other interconnector, EW1 and EW2 can import or export electricity, thereby acting as an additional source of supply or demand.

GB electricity wholesale market

3.72. We consider that one of the most significant impacts of the granting of two exemptions to EWC is likely to be on the GB electricity wholesale market given that this is the primary market where the additional source of electricity will be sold. Whilst the direction of flow will be determined by the price differentials in both markets we are assuming that during some time periods the EW1 and EW2 interconnectors will import electricity into GB and will therefore compete with other GB generation.

3.73. Our view is that the following three electricity wholesale market definitions should be considered in our analysis. Our reasoning for not excluding any of these market definitions at this stage is that it is not clear where in the merit order the generation imported through the EW1 and EW2 interconnectors will sit. In any event the position in the merit order of the proposed interconnectors is also likely to change over time.

[26] We used the Herfindahl-Hirschmann Index (HHI) measure of concentration in our analysis. In its "Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements," the Commission has stated that an HHI below 1000 indicates "low" market concentration; between 1000 and 1800 concentration is "moderate" and above 1800 is "high." See OJ 2001/C 3/02 for more details.

- **Peak electricity supply in GB**: This is the narrowest of the definitions that we have considered for the wholesale market. It is based on the ability of interconnectors to deliver electricity to meet peak demand to the GB market. The market is made up of responsive power stations and all electricity interconnectors. The types of responsive power stations included in this market are pumped storage, open cycle gas turbines (OCGTs) and oil fired power stations. Once operational, EW1 and EW2 capacity would represent approximately 7% of the capacity of the GB peak electricity supply market.

- **Flexible electricity supply in GB**: Our definition of the flexible electricity supply market in GB further expands the scope of the market definition. In addition to the components of peak electricity supply, the flexible electricity supply market also includes electricity plants which are not inherently "baseload" i.e. where they are responsive to market signals such as price. This market definition therefore adds combined cycle gas turbines (CCGTs), coal, biomass and hydroelectric stations to those sources of electricity already included in the peak market definition. It excludes wind, combined heat and power and nuclear power stations. Once operational, EW1 and EW2 capacity would represent approximately 0.9% of the GB flexible electricity supply market.

- **All GB electricity wholesale market**: Our final market definition for the wholesale electricity market is very wide. It includes all sources of supply available on the GB electricity market with the exception of demand side response[27]. Once operational, EW1 and EW2 capacity would represent approximately 0.7% of the all GB electricity wholesale market.

GB retail electricity supply market

3.74. In this instance we have only considered one market definition. Where the interconnectors are exporting to Ireland they can simply be considered as another point of demand on the GB system. The GB retail electricity supply market definition therefore includes all demand on the GB system.

3.75. We estimate that if both EWC interconnectors exported electricity (assuming a 60% load factor) this would equate to 0.9% of the annual GB electricity demand. We note that it is anticipated that EW1 and EW2 will typically export to the Irish market.

Methodology

3.76. Our methodology in assessing the possible impact on competition of granting the exemptions is to estimate the market concentration (HHI's) for each player in the GB wholesale electricity market and retail electricity supply markets. We have used the market definitions above together with a range of scenarios which model

[27] Our modelling has been based on generation capacity. Demand side response is not relevant to our consideration of generation capacity. It would, for example, be more relevant when considering how demand in any half hour would be met.

different capacity allocations for EW1 and EW2 under both an exempt and regulated approach. We have also modelled the impact of the EirGrid interconnector and described the impact of EW1 and EW2 not being built.

3.77. In conducting our analysis we have made a number of assumptions including how interconnector capacity will be allocated between parties. For further details on the assumptions and sources of data used in the analysis please refer to Appendix 4.

3.78. The range of scenarios chosen are described in the table below:

Table 1: Description of scenarios used to model market concentration and market shares

Scenario	Description
1) EW1 and EW2 exempt - Two capacity holders	This scenario assumes EW1 and EW2 have been granted exemptions. The current player with the largest holding of wholesale supply capacity in the GB electricity market gains the maximum of 70% of the total capacity of EW1 and EW2, and the second largest player obtains the residual 30%. This is the maximum permitted allocation of capacity to the fewest parties allowed for under EWC's proposed capacity cap.
2) EW1 and EW2 exempt - Five capacity holders	This scenario assumes EW1 and EW2 have been granted exemptions. There are five capacity holders, each with a share of 20% each. The capacity holders are the two players from Scenario One which hold the largest wholesale supply capacity in the GB electricity market, one party with interest both in GB and Ireland, the largest Irish market participant and one other Irish participant who does not currently participate in the GB market.
3) EW1 and EW2 regulated - Two capacity holders	Under this scenario EW1 and EW2 operate under a regulated, i.e. rTPA regime. As with Scenario One, capacity on the EW1 and EW2 interconnectors has been allocated 70% to the largest holder of GB generation capacity and 30% to the second largest. This scenario is included to illustrate the range of outcomes under an rTPA regime. NB: it is possible for more capacity to be allocated to a single party under a regulated approach where EWC has not imposed its proposed capacity caps.
4) EW1 and EW2 regulated - Five capacity holders	Under this scenario EW1 and EW2 operate under a regulated, i.e. rTPA regime. As with Scenario Two, this scenario assumes that there are five capacity holders, each with a share of 20% each are the same as under Scenario Two.
5) Not built	This scenario considers the current expected state of the market where EW1 and EW2 are not built.

Treatment of EirGrid

3.79. As the EirGrid interconnector is yet to be constructed (CER has provided a strong indication that the project will go ahead) we have broken down our analysis into two broad parts. One where the EirGrid interconnector has been built and is operating as a regulated interconnector and the other where it has not been built. Each of the scenarios outlined above have therefore been modelled separately to consider the situation where the EirGrid interconnector both is and is not built.

Detailed results

3.80. The following table presents the results of the analysis of concentration ratios (HHIs)[28] for the scenarios above for each of the market definitions set out earlier in this chapter.

Table 2: Results of competition analysis

Results assuming Eirgrid is built

	Scenario				
Market definition	1) Exempt: Two capacity holders	2) Exempt: Five capacity holders	3) Regulated: Two capacity holders	4) Regulated: Five capacity holders	5) Not built
Peak electricity supply market	1539	1396	1539	1396	1451
Flexible electricity supply market	993	979	993	979	981
All electricity supply market	831	823	831	823	824
Supply of electricity on GB retail market	1348	1336	1348	1336	1344

Results assuming Eirgrid is not built

	Scenario				
Market definition	1) Exempt: Two capacity holders	2) Exempt: Five capacity holders	3) Regulated: Two capacity holders	4) Regulated: Five capacity holders	5) Not built
Peak electricity supply market	1681	1520	1681	1520	1595
Flexible electricity supply market	1005	992	1005	992	993
All electricity supply market	839	831	839	831	832
Supply of electricity on GB retail market	1348	1336	1348	1336	1344

3.81. The following section provides a commentary on the empirical analysis provided in the above table against each of the relevant market definitions.

GB peak electricity supply

3.82. Under this definition, the majority of the capacity in this market is currently held by only three parties[29]. Two of these parties are also the largest holders of wholesale supply capacity in the GB market. For the purposes of Scenarios One and Three they have also been allocated all of the EW1 and EW2 capacity. For this reason the results of our analysis show that concentration increases when EW1 and EW2

[28] In Appendix 4 we have also set out the results of market share analysis that we have conducted to complement the analysis of concentration ratios.
[29] e.on, International Power and RWE.

capacity is allocated to only two players in either an exempt or regulated world. However, the market itself remains only moderately concentrated.

3.83. In the situation where the capacity is allocated to five players, either under an exempt (Scenario Two) or regulated (Scenario Four) regime, market concentration falls slightly compared to the situation where EW1 and EW2 are not built (Scenario Five). The relatively modest fall relates to the fact that two of the five modelled capacity holders on EW1 and EW2 are also two of the three holders of GB peak generation capacity.

3.84. The inclusion of the EirGrid interconnector does not impact the relative market concentrations when comparing a regulated with a non-regulated approach.

3.85. Further, it should be noted that under a regulated approach capacity must be offered for sale on a transparent, non-discriminatory basis, however, the capacity allocation under which EWC proposes to operate will also offer capacity for sale using these same principles. Therefore we do not consider that the granting of an exemption will be detrimental to competition in the market. EWC's method of capacity allocation is discussed later in this chapter. We further note that the 40% capacity cap that EWC intend to apply to the dominant player in the Irish market and the 70% capacity cap that will apply to all other parties, provides an additional safeguard. This safeguard would not necessarily apply under a regulated rTPA regime.

Flexible electricity supply

3.86. The results show that the impact of an exemption on competition in the flexible electricity supply market is likely to be limited.

3.87. Under this market definition, concentration only increases marginally under Scenarios One and Three compared to Scenario Five (i.e. where EW1 and EW2 are not built). In the situation where the EirGrid interconnector is built market concentration is low. This outcome is obviously dependent on the capacity allocation assumptions that we have used.

3.88. When we allocate capacity to five parties under Scenarios Two and Four we can see that market concentration is marginally lower than if the EW1 and EW2 interconnectors are not built. For the reasons noted above, we do not consider that market concentration is likely to vary depending on whether the EWC interconnectors operate under exemptions. We again note that the market concentration figures increase if we assume that the EirGrid interconnector is not built. However, this effect is only marginal.

All electricity supply into the GB market

3.89. The results for this market definition show that the impact of an exemption on concentration is likely to be very limited, regardless of whether the EirGrid interconnector is built.

3.90. Under this market definition the concentration index increases marginally in Scenarios One and Three compared to the scenario where EW1 and EW2 are not built. We do not consider this increase to be material and does not depend in on whether the EWC interconnectors operate under an exemption. Our analysis shows that the market is not concentrated across all the scenarios reviewed for this market definition.

Retail electricity supply market

3.91. The results for the retail electricity supply market definition (i.e. where we have looked at all demand on the GB system) show that the impact of an exemption on concentration is likely to be limited. Again, this is regardless of whether the EirGrid interconnector is built. The market remains moderately concentrated across all the scenarios we analysed.

Part 2 - Cross border transmission and other factors

3.92. The following section sets out our consideration of the other key factors that are relevant to our understanding of the impact that granting exemptions would have.

Cross border transmission

3.93. In addition to the wholesale electricity market and the retail electricity market discussed above we have considered the impact of the proposed exemptions on the cross border transmission market.

3.94. Currently there are two electricity interconnections between GB and other markets. These are Moyle and IFA. A third electricity interconnector (BritNed) is under construction.

3.95. As part of our analysis on cross border transmission we reviewed the following;

- **Interconnection between GB and Irish markets**: This is the narrowest transmission market that we have considered. It includes the Moyle interconnector, and when relevant, the planned EirGrid interconnector.
- **All electricity interconnection with GB market**: In addition to the interconnectors between the GB and Irish markets this market definition also includes IFA and BritNed.

3.96. When considering whether the granting of an exemption would be detrimental to competition in this market we consider that the following factors are important to consider. These factors are discussed in detail below and include:

- the manner in which EWC proposes to allocate interconnector capacity;
- the provision of information to support transparency; and
- the market rules that will determine how the interconnector will operate in practice

Capacity allocation

3.97. As noted above, EWC has sought to address potential concerns in relation to allocation of capacity on the interconnectors so that the granting of exemptions to EWC will not have a detrimental impact on competition when compared to a regulated interconnector. These measures relate to the initial and ongoing allocation of capacity on EW1 and EW2.

3.98. EWC has considered the potential competition effect of capacity allocation between specific parties in the Irish market. It has concluded that allocation to the ESB, the dominant player in that market should be capped at 40% and allocation to all other parties including those in the GB market should be capped at 70%. It is important that any cap placed on capacity sales is set at an appropriate level such that it does not distort the market. However, an appropriate cap is likely to mitigate market concentration concerns.

3.99. EWC intends to allocate capacity on the EW1 and EW2 interconnectors using an open season mechanism. This will ensure that all market participants are able to bid for capacity in an open transparent and non-discriminatory manner. Consistent with the Commission's view we believe that an open season capacity allocation mechanism is an appropriate way to allocate capacity in an open and fair manner where an exemption from the rTPA requirements has been granted.

3.100. To ensure that all capacity is offered to the market, EWC has also indicated that it will have in place effective UIOLI procedures. In addition, EWC will facilitate a secondary market for capacity trading via an electronic bulletin board. Ofgem would expect that these mechanisms should be effective in maximising the allocation of capacity. Where there are concerns that such mechanisms are not effective, Ofgem will investigate and will consider whether the exemptions should be revoked.

3.101. The view that the granting of exemptions to EWC will not have a detrimental impact on competition when compared to a regulated interconnector is further supported by the requirements of SLC 13 of the Interconnector licence. Under SLC 13 licensed interconnectors, including those that have been granted an exemption, are required to publish open, transparent and non-discriminatory capacity allocation mechanisms on its website. If the final arrangements put in place by EWC did not fulfil these requirements, Ofgem could seek to enforce SLC 13 to ensure that the arrangements are transparent and non-discriminatory.

3.102. Further, EWC has indicated that they will comply with the requirement of the Congestion Management Guidelines[30].

3.103. EWC is proposing to introduce a reserve price as part of the open season process. There is a concern that a reserve price may reduce the likelihood that all available capacity is allocated to the market. However, it is clearly in the interests of EWC to ensure that the reserve price is kept as low as possible to ensure active participation in the open season process. In addition, as noted above SLC 13 requires interconnector owners to ensure that all capacity made available to the market. We would therefore expect that, were a reserve price to be set, it should be at a level that can be justified by the costs of operating the interconnectors.

3.104. We have carried out our analysis on the basis of the information provided by EWC on how it intends to allocate interconnector capacity. Accordingly, once the initial capacity allocation is known, and in particular in the event that the outcome of the initial allocation is different from that set out by EWC in its application and supporting information, the Authority may re-examine whether the exemption meets all relevant criteria and may modify or revoke the exemption within four months if it were to find that the relevant criteria are no longer met. In this way, the proposed exemption remains conditional on the outcome of the open season.

3.105. We consider that, for the reasons set out above, that the capacity allocation arrangements that EWC intend to put in place are appropriate in principle and that there are appropriate mechanisms in place to enforce these requirements. We therefore consider that, when compared to a regulated approach, granting exemption to EW1 and EW2 will not have a detrimental impact on competition.

Information provision

3.106. EWC is proposing to disclose information to the market according to rules based on those implemented by the IFA connecting the markets in France and Great Britain. IFA publishes information concerning the charging methodologies as well as information on the eligibility requirements that need to be met to use the interconnector. IFA also publishes results of the auction process for daily, monthly, quarterly, seasonal and annual capacity.

3.107. We believe that the provision of information is necessary for the effective functioning of a competitive market and welcome EWC's commitment to publish

[30] Revised binding Guidelines on the management and allocation of available transfer capacity of interconnections between national systems were adopted by formal Decision of the European Commission in November 2006, as provided for under Regulation 1228/2003. These Guidelines reflect advice provided to the Commission by ERGEG, and they set out among other things guidelines for efficient and market based mechanisms to allocate cross border interconnector capacity.

information in accordance to rules of the IFA as well as relevant licence provisions[31]. As always, information transparency is evolving and our views do not fetter the discretion of the Authority in relation to future views.

Regulatory safeguards

3.108. It must be made very clear that our views in relation to this application do not preclude or impact in any way on the operation of the Competition Act 1998 or the Enterprise Act 2002. The analysis contained in this document has been carried out in relation to a specific situation and may not be relevant to a consideration of any related issue that may arise, for example under the Electricity Act 1989, the Competition Act 1998 or the Enterprise Act 2002.

3.109. Indeed, in the event that there appears to be a competition problem arising from the way in which either or both of the interconnectors are operating, the Authority has the power to open a Competition Act investigation into the issue. In this way, the Competition Act acts as a regulatory safeguard to protect consumers.

3.110. In addition, the Authority can review and amend or revoke both exemptions if there is a material change in the degree to which any of the tests in (a), (c), (d), (e) or (f) are met.

Condition (f): Test 2 - Effective functioning of the internal market

3.111. Criterion (f) also requires that the exemption is not detrimental to the effective functioning of the internal electricity market. To review this test we have considered the cross border operating arrangements of the proposed interconnectors and the extent to which they represent "optimal capacity" for the market.

Cross border issues

3.112. It is appropriate to review how the exemption might affect the integration of the GB and Irish markets. At the moment GB and the Republic of Ireland is already linked through the Moyle transmission line from Scotland to North Ireland. Under present market conditions this link is mainly used to transfer electricity from GB to Northern Ireland, however as transmission capacity on the Irish market is expanded[32] it will become a more direct substitute to the EWC interconnectors.

[31] Under Standard Licence Condition 4 of the interconnector licence the licensee is required to provide the Authority with information that it may reasonably require which may be necessary for the purpose of carrying out its functions under the Electricity Act 1989, the Utilities Act 2000 or the Energy Act 2004.

[32] There is a 275kV AC interconnector between the Republic of Ireland and Northern Ireland and two 110kV AC interconnectors used for system support. A second interconnector is in the

3.113. We note that EWC intends to apply trading arrangements based on those already in place for Moyle. It will also be required to comply with the Congestion Management Guidelines and to sign and comply with the relevant industry codes[33] (including the Grid Code and the Balancing and Settlement Code.) We therefore consider that the granting of an exemption will, in relation to cross border issues, not be detrimental when compared to a regulated approach.

Interconnector capacity size

3.114. We have assessed whether the size of the proposed EW1 and EW2 interconnectors, if operated under exemptions, would have a detrimental impact on the effective functioning of the internal market.

3.115. Firstly, we note that the Irish Government has supported the construction of a regulated interconnector. The Irish Government has passed legislation to enable the construction of a single interconnector with 500MW capacity. As noted in Chapter 1 EirGrid is developing this interconnector under a regulated approach where potential project losses are supported by its TSO charges and therefore the Irish consumer. The decision of the Irish Government to construct a single 500MW interconnector has been informed by a study undertaken on behalf of the CER in 2003.

3.116. We therefore consider that, a regulated regime would deliver a 500MW interconnection between the Irish and GB markets. The proposed exempt EWC interconnectors would provide an additional 200MW of capacity compared to this regulated approach. If both projects become operational then an additional 700MW would be available to the market.

3.117. Secondly, for a number of technical, grid connection and environmental reasons, the size of the total capacity of EWC's interconnection project is constrained to multiples of the 350MW High Voltage Direct Current Voltage Source Convertor (HVDC-VSC) interconnector technology chosen by EWC. The application sets out the benefits of using this technology in more detail. In particular, we note EWC's view that there are benefits in terms of the cost of connection to the GB and Irish transmission systems as no substantial reinforcement work is required to support the extra capacity. We should further note that the requirement for reinforcement is still being considered by the relevant TSOs as part of the standard grid connection process.

3.118. Thirdly, EWC provided a study undertaken by Katholieke Universiteit Leuven (K.U.Leuven) to support its view that the size of the proposed interconnection capacity, at 700MW was "optimal". This study modelled the potential generation cost saving in GB and Ireland across a range of scenarios and sizes of interconnectors in order to provide an indication of the likely revenues. The generation cost savings do

planning process and is expected to be commissioned by 2012.

[33] This is a requirement of the SLC 3 of the interconnector licence.

not provide a direct forecast of potential future revenues, but rather provide an indication of the potential for an interconnector to earn revenue.

3.119. The study considered a number of scenarios which included variations to fuel prices, CO2 prices and the tightness of generation margin in the Republic of Ireland[34]. For each scenario, four sub-scenarios were considered which incorporated four differing proposed capacities for the EWC interconnectors[35].

3.120. It should also be noted that the study (in all scenarios) assumes that the 500MW EirGrid interconnector project will not be built. This contrasts with the latest view of CER that the EirGrid interconnector will be constructed.

3.121. K.U.Leuven considered that the main revenues are expected to result from replacing Irish generation by British generation, resulting in a flow predominantly from Great Britain to Ireland, although opposite flows were also observed during some hours in the modelling work. The main reason is that the Irish power plants are older and less efficient and hence have higher marginal costs. As expected, the highest potential generation cost savings, and therefore highest expected revenues, were found in the scenarios with a "tight" situation in the Republic of Ireland, high fuel and CO2 prices.

3.122. K.U.Leuven explains that the scenarios are there to illustrate the impact of a range of relevant events that can occur between now and the opening of the interconnector or during the exemption period. They conclude that the value of the interconnector is highly dependent on several generation cost drivers. The study also notes that higher values can of course be projected by considering even higher fuel and CO2 prices, but likewise also lower values can be projected with lower prices.

3.123. EWC has stated that its financial model is based on the world out turning in a better way than its baseline May 2007 scenario contained in the K.U.Leuven study as the project would otherwise not be viable.

3.124. Ofgem concludes from this analysis that a single 350MW capacity cable would be congested the majority of time and that congestion rents would fall if two interconnectors, with a total capacity of 700MW was built. Building more capacity (1050MW) would mean that it would be likely to be underutilised more frequently.

3.125. We are of the view that the proposed size of the EWC project represents an appropriate balance between the private company's incentive to recover its costs and earn revenues and a socially optimal outcome, this view is supported by the fact that

[34] The study also considered the republic of Ireland and Northern Ireland as separate markets as it was undertaken prior to the implementation of the All-Island project. These scenarios are no longer applicable.
[35] These were; 0 i.e. not built, 350MW, 700MW and 1050MW.

EWC is proposing to build a project with more capacity than the Irish government has considered that it is appropriate to build.

3.126. We also consider that, were an exempt interconnector provider to earn profits that were considered to be high, this would be a signal to the market. We would expect the market to respond for example by building new interconnector capacity or locating new generation in the most profitable market.

3.127. In addition, in the event that there appears to be a competition problem arising from the way in which either or both of the interconnectors are operating, the Authority has the power to open a Competition Act investigation into the issue. In this way, the Competition Act acts as a regulatory safeguard to protect consumers.

3.128. In addition, the Authority can review and amend or revoke both exemptions if there is a material change in the degree to which any of the tests in (a), (c), (d), (e) or (f) are met.

3.129. We therefore consider that the proposed exemptions do not have a detrimental impact on the effective functioning of the internal market.

Market operation

3.130. The most significant impact of increased interconnection between two countries is increased price convergence subject to the utilisation of the capacity of the interconnector.

3.131. We would not expect the overall impact on the GB transmission system of the proposed EWC interconnectors being exempt to be significantly different from other existing interconnectors. This is because EWC has stated that, as required under SLC 3 of its licences, it will sign up to all the relevant GB and Irish industry codes and governance arrangements, such as the Grid Code and the Balancing and Settlement Code. These codes ensure that parties access and utilise the system in a consistent and appropriate manner.

3.132. Where the markets being connected are different in terms of their design and operation it is possible for interconnectors to have a range of possible impacts on market participants. For instance, where one market has half-hourly balancing whilst the other is balanced on an hourly basis, this may increase interconnector Users exposure to imbalance prices.

3.133. Following go-live of the All Island SEM project in November 2007, an all Irish electricity market was created. The Irish market operates a mandatory gross pool with gate closure at the day-ahead stage. This is very different to the GB market where generation is bought and sold bilaterally and which operates a half-hour gate closure.

3.134. Whilst this is likely to impact on the risks interconnector users face we would expect them to mitigate these risks, for instance, through hedging their exposure to potentially greater imbalance costs.

3.135. EWC has confirmed that the interconnector can flow with a maximum physical capacity of 350MW in both directions. EWC are considering the possibility of "netting" capacity to maximise flows, including non-physical flows. Under a potential capacity netting process EWC could organize the further allocation of capacity, for instance on a daily basis, after it knows how its users are going to use the capacity allocated to them initially in the open season.

3.136. If, for example, a certain user schedules 50 MW from Ireland to the UK and if this is known before gate closure, EWC could in theory allocate an additional capacity of 50 MW from UK to Ireland. However, EWC note that there may be some practical difficulties in applying a netting process. EWC will not know how capacity is proposed to be allocated this until after gate closure. Gate closure in Ireland is day-ahead. Before the closure of the Irish pool, they will not know how users are going to be dispatched, meaning that EWC cannot apply netting. Whilst we note this as an issue, we do not consider that it is influenced by the granting of exemptions in this instance and therefore we do not consider that it will impact on whether the relevant test in condition (f) is met.

3.137. To avoid unused interconnector capacity becoming sterilised post gate closure, one option would be to allow system operators to utilise this capacity. Such arrangements operate on both the IFA[36] and Moyle interconnectors where unused capacity after gate closure can be used by either transmission system operator on the basis of commercial arrangements agreed between both parties.

Condition (f): Test 3 - Efficient functioning of the regulated system

3.138. In assessing whether this test is met, we need to ensure the interconnector operator and users are bound by technical, safety and contractual rules and responsibilities necessary in interconnecting different systems. In addition, we would need to take account of particular market circumstances, for example interactions of different balancing regimes and markets between relevant Member States.

3.139. As noted above, EWC has stated that they will sign up to the relevant Codes, including Grid, Connection and Use of System and Balancing and Settlement Codes, in GB, as required by its interconnector licences. This will ensure that EWC will operate the interconnector in a manner consistent with other transmission system users. This should ensure that the exemption will not be detrimental to the effective functioning of the regulated system to which the infrastructure is connected.

36 http://www.nationalgrid.com/uk/Electricity/Balancing/services/balanceserv/systemsecurity/sotoso/

Summary of Ofgem views on condition (f)

3.140. On the basis of the analysis and arguments outlined above, it is our view that the exemptions will not be detrimental to competition or the effective functioning of the internal electricity market, or the functioning of the regulated system to which the interconnector is linked. Therefore, Ofgem's initial view is that this criterion is met.

Summary of Ofgem views on exemption criteria

3.141. On the basis of the analysis set out above it is Ofgem's initial view that the six exemption criteria are met and that Ofgem therefore proposes to grant exemptions for both EW1 and EW2.

3.142. It must be made very clear that our views in relation to this application do not preclude or impact in any way on the operation of the Competition Act 1998 or the Enterprise Act 2002. The analysis contained in this document has been carried out in relation to a specific situation and may not be relevant to a consideration of any related issue that may arise, for example under the Electricity Act 1989, the Competition Act 1998 or the Enterprise Act 2002.

3.143. Indeed, in the event that there appears to be a competition problem arising from the way in which either or both of the interconnectors are operating, the Authority has the power to open a Competition Act investigation into the issue. In this way, the Competition Act acts as a regulatory safeguard to protect consumers.

3.144. Moreover, under paragraph D3 and E3 of the draft exemption order proposed for EW1 and EW2, the Authority may revoke the exemption if there is a material change in the degree to which the tests in (a), (c), (d), (e) or (f) are met. That is, inter alia if there is a material change in the degree to which the interconnector benefits competitions or the exemption is not detrimental to competition.

4. Duration, scope and conditions for revocation of the exemption

Chapter Summary

This chapter provides a summary of the scope, duration and conditions for revocation of any proposed exemption.

Question box

Question 1:
Do you agree with the proposed scope and duration for the exemption, and the conditions for revocation?

Duration and scope of the exemption

4.1. EWC has requested an exemption lasting 25 years for EW1 and 20 years for EW2. EWC has provided Ofgem with confidential information regarding the payback period of the interconnector project to justify why the exemptions are being sought for these durations.

Ofgem's initial view

4.2. The 2004 guidance provided by DG Energy and Transport (Exemptions from certain provisions of the third part access regime) advises that the duration of an exemption should not be significantly longer than the period during with the project is expected to 'break even'. The expected breakeven point is determined by capital expenditure, operating expenditure, expected earnings and the discount rate. Ofgem has analysed how the payback period changes according to variations in these factors.

4.3. EWC has provided a financial model of the project's cash flows. The analysis from this model suggests that it would be appropriate for the Authority to grant an exemption of 25 years for EW1 and 20 years for EW2. The difference in the exemption period of the two projects relates to the staggered start dates for the interconnectors and to the profiling of the costs. EW1 is due to commence operation in 2010 whilst EW2 is due to start in 2011. The payback period for EW2 is anticipated to be 23 years if it commences commercial operation in 2011. This drops to 21 years if the EW2 interconnector commences commercial operation on 2012. By requesting an exemption with a duration of 20 years for EW2, we therefore consider that EWC has been conservative.

4.4. EWC intends to sell the full capacity of the interconnector on long term contracts of a minimum of 10 years. Once a contract has expired EWC has indicated

that it would wish to retain the exemption for that capacity so that it can be sold again on a long-term contract. In doing so Ofgem would expect that the allocation procedures noted above (e.g. open season, secondary capacity markets including in particular the requirements for SLC13, UIOLI, congestion management and transparency) would apply to the capacity going forward.

4.5. It is proposed that any exemption granted at this stage would be granted with respect to a capacity of 350MW for each interconnector. This is reflected in the draft exemption orders contained in Appendix 5 and 6.If there was a subsequent expansion to the capacity of either interconnector, EWC would need to go through a separate exemption application process in relation to that increase in capacity, if appropriate.

The Exemption Order and conditions for its application

4.6. For the reasons outlined in Chapter 2, we are minded to grant EWC's request for an exemption for the proposed EW1 and EW2 interconnectors. A draft of each exemption order is presented in Appendix 5 and 6.

4.7. The Authority can review and amend or revoke both exemptions if there is a material change in the degree to which any of the tests in (a), (c), (d), (e) or (f) are met. In the event that any of the circumstances occur which require the exemptions to be withdrawn, Ofgem would likely issue a consultation document setting out the reasons for its decision.

4.8. The exemptions are granted on the basis of the information provided by EWC in its application and further analysis undertaken by Ofgem. If there was a change to the commitments that EWC has provided in its application, or if there was any change to the underlying data provided by EWC as part of its explanation as to how it meets the relevant criteria, this could be grounds for the Authority to review and potentially revoke the exemptions.

4.9. For the avoidance of doubt, Ofgem's analysis has been carried out against the relevant criteria for granting an exemption from rTPA requirements and is specific to the application that Ofgem is considering. Any decision that Ofgem may make in relation to this application does not preclude or impact in any way on the operation of the Competition Act 1998 or the Enterprise Act 2002. Further, as the analysis contained in this document has been carried out in relation to a specific situation, the analysis may or may not necessarily be relevant to a consideration of any related issue that may arise, for example, under the Electricity Act 1989, the Competition Act 1998 or the Enterprise Act 2002.

4.10. We have analysed whether the tests for granting an exemption have been met within the constraints set out in the application[37]. Once the final capacity allocation is known, and in the event that it is different from that represented by the application, the Authority may re-examine whether EWC meets all of the relevant criteria; and may modify or revoke the exemption within four months if it were to find that any of the relevant criteria are no longer met. In this way, the exemption is conditional on the outcome of the open season process. This paragraph in effect allows for a "fast track" revocation in the event that the information upon which the Authority considered the application changes. It is without prejudice to the provisions of paragraph E4 of the draft exemption orders, which set out the circumstances in which the Authority may revoke the exemption order by giving EWC no less than four months notice.

[37] In particular EWC have indicated that they will impose a capacity cap of 40% for ESB and 70% for all other parties.

Appendices

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Appendix 1 - Consultation Response and Questions

1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.

1.3. Responses should be received by 12 August 2008 and should be sent to:

Andrew Wright
Managing Director, Markets
Ofgem
GB Markets
9 Milbank
London
SW1P 3GE
gb.markets@ofgem.gov.uk

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website www.ofgem.gov.uk. Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Next steps: Having considered the responses to this consultation, Ofgem intends to make a decision as to whether to grant EWC's request for two exemptions. Any questions on this document should, in the first instance, be directed to:

Ijaz Rasool
GB Markets
9 Milbank
London
SW1P 3GE
020 7901 7425
Ijaz.rasool@ofgem.gov.uk

CHAPTER: One

Question 1: Do you agree with our proposal to treat the EW1 and EW2 interconnectors as a single project for the purpose of our evaluation of the exemption criteria?

CHAPTER: Three

Question 1: Do you agree with our overall assessment that the exemption should be granted based on the examination of whether the exemption criteria have been met?

CHAPTER: Four

Question 1: Do you agree with the proposed scope and duration for the exemption, and the conditions for revocation?

Appendix 2 – The Authority's Powers and Duties

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority (the Authority), the regulator of the gas and electricity industries in Great Britain. This Appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority's powers and duties are largely provided for in statute, principally the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Act 2004, as well as arising from directly effective European Community legislation. References to the Gas Act and the Electricity Act in this Appendix are to Part 1 of each of those Acts.[38]

1.3. Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This Appendix must be read accordingly[39].

1.4. The Authority's principal objective when carrying out certain of its functions under each of the Gas Act and the Electricity Act is to protect the interests of consumers, present and future, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas conveyed through pipes, and the generation, transmission, distribution or supply of electricity or the provision or use of electricity interconnectors.

1.5. The Authority must when carrying out those functions have regard to:

- The need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- The need to secure that all reasonable demands for electricity are met;
- The need to secure that licence holders are able to finance the activities which are the subject of obligations on them[40]; and
- The interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.[41]

[38] Entitled "Gas Supply" and "Electricity Supply" respectively.
[39] However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.
[40] Under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Act in the case of Electricity Act functions.
[41] The Authority may have regard to other descriptions of consumers.

1.6. Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

- Promote efficiency and economy on the part of those licensed[42] under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems;
- Protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity;
- Contribute to the achievement of sustainable development; and
- Secure a diverse and viable long-term energy supply.

1.7. In carrying out the functions referred to, the Authority must also have regard, to:

- The effect on the environment of activities connected with the conveyance of gas through pipes or with the generation, transmission, distribution or supply of electricity;
- The principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- Certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.8. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation[43] and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

[42] Or persons authorised by exemptions to carry on any activity.
[43] Council Regulation (EC) 1/2003

Appendix 3 - Feedback Questionnaire

1.1. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments?

1.2. Please send your comments to:

Andrew MacFaul
Consultation Co-ordinator
Ofgem
9 Millbank
London
SW1P 3GE
andrew.macfaul@ofgem.gov.uk

Appendix 4 - Competition analysis (additional information)

1.1. The following appendix provides supplementary information that supports our competition analysis for exemption condition (f) in Chapter 3.

Market data used

1.2. In the exemption application, EWC has indicated that commercial operations for EW1 will commence by 2010 and EW2 by 2011. As such, we have based our competition assessment on the effect of granting two exemptions for the EWC project on a scenario for the GB electricity supply markets in 2013. We have also assumed that this supply scenario remains relevant for the duration of the exemption[44]. We consider this to be a conservative approach as there is uncertainty regarding the future generation mix and ownership structure. This is caused by, among other things, the Large Combustion Plant Directive and potential new build of nuclear stations.

1.3. We made a number of assumptions in order to develop the scenarios for GB electricity markets in 2013.

1.4. We developed our assumptions on the basis of:

- the latest view of the GB System operator of the connected generation capacity on the GB market on 2013[45];
- information available on infrastructure that may be available shortly after 2013;
- a confidential competition assessment undertaken by Katholieke Universiteit Leuven (K.U.Leuven), commission by EWC and submitted as part of their application;
- data available to Ofgem with regard to the market positions of parties on the GB domestic retail supply markets;
- data from Datamonitor[46] on the market position of parties on GB retail supply markets; and
- data provided by EWC on ownership of generation assets in the Republic of Ireland and Northern Ireland.

Interconnector capacity allocation

1.5. As a simplifying measure for the treatment of capacity allocation of interconnectors we have made the following assumptions:

[44] On the assumption that our view of the electricity market supply-side in 2013 is also our best assessment of supply conditions beyond 2013
[45] National Grid Seven Year Statement (www.nationalgrid.com)
[46] Provider of data services (www.datamonitor.com)

- For IFA and Moyle we have allocated the capacity in according to current usage of the interconnectors
- For BritNed we have based the capacity allocation on the IFA, however we have modified it to allocate capacity to a Dutch company instead of the French electricity incumbent
- For the proposed EirGrid interconnector, we have allocated capacity according to market shares on the Irish generation market, with allowance made for the proposed divestment of some of ESB's generation assets.

Results of market share analysis

1.6. In Chapter 3 we set out the results of our analysis of market concentration using HHI indices. For completeness table 3 shows the largest single market share of any party for the equivalent market definition and scenario.

Table 3: results of competition analysis - maximum market shares

Results assuming Eirgrid is built

	Scenario				
Market definition	1) Exempt: Two capacity holders	2) Exempt: Five capacity holders	3) Regulated: Two capacity holders	4) Regulated: Five capacity holders	5) Not built
Peak electricity supply market	25%	24%	25%	24%	24%
Flexible electricity supply market	17%	17%	17%	17%	17%
All electricity supply market	14%	14%	14%	14%	14%
Supply of electricity on GB retail market	16%	17%	16%	17%	17%

Results assuming Eirgrid is not built

	Scenario				
Market definition	1) Exempt: Two capacity holders	2) Exempt: Five capacity holders	3) Regulated: Two capacity holders	4) Regulated: Five capacity holders	5) Not built
Peak electricity supply market	26%	25%	26%	25%	25%
Flexible electricity supply market	18%	17%	18%	17%	17%
All electricity supply market	14%	14%	14%	14%	14%
Supply of electricity on GB retail market	16%	17%	16%	17%	17%

Appendix 5 - Draft exemption order for EW1

1.1. See separate document (www.ofgem.gov.uk).

Appendix 6 - Draft exemption order for EW2

1.1. See separate document (www.ofgem.gov.uk).