East West Interconnector Revenue Requirement Public Information Note

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Abstract:

This Information Note outlines the revenues that EirGrid Interconnector Limited ("EIL") will be allowed to recover from the Transmission Use of System (TUoS) customer to cover their costs pertaining to the East West Interconnector ("the EWIC") as licensed interconnector operator.

Target Audience:

This Information Note is for the attention of members of the public, the energy industry, customers and all interested parties.

Related Documents:

- Decision on TSO and TAO Transmission Revenue for 2011 to 2015 (CER/10/206)
- Determination of 2010 Transmission Allowed Revenue and Use of System Tariffs (CER/09/140)
- CER Interconnection Page

Executive Summary

On 27 July 2006 the Minister for Communication, Energy and Natural Resources ("the DCENR") requested that the Commission for Energy Regulation ("the CER") arrange the design of a competition to secure the construction of one 500MW East West interconnector and that this interconnector be owned by EirGrid[1]. Following this request the CER engaged EirGrid to develop the interconnector project. This interconnector is known as the East West Interconnector ("EWIC") and is currently on target and ahead of budget to come into commercial operation in September 2012. With the approval of the CER EirGrid transferred ownership of the EWIC to EirGrid Interconnector Limited ("EIL"), a wholly owned subsidiary of EirGrid.

This purpose of this paper is to inform industry and the wider public on:

- The background to the EWIC;
- The background to the financing arrangements already entered into;
- The level of revenue requested by EirGrid for the repayment of debt, operation and maintenance of the EWIC;
- The analysis of these requirements and the CER's decision on the level of allowed revenue;
- The appropriateness and level of incentives that should be placed on EirGrid relating to the return on its equity share in the EWIC project;
- The appropriateness and level of incentives that should be placed on EirGrid relating to maximising the operational availability of the EWIC.

The thrust of the Government letter of July 2006 entailed that as the interconnector is to remain in public ownership and not to be funded directly through exchequer monies it would need to be underwritten by the final customer. In this context the EWIC is a fully regulated interconnector. These costs are to be recovered through the transmission use of system ("TUoS") charges, less revenue received from other revenue streams such as ancillary services and fibre optic hosting. Pursuant to EU Regulation 1228/2003 (as amended) the EWIC is subject to regulated third party access and the revenue restrictions and congestion management guidelines arising from this Regulation. Under this Regulation capacity cannot be charged for unless the interconnector is congested and it is anticipated that auction receipts earned from selling capacity on a congested interconnector will reduce the financial burden on the final customer.

It was agreed with EirGrid that as project developer, it would run the competition for the award of the contracts necessary for its construction. The CER determined all key policy questions in consultation with the DCENR and had regulatory oversight of the procurement process.

The revenues to support EIL in carrying out its functions will be regulated. The interconnector revenues will not be included in the revenues of EirGrid in fulfilling its function as Transmission System Operator ("TSO") as this is not a TSO function. It is intended, that the necessary support is recovered via the demand element of TUoS (from Republic of Ireland customers) net of any other revenue streams which may be available to it. The revenues within PR3

[1] Letter to CER dated 27 July 2006 available on CER Web site; the so called "letter from Government"

associated with the interconnector business will not be attributable to EirGrid TSO but instead represent a placeholder for the TUoS support necessary in order to fund the licensed interconnector operator activity (including remuneration of underlying capital cost of construction).

EirGrid has submitted, in its capacity as owner of EIL, a proposal relating to the revenue required for the support of the EWIC. The CER is publishing its decision on the level and treatment of these revenues. The separation of accounts and the differentiation of the respective licence functions of EirGrid as TSO and EIL is an important matter and are discussed in this paper. The table below outlines the revenue requirement as requested by EirGrid and that decided upon by the CER[2].

		EirGrid Proposal			CER Decision		
Line Item #	**Element**	**€m**	**€m**	**€m**	**€m**	**€m**	**€m**
		2012/13	**2013/14**	**2014/15**	**2012/13**	**2013/14**	**2014/15**
	Expenditure						
(1)	**Debt Service Costs & Liquidity**	€48.99	€29.76	€34.89	€48.99	€29.76	€34.89
(2)	**Equity Opportunity Cost of Capital and Principal Repayment (2011 prices)**	€4.51	€4.37	€4.23	€4.33	€4.20	€4.09
(3)	**East West Readiness Recovery (2011 prices)**	€0.63	€0.61	€0.58	€0.54	€0.52	€0.49
(4)	**Operational Costs (2011 prices)**	€7.83	€7.94	€7.72	€6.02	€6.63	€6.66
	Underlying Net Requirement	**€61.97**	**€42.68**	**€47.43**	**€59.88**	**€41.11**	**€46.14**
(a)	**Reprofiling**						
	Extent of Reprofiling	(-€13.40)			(-13.40)		
	Additional Revenues	(-€15.0)	(-€5.0)	(-€5.0)	(-€15.0)	(-€5.0)	(-€5.0)
	Adjustments as a result of reprofiling (2011 prices)	€1.06	€6.53	€1.39	€1.01	€6.09	€0.99
	Adjusted Net Requirement	**€34.63**	**€44.21**	**€43.82**	**€32.50**	**€42.21**	**€42.14**

Revenue Requirement as requested by EirGrid and approved by the CER

[2] Revenue amounts rounded up.

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1 Introduction

1.1 The Commission for Energy Regulation

The Commission for Energy Regulation ('the CER') is the independent body responsible for overseeing the regulation of Ireland's electricity and gas sectors. The CER was initially established and granted regulatory powers over the electricity market under the Electricity Regulation Act, 1999. The enactment of the Gas (Interim) (Regulation) Act, 2002 expanded the CER's jurisdiction to include regulation of the natural gas market, while the Energy (Miscellaneous Provisions) Act 2006 granted the CER additional powers in relation to gas and electricity safety.

The Electricity Regulation Amendment (SEM) Act 2007 outlined the CER's functions in relation to the Single Electricity Market (SEM) for the island of Ireland. This market is regulated by the CER and the Northern Ireland Authority for Utility Regulation ("NIAUR"). The CER is working to ensure that consumers benefit from regulation and the introduction of competition in the energy sector.

1.2 Purpose of this paper

This purpose of this Information Note is to inform industry and the wider public on:

- The background to the East West Interconnector ("EWIC");
- The background to the financing arrangements already entered into;
- The level of revenue requested by EirGrid for the repayment of debt, operation and maintenance of the EWIC;
- The analysis of these requirements and the CER's decision on the level of allowed revenue;
- The return on its equity share in the EWIC project;
- The appropriateness and level of incentives that should be placed on EirGrid relating to maximising the operational availability of the EWIC.

1.3 Structure of this paper

This paper is structured in the following manner:

- **Section 1** provides an introduction to and outlines the purpose of this Information Note;
- **Section 2** provides background information on this note. It outlines, at a high level, the background to the EWIC project;
- **Section 3** discusses the regulation and licence requirements;
- **Section 4** summarises the EWIC revenue submission;
- **Section 5** details the EWIC capital requirements
- **Section 6** details the EWIC operational costs;
- **Section 7** details the EWIC return on equity;
- **Section 8** details the EWIC readiness costs;

- **Section 9** details the potential revenue streams to offset the EWIC revenue;
- **Section 10** details the incentive mechanisms around the EWIC; and
- **Section 11** summarises the revenue approved by the CER for the EWIC.

2 Background Information

2.1 EWIC Project

On 27 July 2006 the Minister for Communication, Energy and Natural Resources ("the DCENR") requested that the CER arrange the design of a competition to secure the construction of one 500MW East West interconnector and that this interconnector be owned by EirGrid[3]. Following this request the CER engaged EirGrid to develop the interconnector project pursuant to Section 16A of the Electricity Regulation Act 1999 (the "Act"), as amended. This interconnector is known as the East West Interconnector ("EWIC"). The duties and functions of EIL are set out in its licences from both the CER and Ofgem as Regulator in the other jurisdiction. EirGrid was granted an authorisation to construct the EWIC pursuant to Section 16 of the 1999 Act. This authorisation to construct has since been transferred to EirGrid Interconnector Limited ("EIL"). EIL is a wholly owned subsidiary of EirGrid and owner of the East West Interconnector. EIL came into existence in January 2010 and was granted a Licence to Operate the EWIC on 7 October 2011[4]. Ofgem granted EirGrid an electricity interconnector operator licence on 20 November 2007[5] which was then transferred to EIL on 4 November 2011[6]. Relevant regulation and licence requirements are discussed in later sections of this report.

2.2 Project Governance

The CER, DCENR and EirGrid established governance arrangements for the oversight on progress of the construction and status of capital expenditure of the EWIC. The framework is designed to provide assurance that appropriate expenditure decisions are made by EirGrid and risks to project construction are monitored. There are bimonthly meetings with monthly and quarterly reports generated by EirGrid. Where individual non-contract items are expected to exceed the budget by more than €500k or potentially lead to an overrun beyond €601m, CER approval is required.

2.3 Pass Through of Capital and Operating Costs

The thrust of the Government letter of July 2006 entailed that as the interconnector is to remain in public ownership and not to be funded directly through exchequer monies it would need to be underwritten by the final customer. In this context the EWIC is a fully regulated interconnector. All reasonable costs incurred by EIL during its construction and operation would

[3] Letter to CER dated 27 July 2006 available on CER Web site; "letter from Government"
[4] Operator Licence issued to EIL 7 October 2011
[5] http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=99&refer=Licensing/Work/Notices/Licences
[6] http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=36&refer=Licensing/Work/Notices/PropGrant

be recovered from the final customer. These costs are to be recovered through the TUoS charges, less revenue received from other revenue streams. These potentially include ancillary services and fibre optic hosting.

Pursuant to EU Regulation 1228/2003 (as amended) the EWIC is subject to regulated third party access and the revenue restrictions and congestion management guidelines arising from this Regulation. Under this Regulation capacity cannot be charged for unless the interconnector is congested and it is anticipated that auction receipts earned from selling capacity on a congested interconnector will reduce the financial burden on the final customer.

It was agreed with EirGrid that as project developer, it would run the competition for the award of the contracts necessary for its construction. The CER determined all key policy questions in consultation with the DCENR and had regulatory oversight of the procurement process.

The revenues to support EIL in carrying out its functions will be regulated[7]. The interconnector revenues will not be included in the revenues of EirGrid in fulfilling its function as Transmission System Operator ("TSO") as this is not a TSO function. It is intended, that the necessary support is recovered via the demand element of TUoS (from Republic of Ireland customers) net of any other revenue streams which may be available to it. The revenues within PR3 associated with the interconnector business will not be attributable to EirGrid TSO but instead represent a placeholder for the TUoS support necessary in order to fund the licensed interconnector operator activity (including remuneration of underlying capital cost of construction).

2.3.1 Capital Costs

The business case for the EWIC was premised upon a capital construction cost for the asset of €601m. EirGrid, on foot of the letter from Government, conducted a procurement process for the award of the contracts for the construction of the EWIC. This figure includes a contingency which EirGrid is incentivised to keep as low as possible, the mechanism for which is discussed later in this paper. At the time of writing, the project is expected to be delivered on time and ahead of budget. Due to the commercially sensitive and confidential nature of the financing costs with the lenders, EirGrid has requested that this commercially sensitive information is kept privileged. The CER has therefore provided the aggregate finance costs.

Finance Source & Type	Value €
Total Loans and Grant[8]	€570 million
EirGrid equity	€31 million
Total	**€601 million**

EWIC Project Financing

The terms of the loan were arranged prior to the issuing of full notice to proceed ("FNTP") with the construction of the interconnector which as well as requiring CER approval also required Government approval[9].

[7] The Electricity Act (1999 as amended), Section 2A, provides for considering the EWIC as part of the transmission system for the purposes of calculating charges for the use of transmission system (i.e. TUoS).

[8] Includes European Energy Recovery Plan (EERP) grant of €110m

2.3.2 Operational Costs

The underlying estimated ongoing operational costs are as set out in the table below for each of the next three years. Further detail and analysis is given in the following sections.

Activity	2012/2013	2013/2014	2014/2015
Operational Activities	€1.16	€1.16	€1.16
Asset Management	€3.28	€3.28	€3.03
Contract Management	€3.39	€3.50	€ 3.53
Total	**€7.83**	**€7.94**	**€7.72**

EWIC Operational Costs

3 Regulation and Licence Requirements

In April 2011, CER made its Decision on the conditions to be contained in the Interconnector Licence following a wide consultation process, including a proposed Decision. The duties and functions of EIL to operate the EWIC are set out in its licence from both CER and Ofgem.

As Interconnector Operator, EIL holds a connection and Use of System Agreement with EirGrid in EirGrid's capacity as licensed TSO, and EIL will hold an Ancillary Services Agreement with EirGrid, in EirGrid's capacity as licensed TSO. EIL will be only be remunerated for Ancillary Services which it provides in accordance with regulated rates, such revenues will be used to off-set TUoS tariffs. In this context it should be noted that EirGrid is not allowed to benefit from interconnector, apart from the regulated rate of equity it invested in the EWIC.

The CER and Ofgem have communicated and agreed the arrangements on the regulation and approval of revenues of EWIC. These are outlined below:

- Any revenue earned from the interconnector shall be attributed to the Irish consumers.

- To avoid double or inconsistent regulation, in relation to the arrangements for access to and charging for the use of interconnector, a coordinated approval approach has been agreed in line with Regulation 714/2009 and Directive (2009/72/EC).

The CER and Ofgem continue to engage on relevant matters relating to EU Regulation 1228/2003 (as amended) and relevant licence conditions. The Conditions referred to below pertain to the Interconnector Operator Licence as issued to EIL by the CER[10].

[9] This was a condition set out in the letter from Government to CER dated 27 July 2006
[10] http://www.cer.ie/GetAttachment.aspx?id=4f02705b-7ea2-4ac8-95c6-f3a583d0954d

3.1 Condition 19 Use of Revenue

In accordance with Condition 19 of CER's Interconnector Operator Licence, the licensee of the interconnector is required to prepare and submit for approval an annual revenue statement after the year in question ('Use of Revenues Statement'). A use of revenue statement will have also to be approved by Ofgem under Condition 9 of the Electricity Interconnector Licence. Both licences require the revenues to be utilised in accordance with the requirements of Article 16(6) of Regulation EC No 714/2009. It is important however that a common approach and understanding on the use of revenue is established.

Condition 19 of CER's licence states that EIL shall use any revenues it receives from the allocation of the interconnector for one or more of the following purposes:

(a) guaranteeing the actual availability of the allocated capacity; and/or
(b) investment in maintaining or increasing interconnection capacities.

EIL proposes that revenues earned from auction receipts would be used to support the EWIC revenue requirement and net against the level of EWIC TUoS support required. In other words, revenues from auction receipts will be net against EIL's revenue requirement, to lower the amount to be recovered from TUoS customers. The necessary support is recovered via the demand element of TUoS (from Republic of Ireland) customers.

The CER agrees with this approach, i.e. that revenues earned from auction receipts can be net against TUoS support for EWIC. The format of the statement will be approved following discussions with Ofgem.

More generally, the revenues to support EIL to carry out the functions assigned to it under its licence will be regulated, as it was developed on behalf of Irish consumers.

3.2 Condition 20 Access to the Licensee's Interconnector

This Condition requires EIL to offer access to the interconnector and enter into agreements for capacity with any person on a non discriminatory, objective and transparent basis. Access arrangements are a SEM matter and subject to separate decision process. Therefore they are not addressed in this paper.

Condition 20 also requires EIL to submit a charging methodology for access to and use of the interconnector. This was a separate decision process and therefore not discussed in this paper.

3.3 Condition 18 Restriction of Use of Certain Information and Confidentiality Arrangements

This Condition requires EIL to preserve the confidentiality of Commercially Sensitive Information held and/or obtained by EIL in the discharge of its function as interconnector licensee in accordance with the Regulation EC 714 2009 of the European parliament and the Council.

The CER is mindful of the comments received from industry regarding possible conflict of interest that may arise for EirGrid as TSO and parent company of EIL. In this regard the CER will require EIL to provide a detailed statement covering the manner in which it meets its obligations under Condition 18 of its licence and any other matters regarding confidentiality and ring fencing that may need to be addressed. Following receipt of the above mentioned request, the CER will consider how best to provide the relevant information to allay concerns.

3.4 Certification

It is a requirement of Directive 2009/72/EC that electricity transmission arrangements across EU Member States are suitably unbundled and that the Transmission System Operators ("TSO") are certified. The Certification process is designed to ensure effective independence of the TSOs in carrying out its tasks as set out in Article 12 of the Directive, from any generation or supply interests. It is anticipated that the EIL will apply for certification of the EWIC and that this will follow the consideration of the certifiability of the onshore transmission arrangements which is currently being considered by the CER.

4 EWIC Revenue Submission - Summary

The CER received a submission regarding the revenue requirement for the EWIC. The submission was made by EirGrid as parent company of EIL, a wholly owned subsidiary.

The CER has examined the proposals made and provided its approval using the following principles:

1. Debt service costs and liquidity covenants to be passed through on the basis that this was agreed as part of the funding arrangements.

2. Operating costs will be based on a pass through model for the first three years of operation. EIL will be required to demonstrate that all costs were efficiently incurred. An audit of operating costs will be carried out to ensure where services were tendered or contracted and that the best value was attained for the final customer. Under spend in operating costs will be returned to customers in a subsequent tariff year and netted against EIL's revenue requirements. Additional costs over and above the *ex ante* provision will be treated similarly provided that these are appropriately incurred. In the event that the operating costs, in any of the three broad cost categories, exceed the level set out in this document by €500,000, then the CER should be advised, to consider if a more detailed submission and approval is required. Further detail with regard to the operating costs is explained in Section 6.

3. Return on Equity. The CER acknowledges that there was an onus on EirGrid under the terms of the EIB funding arrangements to have some of its own equity in the business and for it to remain there for the duration of the loan agreement. The CER agreed that EirGrid's equity return would be consistent with that agreed in PR3. The CER is approving a return on equity of 7.51% equivalent to a WACC of 5.75%. This is lower than that proposed by EirGrid but, consistent with the rate determined in PR3, adjusting for efficiencies in operating costs that were accounted for the Transmission Asset Owner business.

4. IT Capital Expenditure. EirGrid has submitted costs relating to IT and the Auction Management Platform (AMP). The CER is approving a WACC of 5.75% and a depreciation profile of 8 years relating to approved costs. This rate is consistent with the rate determined in PR 3 but adjusting for efficiencies in operating costs that were accounted for in PR3 for the Transmission Asset Owner business.

   It is possible that due to ongoing work in the SEM coupled with the fact that EWIC is a start up operation, there could be a number of IT related changes. The CER is of the view that costs relating to IT changes must be cost effective and efficiently incurred. The CER recognises that some flexibility in expenditures associated with system changes is required, to ensure the smooth and efficient operation of EWIC and to enable EIL to provide services to users of the EWIC. In recognition of this and in the interest of consumers, the CER proposes that until the approach for approval of IT costs, relevant telecommunications costs and system changes are finalised, costs in this regard that are greater than €80,000 will require authorisation for the associated spend. Furthermore EIL will have to demonstrate annually that costs were efficiently incurred and that alternative options were considered. An audit of the costs relating to such changes will be required.

The table below summarises the revenue requirements as submitted by EIL.

		EirGrid Proposal		
Line Item #	Element	€m	€m	€m
		2012/13	2013/14	2014/15
	Expenditure			
(1)	Debt Service Costs			
(2)	Debt Liquidity requirements (ADSCR, PDSCR, LLA)			
	Total Cost	€49.00	29.76	34.90
(3)	Equity Opportunity Cost of Capital and Principal Repayment (2011 prices)	€4.51	€4.37	€4.23
(4)	East West Readiness Recovery (2011 prices)	€0.63	€0.61	€0.58
(5)	Operational Costs (2011 prices)	€7.83	€7.94	€7.72
	Underlying Net Requirement	€61.97	€42.68	€47.43
(a)	Reprofiling			
	Extent of Reprofiling	-€13.40		
	Additional Revenues	-€15.00	-€5.00	-€5.00
	Adjustments as a result of reprofiling (2011 prices)	€1.06	€6.53	€1.39
	Adjusted Net Requirement	€34.63	€44.21	€43.82

Revenue Requirements as Submitted by EIL

5 EWIC Capital Repayments

5.1 Debt Service Cost:

EirGrid Proposal

The revenue requirements for the capital cost submitted by EirGrid reflect the demands to repay the interest and principle on the commercial debt.

The debt was issued to EirGrid/EIL on the basis that the group would conform to a number of debt covenants and other requirements that would be put in place. These arrangements ultimately provided for a lower overall cost of funds.

The original business case for the EWIC was premised upon a capital construction cost for the asset of €601m. This figure includes a contingency which EirGrid is incentivised to keep as low as possible. Currently the project is on target and ahead of budget.

In recognition of the confidential and commercially sensitive nature of the agreements between EirGrid and its lenders, a detailed breakdown of the Debt Service Cost has not been provided. The CER has endeavoured to provide some transparency, without breaching the terms or nature of commercially sensitive information. The provision of the recovery of both capital and operating costs enabled a lower cost of finance and higher gearing to be achieved than would otherwise have been the case.

Financing for the project has been arranged thus:

Finance Source & Type	Value €
Total Loans and Grant[11]	€570
EirGrid Equity	€31 million
Total	**€601 million**

EWIC Project Financing

The debt in the project is to be repaid on a 100% pass through basis of both interest and principal and to be recovered from the TUoS customer as discussed above.

The debt service cost covers principal and interest repayments. It is higher in the first year due to the need to service the bridging loan (see below) as proposed by EirGrid.

"Bridging Loan"

EirGrid Proposal:

The final tranche of €33m out of the total European Energy Recovery Plan ("EERP") grant of €110m is due to be received following the completion of the project. It was therefore necessary to enter into a "bridging loan" to cover the short term shortfall. The capital element of this bridging loan will ultimately be covered by the EERP grant. As EirGrid will incur the interest cost of the

[11] Includes European Energy Recovery Plan (EERP) grant of €110m

bridging loan the TUoS customer will be required to provide revenue for the interest on this loan and will need to put in place the debt covenant liquidity requirements faced by EirGrid to meet the covenant requirements associated with it. This increases the cash requirement in the first year in the order of €5.1m as a result of the need to hold the principal and interest cover against the bridging loan.

5.2 Debt Liquidity Requirements:

EirGrid explain in their proposal that, in addition to the underlying principal and interest repayments of the loan, there a need to have additional cash flow to meet debt covenants of the loan. The covenants require them to have in place and Annual Debt Service Cover Ratio (ADSCR) and Project Debt Service Cover Ratios (PDSCR) above a rate at all times. The covenants also require that sufficient funds are held in reserve to cover two years of operational and maintenance costs; the Lifecycle Liquidity Account (LLA). The ratios and requirements must be maintained and form an integral part of the underlying debt service cost requirements.

The cost of the covenants in the first year is €13.40m. This figure reduces in the second and subsequent years as the bridging loan is assumed to be paid back; this is discussed further below.

(a) Reprofiling Proposal

EirGrid Proposal:

As a result of the significant cash requirements in the first year to meet costs relating to the debt covenants and bridging loan, an additional tariff impact is seen in the first year of EWIC’s operation.

In an effort to address the tariff impact in the first year, EirGrid has proposed a NPV neutral reprofiling mechanism which will smooth this upfront requirement across a number of years. This reduces their revenue submission to circa €44.63m for 2012/2013 from €57m.

EirGrid propose that it would contribute the additional €13.40m from its own resources and this equity would be remunerated on the same basis as its equity stake in the EWIC project over 10 years. In the second year, €5m of this €13.4m would be returned to EirGrid as the financial demands of the debt covenants is set to be reduced in this year with the bridging loan expected to be repaid. In other words, the debt service cover ratios no longer need to cover the bridging loan. The cash flow reprofiling proposal is designed to be NPV neutral to the TUoS customer.

5.3 Capital Repayments - CER Decision

5.3.1 Debt Service Cost:

This principle that debt service costs would be recovered through TUoS was established in the initial stages of the project and that the funding structure that is in place is optimum for the project financing. The CER is satisfied with the funding structure and had regulatory oversight during the entire process, including discussions with the major lenders to the project. This is reflected in the relatively low interest rate for the entire funding as a whole. The interest and principal repayments are consistent with the funding arrangements already agreed.

Bridging Loan

As the bridging loan will be repaid once the final tranche of the EERP grant is received, the issue here is one of cash flow and is unavoidable due to the terms and conditions of the grant. The interest and principal repayments associated with the bridging loan requires additional cash requirements on a short term basis of approximately €5.1m in order to meet the debt covenants.

Under EirGrid's proposal, the TUoS customer will cover the interest on the bridging loan and the debt service covenants associated with it but will not pay for the principal repayment; this will be repaid from the EERP grant.

Due to the timing of the payment of the final tranche of the grant and the ensuing cash flow issue, the revenue requirement arising from utilising a bridging loan until the final payment is received, is approved. The effect of this loan is discussed further in the section below.

5.3.2 Debt Liquidity Requirements:

(a) Reprofiling Proposal:

The cash flow variation, with a significant additional requirement in the first year is undesirable as it would have knock on effects in the final tariff. Essentially customers in 2012/13 are paying for a cost which is associated with the lifetime development of the project. This questions the fairness whether all costs should be allocated on a simple cash flow basis and spreads the requirement to meet the covenants requirements over a number of years rather than just Year 1.

In view of the tariff impact in the first year, the CER agrees that additional equity be injected to smooth the revenue requirement and tariff impact in the first year.

The alternative situation is that fluctuations are not reprofilled but allowed to pass through to the final TUoS tariff and that customers in Year 1 take the burden of the debt covenant requirements, as opposed to sharing it across customers in later years.

Having considered the alternatives, in order to mitigate the tariff impact on consumers in the first year, the CER is approving the reprofiling option set out above, with a repayment profile over a longer profile of 20 years, instead of over 10 years as proposed by EirGrid.

For the purpose of the submission EirGrid are assuming a rate of 7.93%. The CER approves a return on equity of 7.51% consistent with a WACC of 5.75%.

6 Operational Costs

EirGrid Proposal

EirGrid propose that appropriately incurred operating costs would be based on principle of pass through, in the early years of operation of the EWIC.

In recognition of the start up nature of the operation of the EWIC it was agreed that pass through model be applied in the case of EWIC for the initial years of its operation. The pass through model will also provide surety to the banks that the ongoing costs of operation will be recoverable and will not impinge upon the ability of the business to meet its underlying funding and liquidity obligations, which requires ratios relating to operating costs to be held in reserve.

The operating costs are very broadly categorised as costs that will either be competitively tendered or those that by their nature are third party driven, e.g. statutory levies and rates. Where services are subject to tender or where the identification of cost categories would reveal the level of costs allowed these have not been identified separately. This is to protect the competitive tendering process. The cost categories have been identified as much as possible.

The operating costs proposed are approximately €8m per annum. EirGrid has informed the CER that the estimates provided are largely informed through engagement with firms and experience in relevant areas.

EirGrid's proposal categorises the overall ongoing operation of the in three key activity areas.

1) Operational Activities;
2) Asset Management;
3) Contract Management.

6.1.1 Operational Activities

The successful operation of the interconnector requires significant ongoing support from telecoms and Information System (IS) activities. The fundamental operational activity includes activities such as energy schedule review and issue and voltage control at either end of the EWIC. In addition, alarm monitoring is required and the management of system alerts and emergencies (e.g. loss of telecoms). It is also necessary to manage interconnector outages which require close coordination with the TSO at either side of the interconnection.

There are telecoms and IS requirements which support the above activities. In order to communicate with the TSO a Wide Area Network (WAN) is required which links the interconnector to the TSO's systems. There is an ongoing requirement to maintain and service this WAN and the associated infrastructure.

The management of participant access to the interconnector is undertaken by the Interconnector Administrator (IA) activity. This is a requirement under both the SEM Trading and Settlement Code and the GB Balancing and Settlement

Code. Effectively the IA administers the interconnector access arrangements, including the running of capacity auctions via the auction management platform (AMP). It must also perform the formal roles of IA and IEA in the BETTA market in GB as defined under the GB Balancing and Settlement Code. These requirements include, *inter alia:*

- Submission of the relevant data files to SEMO, Elexon, and National Grid.
- Management of the daily, monthly and quarterly financial settlement with SEMO, Elexon and National Grid.
- Managing and monitoring the credit cover arrangements in place for trading on the Interconnectors.
- Managing Interconnector queries or disputes raised under the Market Codes and Agreements and ensuring that they are resolved within the agreed timescales.

In addition to the capital expenditure associated with the AMP and other IS system support there are ongoing costs associated with utilisation of the asset including hosting the AMP, operational support and maintenance of the solution and the cost of the telecoms capacity. No provision has been made in anticipation of any major market model changes, e.g. EU Target Model. EirGrid propose to address these as they arise.

Under the SEM Trade and Settlement Code (T&SC) an interconnector is not liable for Fixed Market Operator Charges (FMOC) or Variable Market Operator Charges (VMOC), nor is it liable for Imperfection Charges. This is due to the unique treatment of interconnectors in the SEM given their distinct operational characteristics. In the BETTA market Balancing Services Use of System (BSUoS) is charged to interconnector users (i.e. capacity traders) as opposed to the interconnector operator.

In the operation of the EWIC electricity will be required to cover house load needs. There may also be further costs associated with ongoing testing and other system requirements.

Commissioning	**2012/2013**	**2013/2014**	**2014/2015**
Operational Activities Purchase of energy and ongoing testing	€1.16	€1.16	€1.16

Operational Activities Estimated

6.1.2 Asset Management

The asset management function ensures that the EWIC's physical assets are kept in working order and maintained to a safe and reliable standard. Asset management involves developing polices, managing the day to day requirements in accordance with such policies and maintaining site security. EIL is obliged to maintain and operate the equipment and premises in line with the applicable Grid Code and to a standard equal to that of a prudent electricity utility practice and/or the relevant electrical standards; this would be pursuant with the signed Connection Agreements with EirGrid and National Grid and the respective licences.

Policies are developed for maintenance, safety and fault responses/repair (including preventive measures) for the cable along with the converter stations at both ends. These vary for both terrestrial and subsea cables. The day to day maintenance will involve supervising/overseeing of third party contractors. Specific activities include switching at the converter stations as requested by the TSO, ensuring that spares and consumables are replenished, along with the monitoring of both the cable the terrestrial and off-shore cable in order to diagnose for faults that occur in addition to normal monitoring of this cable to ensure that it is at an appropriate performance standard.

A maintenance and repair contract will be put in place with a third party vendor for the converter stations and the storage facility site. This will cover basic services, annual maintenance and call outs. The cost of switching will be organised on a variable cost basis. In addition the replacement of spares and consumables will need to be undertaken on an annual basis.

The terrestrial cable is monitored on a regular basis throughout the year. Marine surveys of the cable are required in order to gain an understanding of the condition of the cable which will assist in determining whether further action is required. They will be undertaken on periodic basis, with an initial working assumption that a survey will be done every three years. The first survey is expected to occur in the second year of operation. The timing and ultimate number of surveys will be heavily influenced by the condition of the cable and its surrounding environment. In order to mitigate the tariff impact of the marine survey, the cost of each survey is shared across each year's revenue requirement up to and including the year the survey is expected to occur. Therefore, the first two years incorporate a provision as the survey is expected to take place every three years a third of the cost is included on a per annum basis thereafter. The CER propose that the costs associated with the marine survey is not recovered in the first year and are profiled for recovery over a longer period starting from the second year of EWIC's operation.

Additional costs will be incurred when fault repairs are required to be undertaken. The extent of this will only be known on an *ex-post* basis. Initially, for a period of five years, it is expected that equipment faults will largely be covered by the warranty held with ABB (the turn key contractor is responsible for construction of the interconnector).

Asset Management	2012/2013	2013/2014	2014/2015
	€3.28	€3.28	€3.03

Asset Management Estimated Costs

6.1.3 Contract Management

EIL estimate that a general management function will, once bedded in, involve circa five Full Time Equivalents (FTE), supplemented with financial, legal and regulatory support as necessary. In addition, a provision has also been made for professional fees and a number of associated basic IT and facilities costs. This function will manage all the contractual arrangements currently in place as well as those that remain to be finalised and renewed.

By conducting its businesses in Great Britain, EWIC is obliged to pay commercial rates. There is not a direct comparison of this category on the Irish side of the connection but the local authority global rates can be considered broadly equivalent. An initial estimate of global rates applicable, and in advance of any rating, is provided as an estimate.

In addition to the payment of Commercial Rates on the Great Britain side, EWIC must pay for a Crown Estate Lease. The payment profile is as a result of a prepayment already made and which is capitalised in the project. The equivalent foreshore lease in Ireland was paid on upfront basis and has no ongoing cost associated with it.

It will be necessary for the business to have insurance protection in place. The cost of the insurance will be a function of both the risk profile of the interconnector itself, which will evolve over time, and also external international factors. Insurance premiums are increasingly being influenced by significant worldwide *force majeure* events along with the increased correlation that international markets now face and which the insurance companies avail of to manage its obligations to holders of insurance policies. Initial estimates provided by EIL's insurance advisor are put forward.

As part of the EirGrid Connection Agreement the EWIC is obliged to pay the On Going Service Charge (OGSC) and an estimate for this has been provided. In addition, as part of the National Grid Connection Agreement there is an obligation to meet all the charges as applicable to the Connection Use of System Code (CUSC). Estimate for this has not been included in the submission.

The SEM Committee Decision on All Island TUoS charges for Generators (SEM/11/078) noted that the EWIC, or its users, will not be charged TUoS. This is consistent with the stance undertaken by the National Grid Electricity Transmission plc (NGET) and not vetoed by Ofgem, not to charge Transmission Network Use of System (TNUoS) to interconnectors. By not charging TUoS European competition is promoted by providing a consistent basis upon which all parties compete with each other in the wider European market.

A further external cost that EWIC incur is the payment of regulatory levies under its licences. An explicit provision for the CER levy has not been made. Under the Ofgem licence EWIC is liable to certain payments to the regulator and we have sought clarification from Ofgem on these. However, it is expected by EirGrid that these payments will occur on an exceptional basis. Therefore, no estimate is included in relation to the Ofgem licence.

Contract Management	2012/2013	2013/2014	2014/2015
	€3.39m	€3.50m	€3.53m

Contract Management Estimated Cost

Summary of Operational Costs

In summary, EirGrid propose a pass through model will apply with an *ex-post* assessment occurring after 3 years of operation with any necessary adjustments as part of the annual TUoS adjustment process in the interim.

Activity	2012/2013 €m	2013/2014 €m	2014/2015 €m
Operational Activities	€1.16	€1.16	€1.16
Asset Management	€3.28	€3.28	€3.03
Contract Management	€3.39	€3.50	€ 3.53
Total	**€7.83**	**€7.94**	**€7.72**

Summary of Operating Cost Estimated

6.2 *Operating Costs - CER Decision*

The CER agreed during the initial stages of the project that, as EIL is a start up operation, therefore some experience is required before the normal revenue review exercise can be introduced.

The CER has reviewed EIL's submission and acknowledges that it is based on reasoned estimates following discussions. The final amounts will not be fully established until the tender process is completed. The CER's approval of EIL's submission is made following review of EIL's submission and status of the various tendering processes.

In addition CER has outlined guiding principles that should apply in procuring services. These should apply until the treatment of operating costs in the long term has been determined. Also where operating costs can be profiled for recovery over a longer period this will be factored into future submissions in order to smooth out spike effects on final customer tariffs:

1. Services tendered should be competitively procured (where relevant) and EIL should be satisfied it can demonstrate that contracts procured are cost effective;

2. Operating costs incurred will be subject to an audit. At a high level the purpose will be to review the estimates provided and the actual costs incurred, the process used and the demonstration that best possible value to the final customer was achieved;

3. In the event that the operating costs, in any of the three broad cost categories, exceed the level set out in this document by €500,000, then the CER should be advised, to consider if a more detailed submission and approval is required. This is to provide oversight on the level of operating cost required during the course of the year, and provide

some protection mechanism to the TUoS customer. The mechanism is again a reflection of the start up nature of the EWIC;

4. Payroll costs cannot go beyond the average cost approved under PR3. CER consent will be required should EIL require FTE beyond the estimated five and the approved cost will be determined at the time;

5. The pass through model will be supplemented by the application of key performance incentives, once sufficient information has been gathered.

The table below summarises CER approval of operating costs:

Activity	**2012/2013 €m**	**2013/2014 €m**	**2014/2015 €m**
Operational Costs	€1.050	€1.050	€1.050
Asset Management	€2.050	€2.550	€2.550
Contract Management	€2.924	€3.034	€3.064
Total Allowed Operating Costs	**€6.024**	**€6.634**	**€6.664**

CER Approved Operating Costs

7 Return on Equity

EirGrid Proposal

EirGrid has invested €31m of its own equity in the EWIC Project. Under the structure of the financing given by the EIB to the project there was a requirement for EirGrid to have some of its own equity in the business and for it to remain there for the duration of the life of the loans. Although there was an understanding that the equity employed by EirGrid in the EWIC project would be remunerated on a basis consistent with the equity return provided to EirGrid in its capacity as licensed TSO in PR3 the actual methodology or value was not determined.

EirGrid propose that the equity return on the €31m of its capital injection be based upon that determined in PR3. EirGrid requested a rate of 7.93% real pre-tax. The equity is assumed to be repaid over the 20 years of the life of the debt and will be indexed by HICP consistent with the standard approach applied by the CER to Regulatory Asset Bases.

7.1 Return on Equity CER - Decision

The CER acknowledge that there was an onus on EirGrid under the terms of the EIB funding arrangements to have some of its own equity in the business and for it to remain there for the duration of the life of the loans. During the development of the EWIC, the CER agreed that EirGrid could earn an equity return consistent with that in PR3. The CER is therefore approving a return on equity of 7.51% equivalent to a WACC of 5.75%. This is consistent with the rate determined in PR 3 but adjusting for efficiencies in operating costs that were accounted for the Transmission Asset Owner business.

Any review of a change to the WACC that may be applicable to EWIC will only take place at the next full review of PR3 and not during an interim review. As the funding for the EWIC is already in place and determined the CER feels that the uncertainty faced by the TSO side of the business is hence not comparable to that faced by EWIC.

7.2 Incentive on Equity

The CER also considered options to incentivise EirGrid with regard to their return on equity. A number of options were considered, but not progressed as each could create perverse incentives on EirGrid. The options considered are outlined below:

1. A floor of 6.24% and a cap of 7.93% on equity return would be applied. EIL would earn a higher return for maximising revenues from Ancillary Services, for any revenues above €5m. This option was disregarded, as it would be at odds with the principle that the EWIC should also be available for other players to make available ancillary services either across the interconnector or as generator in the market.
2. A mechanism using the above cap and floor would be used to incentivise EIL to maximise utilisation of the EWIC. In other words, EIL would earn a higher return if revenues from congestion rents were

maximised. This option was also ruled out as it is at odds with the principle that EIL should provide opportunities and design products that would limit congestion.

3. Another option that was considered inappropriate was to include the TSO's process for determining the transfer capacity and associated compensation mechanism on the EWIC as part of any incentivisation scheme for EIL. This is because the process relates solely to the TSO licence holder and is subject of a specific TSO procedure as set out in the annex to Regulation 714/2009. If it is decided that the TSOs should be incentivised in this regard, it should be dealt with as part of current or future TSOs incentivisation schemes, separate from the interconnector owners.

The CER welcomes suggestions from interested parties in relation to incentives that could be introduced going forward.

8 East West Readiness

EirGrid Proposal

The readiness costs submitted relate to various capital expenditures required for the operation of the EWIC. The total costs submitted are €3.49 million (before Interest During Construction) and include elements such as the Auction Management Platform (AMP), telecommunications and other capital expenditure associated with IT systems costs.

The readiness costs are separate to the underlying capital cost of the interconnector. The AMP was required to manage the capacity allocation process on both Moyle and the EWIC. The AMP was procured recognising EU procurement rules and procedures as applicable and is consistent with the criteria set out by the SEM Committee in its SEM regional integration decision paper.

In its submission to the CER, EirGrid assumed 50% of the capital cost for the AMP is borne by EWIC and 50% by Moyle. The total cost submitted in relation to the AMP is €1.1m which relates to other IT and Telecoms systems and capital expenditure associated with system changes. EirGrid has proposed that this be recovered over 8 years with a WACC of 5.95%.

EirGrid has also notified that there will likely be changes to the AMP over time as a result of changes in market arrangements, access rules. These will be added to the RAB on an as incurred basis.

8.1 East West Readiness – CER Decision

The readiness costs submitted relate to various capital expenditures required to establish the operation of the EWIC. The IT and Telecom systems were required to ensure the complete functionality and readiness of the services provided as interconnector operator, in time for operation and auctions.

The CER is informed that the AMP was procured competitively, recognising EU procurement rules and procedures and consistent with the criteria set out in the SEM Regional Integration Decision Paper (SEM/10/11)[12]. In relation to telecom systems required, the most cost effective option was adopted and current providers, where appropriate, have been used for services relating to IT requirement in order to leverage existing systems.

The total costs submitted are €3.49m (before Interest During Construction) and the CER is approving €3.0m in 2012 for readiness costs. The balance of the submission to considered subject to further discussions regarding the details of the estimates and the treatment of recovery.

[12] SEM-10-011 - SEM Regional Integration Decision Paper

The CER recognises that some flexibility in expenditures associated with system changes is required, to ensure the smooth and efficient operation of EWIC and to enable EIL to provide services to users of the EWIC. In recognition of this and in the interest of consumers, the CER proposes that until the approach for approval of IT costs (or if relevant telecoms costs) and system changes are finalised, costs in this regard, greater than €80,000 will require authorisation. Furthermore EIL will have to demonstrate annually, that costs are efficiently incurred, together with alternative options considered. An audit of the costs relating to such changes will be required. Also it is anticipated that relatively small system changes to the AMP/IT systems will be treated as operating costs but larger changes will be capitalised. Costs associated with 2012/2013 are capitalised.

The CER is approving a WACC of 5.75% and a depreciation profile of 8 years. This is consistent with the rate determined in PR 3 but adjusting for efficiencies in operating costs that were accounted for in PR3 for the Transmission Asset Owner business.

The CER also requires that any system changes that need to be capitalised should be carried out in a cost effective manner. EIL will have to demonstrate on an annual basis that these were cost effectively and efficiently expended. In the first three years costs, relating to all system changes will be subject to audit to assure these were cost effectively and efficiently expended. A governance and approval process will be established for the approval of system changes required for the operation of the EWIC.

In recognition of the start up nature of the capital requirements, the CER considers it appropriate to give EIL some flexibility in the capital cost requirements rather than imposing a cap that cannot be achieved. To ensure that costs are incurred efficiently and/or procured cost effectively, an audit will be conducted for the first three years of operation.

9 EWIC Revenue Streams

EirGrid Proposal:

It is anticipated that a number of sources will generate income for EWIC and thus reduce the burden on the TUoS customer. Income sources include auction receipts where congestion exists on the EWIC, income from ancillary services and income from the hosting fee from fibre optics laid on top of the EWIC. Following discussions with EirGrid it was agreed that an *ex ante* provision of €15m be included in the calculation of the EWIC revenue requirement as the estimated net value of the *ex ante* estimate of Auction Receipts, Ancillary Services and fibre optic hosting for the 2012/13 period. No auction receipts estimate has been made in respect of 2013/14 and 2014/15 given that the market appetite has not yet been tested. The outturn income associated with these income sources will ultimately be reflected in the ongoing revenue requirement assessment.

EirGrid has explained its view that there is a negative correlation between the auction receipts revenue and the income that can be earned from ancillary services. Auction receipts can only be earned when the interconnector is congested (in accordance with Regulation (EC) No 714/2009) while ancillary services can only be provided, and therefore receive payments, when the interconnector is not congested. EirGrid is installing fibre optic cables at the same time as the installation of the EWIC. The capital expenditure does not form part of the EWIC project capital expenditure. In addition, the operational costs of the fibre optic business is a matter for EirGrid and is not recovered through TUoS or under this submission. However, the fibre optic business is utilising the regulated asset. Therefore, it is reasonable that the unregulated business contributes a fee towards this use of the asset. Following discussions with the CER, EirGrid proposed that an annual charge based on a fixed percentage of the revenue earned from the fibre optic hosting will be shared on a 50:50 basis with EIL and the TUoS customer. This is consistent with the telecoms sharing arrangements as set out in the 2010 Transmission Revenue Decision Paper[13].

9.1 EWIC Revenue Stream – CER Decision

EirGrid estimate that the potential annual income from auction receipts, ancillary services and fibre optic hosting fee is in the order of €15m for the 2012/13 period and currently estimate the income at €5m for 2013/14 and 2014/15. Although this is a proportion of to the annual revenue requirement of circa. €50m it nonetheless represents a net reduction in the burden borne by the final customer. Following discussions with EirGrid it was decided that this netting be performed on an *ex ante* basis.

[13] CER/09/140, p.47 http://www.cer.ie/GetAttachment.aspx?id=499f42d8-fd53-417f-9ea6-25d490f96d71

10 Interconnector Incentives

This section summarises the various incentives on EirGrid for the construction and continued availability of the EWIC and possible incentives relating to the return on project equity.

10.1 Equity Incentive

The CER also considered options to incentivise EirGrid with regard to their return on equity. A number of options were considered, but not progressed as each could create perverse incentives on EirGrid. This was dealt with in Section 7.2.

10.2 Construction Incentive

EirGrid Proposal:

EirGrid currently have an incentive framework for the capital cost and timely delivery of the EWIC. The framework is out lined below.

Designed around the capital cost and timely delivery:

- Capex: an incentive/ penalty of 0.2% of equity employed for every €10m, or part thereof, for project delivery below/ over the budgeted project cost of €601m;

- Timing: an incentive/ penalty of 0.2% of equity employed for every month, or part thereof, the project is successfully delivered before/ after 30th September 2012.

- Each portion of the incentive would apply for 10 years, subject to a total cap and collar of +€310k or -€310k per annum (1**%** of the equity employed in EWIC (before Interest During Construction)).

10.3 Availability Incentive

EirGrid has proposed a performance incentive on the availability of the interconnector and have proposed two options. Any penalty imposed on EirGrid resulting from the terms of the availability incentive would be fed through to the TUoS customer by reducing the required TUoS support for the EWIC.

EirGrid assume that each year's performance will be assessed on a discrete individual basis i.e. one year's performance outturn would not have an effect on a subsequent year's reward/penalty. This was the basis on which EirGrid determined the appropriateness of the risk profile for the two proposals put forward. In addition, it is important that any reward/penalty is applied in a timely and effective manner rather than applying after a three year interval. EirGrid believes that this overall approach will lead to a more effective incentive design to the benefit of the customer.

Option 1:

This option seeks to incentivise those elements are in general more controllable by the Licensee, that is scheduled outages. As such this option excludes forced outages and is therefore less precise in measuring that which is ultimately of overall benefit – total availability. The parameters are set accordingly with a cap set by reference to the minimum anticipated level of maintenance required in a best case scenario and a symmetric collar.

In summary Option 1:

- relates to scheduled outages only.
- the central availability target is 98% with upper and lower bound of +/- 1.2% (i.e. 99.2% or 96.8%).
- the reward/penalties would be a symmetrical positive/negative of 0.5% of the cost of equity (applied to the project equity). The 99.2% cap is set by reference to the minimum anticipated level of maintenance required in a best case scenario. This equates to a maximum reward/penalty of approx. €0.175m p.a. (or putting it another way, for every 0.1% above 98% availability up to 99.2% is worth approx. €14,600).
- It is the same is for the penalty as this a symmetrical financial reward/penalty.

Option 2:

This option focuses on the total availability by incorporating forced outages in addition to scheduled outages. However, as these are less under the influence of the Licensee the associated cap and collar arrangements and asymmetry in the payoffs reflects the increase in risk profile associated with such an incentive.

In summary Option 2:

- relates to all outages (both scheduled and forced).
- the central availability target is 96% with an upper and lower bound of +/- 2.5% (i.e. 98.5% and 93.5%).
- the reward/penalties are asymmetric with 1%/-0.5% applied to the cost of equity (which is applied to the project equity). This equates to a maximum reward of approx. €0.35m and penalty of approx. €0.175m p.a. (or putting it another way, for every 0.1% above 96% availability (up to 98.5%) the reward is worth €14,000 or for every 0.1% below 96% availability (down to 93.5%) the penalty is €7,000)
- any significant *force majeure* events would be excluded.

10.4 Interconnector Availability Incentive - CER Decision

Based on the proposals above pertaining to the incentive for the timely delivery of the EWIC and under budget it is decided to structure the incentive mechanism in the following way:

- The availability incentive needs to reflect all outages as opposed to scheduled outages

- The upper and lower percentage availability needs to be higher to be consistent with the availability figures below:

Availability (%)	April 08 – March 09	April 09 – March 10	April 10 – March 11
IFA	94.30	94.80	Unavailable
Moyle	99.05	93.47	85.74

Source: EirGrid Submission

- a central availability target of 97% with an upper bound of 2.0% and a lower bound of 1.0% that is a maximum of 99% and minimum 96% availability.
- A reward/penalty of +1% / -0.5% on this availability applied to the cost of equity in the project.
- The cost of equity in the project is, as discussed earlier, €31m. EirGrid assumed a figure of €35m which takes account of interest during construction (IDC) and inflation. However the figure for the purposes of the incentive calculation is €31m.
- This equates to a maximum reward of approx. €0.31m and a maximum penalty of approx. €0.155m p.a. (or putting it another way, for every 0.1% above 97% availability (up to 99%) the reward is worth €15,500 or for every 0.1% below 97% availability (down to 96%) the penalty is also €15,500).

The CER believes that this incentive more balances the incentive to be placed on the Licensee in order that it achieves the highest availability possible while at the same time controlling the amount of payments thus payable to the Licensee that ultimately need to be borne by the TUoS customer. The CER agrees that incentives should be should be assessed on an annual basis, which is in line with performance incentives in PR 3 for Transmission and Distribution allowed revenues.

Finally the CER has decided to use a definition to guide determination of *force majeure event* in the context of this project.

"*Force Majeure*" means an act of God, war, riot, civil commotion, malicious damage, compliance with a law or Government order, rule, regulation or direction, fire, flood and storm. However CER still expects EIL to design against credible worst case events and take reasonable endeavours to protect the EWIC from the risks of fire, flood and storm damage. These will be taken into consideration when evaluating outages due to *force majeure*.

11 Interconnector Revenue Approved by CER

The sections below cover the CER's response and review of EirGrid's proposal.

		EirGrid Proposal			CER Decision		
Line Item #	Element	€m	€m	€m	€m	€m	€m
		2012/13	2013/14	2014/15	2012/13	2013/14	2014/15
	Expenditure						
(1)	Debt Service Costs & Liquidity	€48.99	€29.76	€34.89	€48.99	€29.76	€34.89
(2)	Equity Opportunity Cost of Capital and Principal Repayment (2011 prices)	€4.51	€4.37	€4.23	€4.33	€4.20	€4.09
(3)	East West Readiness Recovery (2011 prices)	€0.63	€0.61	€0.58	€0.54	€0.52	€0.49
(4)	Operational Costs (2011 prices)	€7.83	€7.94	€7.72	€6.02	€6.63	€6.66
	Underlying Net Requirement	**€61.97**	**€42.68**	**€47.43**	**€59.88**	**€41.11**	**€46.14**
(a)	Reprofiling						
	Extent of Reprofiling	-€13.40			(-€13.40)		
	Additional Revenues	(-€15.0)	(-€5.0)	(-€5.0)	(-€15.0)	(-€5.0)	(-€5.0)
	Adjustments as a result of reprofiling (2011 prices)	€1.06	€6.53	€1.39	€1.01	€6.09	€0.99
	Adjusted Net Requirement	**€34.63**	**€44.21**	**€43.82**	**€32.50**	**€42.21**	**€42.14**