Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

Consultation on 2011/2012 Transmission Incentives

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Abstract:

Further to the consultation paper on transmission PR3 revenue (CER/10/102) this paper provides an outline of the proposed transmission incentive parameters for the 2011 and 2012 calendar years period within PR3 (the period 2011 – 2015). It also outlines proposed incentive weightings and revenues for the same period. The CER's proposals, set out in this consultation, focus on placing incentives on the TSO and TAO to increase the security, reliability and quality of the services (including system development) provided by the transmission utilities in PR3, while operating in an increasingly efficient manner.

This consultation paper should be read in conjunction with the CER's decision on PR3 transmission revenue (CER/10/206) and the PR3 transmission response to comments paper (CER/10/207), both of which have been published alongside this paper.

Comments are invited as detailed in Section1.5 of this paper.

Target Audience:

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

Related Documents:

CER/10/206	Decision on TSO and TAO transmission revenue for 2011 to 2015 (published alongside this response paper)
CER/10/207	Response to comments received to CER/10/102 (consultation on TSO and TAO transmission revenue for 2011 to 2015)
CER/10/102	Consultation on TSO and TAO transmission revenue for 2011 to 2015 (published alongside this response paper)
CER/09/004	TSO System Performance Incentives (SPIs) for 2009 & 2010.

Executive Summary

This consultation paper outlines the CER's proposed transmission incentive parameters for the 2011 and 2012[1] incentive period within PR3 (2011-2015). It also outlines proposed incentive weightings and revenues applicable to the 2011/2012 period.

As detailed in CER/10/102 the CER is proposing that certain Transmission System Operator[2] (TSO) PR2 incentives parameters remain for the PR3 period but are slightly modified (e.g. those relating System Frequency and System Minutes Lost). The CER is also proposing the introduction a new system performance incentive on the TSO - System Availability. In addition, the CER is proposing the introduction of a new TSO network delivery incentive. With regard to the Transmission Asset Owner[3] (TAO), the CER is proposing to introduce an incentive mechanism around network delivery and the construction and energisation of transmission assets.

It must be noted that the effective roll-out of Gate 3[4] and the Government's target of 40% of Ireland's electricity consumption coming from renewable generation by 2020 is key to these proposed incentives for both TSO and TAO. It is envisaged that this will come through the connection of a significant amount of renewable generator projects in Gate 3, circa 3,900MW, to the electricity system. In addition to this, it is important that the TSO continue to operate a safe, secure and reliable electricity system, successfully meeting the challenges of increasing levels of intermittent generation (e.g. wind).

In the CER's view the targets which have been proposed in this consultation paper are challenging yet achievable and will encourage both the TSO and TAO to improve its performance over the PR3 period, ultimately to the benefit of all electricity customers and Generators.

Comments are invited from interested parties as detailed in Section 1.5 of this consultation paper.

[1] Refers to 2011 and 2012 calendar years.
[2] EirGrid
[3] ESB Networks
[4] For further details, refer to the Gate 3 pages of the CER's website: http://www.cer.ie/en/electricity-transmission-network-overview.aspx?article=35174640-af92-457c-89ab-44a56abea1ce

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1.0 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 sector's. 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

The purpose of this consultation paper is to:

- outline the proposed transmission incentives parameters, weightings and associated revenues, and
- provide interested parties with the opportunity to respond to these proposals.

1.3 Background Information

Performance incentives are a key component of revenue regulation. Performance incentives complement and enhance the requirement for a regulated business to efficiently manage costs by ensuring that the business also has an incentive to improve its performance in the delivery of its responsibilities, particularly with regard to quality, efficiency and timeliness of service delivery. The CER is keen to continue the appropriation of incentive mechanisms to the TSO from PR2 (and now to the TAO) into the PR3 period (2011–2015). Improvements in transmission system performance, grid infrastructure build and achievement of the Government's 2020 renewables targets are fundamental to the proposed transmission incentive mechanisms in 2011/2012 outlined below.

In the PR3 transmission consultation paper (CER/10/102) the CER stated that it intended to discuss PR3 incentive mechanisms with both the TSO and TAO during the PR3 consultation period. The CER welcomes the submissions received as part of the PR3 review from both the TSO and TAO on potential PR3 transmission incentives.

Further to these submissions, initial discussions with the transmission utilities, advice from our advisors (SKM) and responses received to CER/10/102 (please see CER/10/207), the CER now publishes proposed 2011/2012 transmission incentives parameters and weightings for comment by interested parties.

1.4 Structure of this paper

This paper is structured in the following manner:

- **Section 1** provides an introduction to this paper. It also provides information on where background information can be sourced;
- **Section 2** outlines the proposed 2011/2012 transmission incentives for both the TSO and TAO; and,
- **Section 3** provides a conclusion and outlines the next steps.

1.5 Responding to this paper

Responses to the proposals set out in this consultation paper should be sent to the CER by 5.30pm on Friday 21 January 2011. Responses should be sent to:

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Unless marked confidential, all responses will be published by placing them on the CER's website at the following address: http://www.cer.ie

Respondents may request that their response is kept confidential. The CER shall respect this request, subject to any obligations to disclose information. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality.

2.0 Proposed 2011/2012 transmission incentives

2.1 Introduction

This following section outlines the CER's proposed transmission incentive parameters for the 2011/2012 incentive period within the PR3 transmission control period. It also outlines proposed incentive weightings and revenues applicable to the same period.

As detailed in CER/10/102 the CER is proposing that certain TSO PR2 incentive parameters remain for the PR3 period but are slightly modified (e.g. those relating System Frequency and System Minutes Lost), as well as the introduction a new system performance incentive - "System Availability". The objectives of these system performance incentives are to deliver a continued high quality, reliable electricity supply (to the extent within the control of the TSO). It is also proposed that a TSO network delivery incentive is introduced. With regard to the Transmission Asset Owner (TAO), the CER is proposing to introduce an incentive mechanism around the construction and energisation of transmission assets. The objective of these incentives is to ensure that EirGrid, as TSO, and ESB Networks, as TAO, deliver the required electricity transmission infrastructure within time and within budget to meet Ireland's renewable targets.

It must be noted that the effective roll-out of Gate 3 and the Government's target of 40% of Ireland's electricity consumption coming from renewable generation by 2020 is key to these proposed incentives for both TSO and TAO. It is envisaged that this will come through the connection of a significant amount of renewable generator projects in Gate 3, circa 3,900MW, to the electricity system. In the CER's view the targets which have been proposed in the below section are challenging yet achievable, and will encourage both the TSO and TAO to improve its performance over the PR3 period, ultimately to the benefit of all users of the networks (i.e. ultimately all customers and generators).

As per the previous incentive period (2009/2010)[5] the CER continues to believe that it is important to set the incentive period over two years and is therefore proposing the next incentive period to be the calendar years 2011 and 2012. The CER wishes to avoid setting incentive targets for the TSO and TAO which could lead to large fluctuations in performance over single years during the PR3 period. The proposed incentives outlined below will be reviewed on an annual basis by the CER to ensure a consistent standard is delivered for each year rather than an average over two years.

[5] Please refer to CER/09/004 at the following link: http://www.cer.ie/en/electricity-transmission-network-decision-documents.aspx?article=decf3b52-6d3d-4be1-b99d-efa0d186a3bb

It is proposed that the transmission utilities will be rewarded or penalised, as the case may be, in line with the incentive parameters set out. Rewards for meeting or exceeding the incentive or penalties for failure to meet the incentive will be based on the respective monies for outturn year 2011 in 2012, with the monies to be applied to the utilities in 2013. Similarly for outturn year 2012, the monies owed or owing will be calculated in 2013 and applied to the utilities in 2014. Essentially both the TSO and TAO will have to "beat" the targets in both years of the incentive period to avail of the revenue accorded.

Please refer to tables 1 and 2 below for proposed maximum TSO and TAO revenue incentives amounts for each incentive mechanism. The proposed levels of asymmetry and incentive parameters are detailed within each proposed incentive section below.

2.2 Proposed Incentives

TSO

With regard to the TSO (EirGrid), the following incentive mechanisms are proposed.

- Incentives will be split between system performance (50%) and system development (network delivery) (50%).
- Within system performance, there will be three separate incentives, as follows:

    - System Minutes Lost (15% of total TSO incentive).
    - System Frequency (20% of total TSO incentive).
    - System Availability (15% of total TSO incentive).

- Within transmission system development, there will be three separate incentives as follows:

    - Lodging and receipt of planning permission (12.5% of total TSO incentive).
    - Committed Project Parameters (CPP) and issuance to TAO (12.5% of total TSO incentive).
    - Delivery of enhanced network capacity (25% of total TSO incentive).

Based on an ex-ante allowed revenue of €41.7 million for 2011 internal Opex and €42.16 million for 2012 internal Opex (CER/10/206), it is proposed that the maximum incentive (4%) amounts to €1.67 million in 2011 and €1.69 million in 2012 (in 2009 prices). Please refer to Table 1 below.

Table 1: Proposed 2011 & 2012 TSO maximum incentive amounts
Table 1: Proposed 2011 & 2012 TSO maximum incentive amounts

€m's (2009 prices)	Weighting	2011	2012	Max amount over incentive period
TSO Internal Opex		41.7	42.16	
4% Cap		1.67	1.69	
Revenue Incentive Amount				3.35
Transmission System Performance				
System Minutes Lost	15%	0.25	0.25	0.50
System Frequency	20%	0.33	0.34	0.67
System Availability	15%	0.25	0.25	0.50
Transmission System Development				
Lodgement and Receipt of Planning Permission	12.5%	0.21	0.42	0.84
CPP & Issuance to TAO	12.5%	0.21		
Delivery of Enhanced Network Capacity	25%	0.42	0.42	0.84

TAO

With Regard to the TAO (ESB Networks) the following incentive mechanisms are proposed.

- There will an incentive mechanism related to transmission system development (network delivery). This mechanism will have two separate parts:
    - Issuance of Project Initiation Plan (PIP) right through to delivery of project agreement (PA) with the TSO (10% of total TAO incentive).
    - Construction and energisation (90% of total TAO incentive).

Based on an ex-ante allowed revenue of €47.03 million for 2011 Opex and €46.51 million for 2012 Opex (CER/10/206), it is proposed that the maximum incentive (4%) amounts to €1.88 in 2011 and €1.86 in 2012 (in 2009 prices). Please refer to below table 2 below.

Table 2: Proposed 2011 & 2012 TAO maximum incentive amounts

€m's (2009 prices)	Weighting	2011	2012	Max amount over incentive period
TAO Opex		47.03	46.51	
4% Cap		1.88	1.86	
Revenue Incentive Amount				3.74
Transmission System Development				
Issue PIP to PA	10%	0.19	0.19	
Construction and Energisation	90%	1.69	1.67	

Incentive proposals from stakeholders

The CER would welcome any comments from stakeholders on potential modifications to the incentive proposals outlined below or indeed on additional incentives which respondents believe the CER should examine. For example, the CER is proposing to incentivise the TSO around transmission system availability as it is the body predominately responsible for scheduling planned outages. However, recognising that under the Infrastructure Agreement the TAO is also responsible for outtages, a modification to this proposal may involve incentivising the TAO to complete outages as per an outtage agreed timetable, i.e. for outtages that return on time. Another proposal may involve applying more 'dead bands' to the incentives and making them more stringent.

The CER will review any modifications proposed by stakeholders before finalisation of incentives.

2.3 Proposed PR3 TSO Incentives – System Performance

In PR2 the TSO revenue incentive was capped at approximately 2% of internal Operating Costs (Opex) in any one revenue year. As noted above the CER is proposing to introduce a TSO incentive mechanism around transmission network development. The effective roll-out of Gate 3 and the Government's target of 40% of Ireland's electricity consumption coming from renewable generation by 2020 is key to this incentive.

However, the CER also believes that continuing the trend of improved transmission system performance from PR2 into PR3 is vital and of equal importance to the TUoS customer. System performance relates to the quality and reliability of electricity supply within the transmission system. If the PR3 TSO incentives were split 50% on transmission system performance and 50% on network development (as proposed below) under a 2% internal Opex cap, this may 'dilute' the network performance incentive for PR3 and send out the wrong signal to the TSO/TUoS customer that improved transmission system performance is not important in PR3 as it was in PR2.

The CER is therefore proposing to cap the TSO revenue incentive to approx 4% of internal Opex for 2010. This 4% of internal Opex is a significant level of TSO revenue and the ability of the TSO to bear this amount, while promoting the application of the incentive mechanism must be taken into account. It is therefore proposed that a certain level of asymmetry will be incorporated into TSO incentive mechanism and parameters.

2.3.1 System Minutes Lost (SML)

The System Minutes Lost (SML) is an index that measures the severity of each system disturbance relative to the size of the transmission system. It is determined by calculating the ratio of unsupplied energy during an outage to the energy that would be supplied during one minute, if the supplied energy was at its peak value.

Proposed 2011/2012 weighting

As noted by SKM in their PR3 report [CER/10/102(a)], the PR2 incentive on SML was volatile with large outturn fluctuations on SML year on year (i.e. 2.3 in 2006, 3.4 in 2007 and 0.7 in 2008). Therefore, the CER is proposing the application of a 'dead band' of between 0.7 and 3.4 SML within the incentive mechanism, which is reflective of recent SML outturn. Therefore, this incentive mechanism will remain neutral (no TSO payment or penalty) if SML outturn is between 0.7 and 3.4 (that is TSO will rewarded below 0.7 and penalised above 3.4). The CER has derived these ranges based on the median of the 2005 to 2009 SML outturns

and the highest (worst) SML outturn of the same period (i.e. 0.7 and 3.4 respectively). Therefore the values reflect recent TSO performance[6].

Please see the table below for the proposed incentive parameters. Full achievement of the target (i.e. 0.2 and below) will result in a reward of all 15% of the incentive (€250k).

The proposal equates to 3% of the total TSO incentive per 0.1 SML less than 0.7 SML. Failure to achieve any of the target (i.e. 3.9 and above) will result in a penalty payment of €250k for 2011.

Table 3: Proposed SML weighting and targets

2011/2012		Weighting	Lower Bound	Dead Band	Upper Bound	Below Target	Above Target
System Minutes Lost		15%	0.2	0.7 to 3.4	3.9	Plus €50k per 0.1 min	Minus €50k per 0.1 min
2008 Outturn	0.006						

2.3.2 System Frequency

The National Control Centre (NCC) in TSO offices aims to maintain the frequency of the transmission system within a target operating range of 50 ±0.1 Hz. The frequency, however, may deviate outside the normal operating range under fault or abnormal operating conditions.

Proposed 2011/2012 weighting

System frequency performance has varied significantly over recent years and the TSO PR3 questionnaire response provides the following outturn figures, 2005 - 93% 2006 - 90%, 2007 - 94% and 2009 - 98%. It is clear that the trend has been improving in recent years. The expected increase in wind penetration in PR3 will tend to make frequency control more difficult for the NCC, however this may be offset by interconnection with other jurisdictions and technological/IT solutions.

The CER acknowledges that the upper bound target of 98% is the peak of performance in recent years and that this might not be the case in future years with the connection of intermittent generation. This has been reflected in the fact that the central target is 97%, which the CER believes is certainly achievable by the TSO based on recent experience.

[6] Please refer to the TSO transmission system performance reports 2009 to 2005 at the following link:
http://www.eirgrid.com/aboutus/publications/

The proposal equates to 2% of the total TSO incentive per 0.1% more frequency than 97%. Full achievement of the target (i.e. 98% and above) will result in a reward of all 20% of the incentive (€330k). Failure to achieve any of the target (i.e. 96% and below) will result in a penalty payment of €330k for 2011.

Table 4: Proposed System Frequency weighting and targets

2011/2012	Weighting	Lower Bound	Central Target	Upper Bound	Below Target	Above Target
System Frequency	20%	96%	97%	98%	Minus €33k per 0.1% below	Plus €33k per 0.1% above

2.3.3 System Availability

In their PR3 report (CER/10/102(a)) SKM noted that the TSO should be incentivised on network availability, which SKM believe is a better measure of system risk. Essentially, system availability is a measure of the amount of time that all circuits on the transmission system are able to perform their normal function. System unavailability occurs when a particular circuit is not able to perform its normal function due to a planned or unplanned outage. In light of this advice the CER is proposing to introduce a new system performance incentive around system availability. System availability[7] is already measured and reported on by EirGrid in their annual transmission system performance reports[8]. Please see table 5 below for the published figures.

The CER acknowledge that system availability is not completely within the control of the TSO and that the construction and outtage programme associated with the increased PR3 Capex programme will put considerable strain on network availability. These points were raised by the TSO during the PR3 consultation phase and are acknowledged by the CER. Therefore, it is proposed that an annual adjustment will take place to take account of planned interruptions, depending on the outtages associated with the Capex programme. The CER is also not proposing to weight this incentive at the same level as the System Frequency incentive.

Furthermore, in light of the Capex spend profile in PR3 the incentive targets may need to be reviewed during the PR3 period as the Capex programme ramps up and outtages increase in number. However, the CER believe that the targets for 2011 and 2012 appear reasonable.

[7] System 'Unavailability' is in fact measured by the TSO. However, when considering transmission system availability, it is the convention to analyse it in terms of transmission system unavailability.

[8] Please see transmission system performance reports tab the following link: http://www.eirgrid.com/aboutus/publications/

Maintenance policy is one of the key areas where the TSO can influence system availability and one of SKM's reported observations in PR3 (please refer to CER/10/102(a)) was that the TSO seemed unduly cautious in adopting international tends to increase maintenance and inspection intervals. The CER believes that an incentive around System Availability will encourage the TSO, working with the TAO, to optimise maintenance intervals, outtages times and promote international best practice. Please also refer to section 2.2 above.

Table 5: Transmission System Unavailability 2005-2009

Transmission System Unavailability[9] %					
	2009	**2008**	**2007**	**2006**	**2005**
January	0.2	1.4	1	0.3	0.9
February	0.3	2.5	1.7	0.9	1.2
March	1.2	1.2	2	3	2.9
April	3.5	3	2.9	4.7	5.1
May	4.5	4.6	4.2	4.1	5.6
June	6	4.2	4.5	4.1	4.7
July	5.6	2.2	5.8	3.9	6.3
August	6.2	3.2	3.1	5.3	4
September	5.5	3.5	2.9	3.2	5.1
October	5.2	4.4	2	3.2	5.4
November	2	1.5	1.1	2.5	3.3
December	1.8	0.1	0.6	0.5	1.1
Annual Average	3.5	2.65	2.65	2.975	3.8
Transmission System Availability %	96.5	97.35	97.35	97.03	96.2

Proposed 2011/2012 weighting

With system availability not completely within the control of the TSO the CER is not proposing to weight this incentive at the same level as the System Frequency incentive. The proposal equates to 3.75% of the total TSO incentive per 0.25% greater system availability than 97%. Full achievement of the target (i.e. 98% and above) will result in a reward of all 15% of the incentive (€250k). Failure to achieve any of the target (i.e. 96% and below) will result in a penalty payment of €250k.

[9] As per annual TSO transmission system performance reports.

Table 6: Proposed System availability weighting and targets

2011/2012	Weighting	Lower Bound	Central Target	Upper Bound	Below Target	Above Target
Transmission System Availability	15%	96%	97%	98%	Minus €62.5k per 0.25% below	Plus €62.5k per 0.25% above

2.4 Development of the Transmission System

The timely delivery of transmission network build, in light of the Government's 40% target for renewables and the CER's Gate 3 policy is central to the setting of PR3. In addition a significant capital development programme will ensure that the network is developed to enable the additional generation to be connected so as to reach these 2020 targets. The CER has decided that a Capex investment of €1.45 billion in transmission infrastructure will be needed over the course of PR3 in order to deliver Gate 3, meet Ireland's renewable targets and continue to deliver high quality electricity supply (please refer to the CER's decision on transmission PR3 – CER/10/206).

In the light of this significant and challenging level of transmission network delivery, the CER deems it appropriate that an incentive centred on transmission network provision and renewable generation connection is introduced[10]. The CER believes that the level of the reward outlined below is sufficient to remunerate the transmission companies for the increased risk of developing and constructing new transmission shallow assets and deep reinforcements (as appropriate), but they will only be paid where targets were achieved. Early delivery of new transmission network assets to budget will deliver distinct benefits to consumers and market participants' e.g. faster connection of renewable generation, reduced carbon emissions, lower constraint costs, and improved quality of supply.

Under the current industry structure, EirGrid's direct influence is limited to specific Stage 1 activities. The Stage 1 timelines cover the period up to the provision of Committed Project Parameters (CPP) by the TSO to the TAO. The CPP sets out the project requirements, including any associated planning conditions. This Stage 1 period includes the internal EirGrid Capital Approval process, lodgement and receipt of planning permission by the TSO and the provision of CPP by TSO to the TAO. The project then enters the Stage 2 activities.

As the project is now a committed one, the TAO proceeds to scope and produce a Project Implementation Plan (PIP) for the project at the start of the Stage 2 timeline. The TAO issues to the TSO the PIP for the proposed project. The PIP includes the detailed project resource plan including outsourcing proposals, the programme for procurement and management of materials and the name of the Project Supervisor for the construction stage.

When the PIP is accepted by the TSO, the TAO then proceeds to obtain ESB Capital Approval for the project. Project Agreement is signed formally by both the TSO and TAO immediately following granting of Capital Approval at the

[10] Please note a similar incentive is being introduced on ESB Networks in its capacity as Distribution System Operator (DSO) to incentivise delivery of renewable connections to parties connecting to the distribution system.

appropriate level within ESB Networks and the project can then move on to construction and energisation. Construction is directly within the control of the TAO, although the TSO is responsible for obtaining landowner consents and wayleaves, which are obtained close to the actual construction period in that individual area. EirGrid as TSO carries out a client engineering role throughout the life-time of the project. This involves oversight of the project in the construction phase to ensure it is being delivered in accordance with agreed plans. ESB Networks, as TAO, is responsible for energisation of the newly constructed asset. The TSO is also witness to commissioning tests to ensure satisfaction with these commissioning and energisation procedures carried out by ESB Networks.

In May 2009 the CER published a decision paper[11] (CER/09/077) on indicative timelines associated with shallow connection transmission projects. As part of that decision the CER requested that the TSO and TAO parallel certain activities rather than doing so in a sequential manner, as dictated by the Infrastructure Agreement (IA). The CER is proposing to base the majority of incentives for development of the transmission system on the standard timelines detailed in CER/09/077, as it promotes transparency. Stakeholders will be aware that the TSO and TAO are being measured by the CER against published timescales. In addition, the incentive will also apply to certain deep reinforcement projects as agreed each year between the CER and EirGrid.

To incentivise Generator shallow transmission project development the CER believes that it is crucial to set incentive parameters on each stage, so as to ensure no one stage can lead to project delays. The CER believes that this will incentivise both TSO and TAO to work together to allow for effective and efficient transmission build in a timely manner. This is detailed further below.

Please see the table below which sets out the various Stage 1 and Stage 2 activities of a project and assignment of responsibility. Please note that the TSO are also responsible for obtaining wayleaves and client engineering oversight during the TAO construction and energisation activity.

Table 7: Activities within transmission project development

Step	Activity	Responsibility
1.	Obtain TSO Capital Approval	TSO
2.	Lodge & receive Planning Permission	TSO
3.	Issue Committed Project Parameters (CPP)	TSO
4.	Issue Project Implementation Plan (PIP)	TAO
5.	Obtain TAO Capital Approval	TAO
6.	Obtain Project Agreement (PA)	TSO & TAO
7.	Construction and Energisation	TAO

[11] Please see following link: http://www.cer.ie/en/electricity-transmission-network-decision-documents.aspx?article=7ab5d769-38ba-450c-b772-74751011d83e

2.4.1 TSO proposed incentive - Lodgement and Receipt of Planning Permission (Step 2 of table 7)

In CER/09/004 the CER introduced a form of incentivisation that related to the lodgement of planning permission by EirGrid for shallow connections assets for both Generators and Demand customers. The CER believes that there is opportunity to incentivise the entire planning stage within Generator shallow connection assets and certain Demand transmission projects. It is now proposed to expand this incentive to include receipt of planning permission for all transmission projects (not just Generators shallow connections) with a combined Stage 1 and Stage 2 value over €10 million.

The CER would welcome comments from stakeholders on what projects should be included in this incentive parameter (e.g. all projects €10 million+ in value and Generators shallow connections, €5 million+ in value and Generators shallow connections, certain deep transmission projects and Generators shallow connections etc). However, stakeholders need to be aware that, to ensure transparency, a definable set of projects which can be measured against is required.

The following is the current thinking of the CER. Granting of this revenue incentive will be linked to the PR3 Network Capex Approvals Program, which will be outlined to stakeholders in the future 2011/2012 transmission incentives decision paper. The TSO will submit a programme plan for transmission projects which will include target dates for lodging of planning permission for the relevant calendar year. The plan will also include the TSO's expected date for receipt of planning permission for Generator shallow connection assets (based on standard timelines) and the Demand projects included. The CER acknowledges that receipt of planning permission is partly outside the control of TSO. This programme plan will be reviewed and amended/ agreed by the CER. The TSO's performance will then be monitored against the standard timelines for lodging and receipt of planning permission for Generator shallow connection assets and the Demand projects included.

At the end of the calendar year (January for the previous 12 months), the TSO will submit its report outlining its delivery against the targets set. The CER will review this report and decide on the appropriate incentive to allow. Importantly, it is proposed to base the award/penalty on the net outturn of timelines against the pre-agreed targets timelines for all projects included in the incentive program.

The CER will publish the TSOs report on its delivery against the programme plan for each year and the CER's assessment of performance. This will also be a key aspect of the CER's PR3 Network Capex Approvals Program and monitoring process which is currently being developed and implemented.

Proposed 2011/2012 weighting

The CER acknowledges that the TSO can only be incentivised in a symmetrical fashion for activities it has near complete control over. Therefore the CER is proposing to apply asymmetric parameters to this incentive. The proposal equates to 6% of the total TSO incentive per 10% quicker than the timelines set.

Full achievement of the target (i.e. 20%+ quicker) will result in a reward of all 12.5% of the incentive (€208k). Failure to achieve any of the target (i.e. 20%+) will result in an asymmetric penalty payment of €104k.

CER/09/077 states that lodgement and receipt of planning permission for a new looped outdoor 110kV substation takes 15 months. So for example, if this new looped substation was the only project in the incentive program and if the TSO carried out this action in 12 months they would be awarded €208k.

Table 8: Proposed Lodgement & receipt of PP weighting and targets

2011/2012	Weighting	Lower Bound	Central Target	Upper Bound	Below Target	Above Target
Lodgement and receipt of PP	12.5%	20% longer than timelines agreed		20% shorter than timelines agreed	€52k per 10% longer	€104k per 10% shorter

2.4.2 TSO proposed incentive – CPP issuance to TAO (step 3 of table 7)

The second TSO proposed incentive within Stage 1 relates to the issuance of the CPP by the TSO to the TAO for Generator transmission shallow connection assets and deep reinforcements (as time progresses, projects which were incentivised in the lodgement and receipt of planning permission stage, should move into this stage). A CPP includes the outline design of a project, a list of all applicable Generic Design Standards and a copy of the anticipated decision of the Planning Authority including any conditions and special requirements.

Proposed 2011/2012 weighting

The creation of the “final” CPP and issuance to TAO is an area that the TSO has near direct control over. In CER/09/077 that CER decided that in the paralleled activities approach, once a Generator has accepted the connection offer, the TSO will almost immediately issue a “draft” CPP to the TAO so it can proceed to scope and produce the PIP. This relates only to the customers’ transmission shallow connection assets. This is instead of the TSO waiting to receive planning permission before issuing the CPP to the TAO, as was the case under the previous arrangement.

The issuing of the CPP from the TSO to the TAO now takes place while the TSO are waiting for receipt of Planning Permission from the planning authority. However, the "final" CPP will need to reflect the decision of the planning authority, which could involve changes to the "draft" CPP. Therefore the CER is proposing to apply asymmetric parameters to this incentive. The "draft" CPP issued by the TSO to the TAO must be of sufficient content so as to allow the TAO to carry out the PIP stage. The CER wishes to avoid a situation where the TSO is incentivised to 'rush' issuance of CPP to the TAO just so to avail of the incentive. This aspect will be monitored by the CER.

Full achievement of the target (i.e. 20%+ quicker) will result in a reward of all 12.5% of the incentive (€208k). Failure to achieve any of the target (i.e. 20%+) will result in an asymmetric penalty payment of €104k.

CER/09/077 states that the issuance of CPP from the TSO to TAO for a new looped outdoor 110kV substation takes 3 months. So for example, if this new looped substation was the only project in the incentive program and if the TSO carried out this action in 2 months they would be awarded €208k.

Table 9: Proposed CPP Issuance weighting and targets

2011/2012	Weighting	Lower Bound	Central Target	Upper Bound	Below Target	Above Target
CPP creation and issuance to TAO	12.5%	20% longer than ST[12]		20% shorter than ST	€52k per 10% longer	€104k per 10% shorter

2.4.3 TAO proposed incentive - Issue PIP to PA between TSO and TAO (steps 4 to 6 in table 7)

To ensure that transmission project development is not unduly delayed by any one stage the CER is proposing to set incentive parameters on each stage of project development for Generator transmission shallow connection assets. The CER believes that incentivising the TSO up to the point of CPP issuance to TAO and then leaving a 'gap' to TAO construction and energisation (Stage 2 phase 2) would not be efficient and/or beneficial to effective network development. Therefore the CER is proposing to incentivise the TAO for issuance of PIP to the TSO, right up to attainment of PA between the TAO and TSO (Stage 2 phase 1).

The CER is proposing to cap the TAO revenue incentive to approx 4% of all Opex for 2010 (internal and external). Although the TAO has a much bigger Regulatory Asset Base (RAB) than the TSO this 4% of Opex is a significant level of TAO revenue and the ability of the TAO to bear this amount, while promoting

[12] Standard Timelines as per CER/09/077.

the application of the incentive mechanism must be taken into account. It is therefore proposed that a certain level of asymmetry will be incorporated into TAO incentive mechanism and parameters.

Proposed 2011/2012 weighting

The issuance of the PIP to the TSO by the TAO for shallow connections assets is an area that the TAO has near direct control over. In CER/09/077 that CER decided in the paralleled activities approach, that the issuing of the PIP would take place while the TSO is waiting for receipt of planning permission from the relevant planning authority. However, the PIP will need to reflect the decision of the planning authority, which could involve changes to the "draft" CPP and PIP. Therefore the CER is proposing to apply asymmetric parameters to this incentive.

Full achievement of the target (i.e. 20%+ quicker) will result in a reward of all 10% of the incentive. Failure to achieve any of the target (i.e. 20%-) will result in an asymmetric penalty payment of €95k.

CER/09/077 states that for a new looped outdoor 110kV substation issuance of PIP to getting TAO Capital approval, to signing Project Agreement takes collectively takes 7 months (paralleled approach). So for example, if this new looped substation was the only project in the incentive program and if the TAO carried out this action in 5 months they would be awarded €190k.

Table 10: Proposed PIP Issuance to PA weighting and targets

2011/2012	Weighting	Lower Bound	Upper Bound	Below Target	Above Target
Issue PIP to PA between TSO and TAO	10%	20% longer than ST	20% shorter than ST	€47k per 10% longer than ST	€95k per 10% shorter than ST

2.4.4 TAO proposed incentive – Construction and Energisation (step 7 in table 7).

The CER is proposing to adopt an incentivisation approach that will reward the TAO for delivery of Generator transmission shallow connection assets where construction has achieved programme and budget targets. The incentive will be based on the Stage 2 standard timelines as per CER/09/077, i.e. post Project Agreement for construction and energisation by the TAO. The CER may also include certain Demand transmission projects and this issue needs to be discussed with the TAO before finalisation. As many Transmission projects span a number of years, it is also proposed that the TAO will agree the shallow connection assets delivery targets in advance with CER on an annual basis based on standard timelines in CER/09/077.

It is proposed that this incentive will involve the TAO submitting a programme plan for transmission projects which it aims to deliver (or percentage of delivery) in the relevant calendar year. At the end of the calendar year (January for the previous 12 months), the TAO will submit its report outlining its Stage 2 delivery against the pre-agreed targets set. The CER will decide on the appropriate incentive to allow as part of the annual revenue process for the following tariff year (i.e. delivery of the 2011 Construction and Energisation incentive will be fed into 2012/2013 tariff year).

The CER will publish the TAO's report on its delivery against the programme plan for each year and the CER's assessment of performance. This will be a key aspect of the PR3 Network Capex Approvals Program, which will be outlined in detail in the future 2011/2012 transmission incentives decision paper.

Proposed 2011/2012 weighting

As with the TSO the CER acknowledges that the TAO can only be incentivised in a symmetrical fashion for activities it has near complete control over. It is unlikely that a steady state flat Stage 2 phase 2 delivery profile, from an operational standpoint, is achievable every year. In some instances driving a constantly high level of delivery may actually be sub-optimal. There are also external reasons why certain programmes may not be delivered in a specific year, e.g. lack of planning permission and/or wayleave consents (which is within the control of TSO).

Therefore the CER is proposing to apply asymmetric parameters to this incentive.

Table 11: Proposed Construction & Energisation weighting and targets

2011/2012	Weighting	Lower Bound	Upper Bound	Below Target	Above target
Construction & Energisation	80%	50-60%	60-100%	Minus €423k per 5% in range	Plus €423k per 10% in range

Importantly, it is proposed to base the award/penalty on the net outturn of timelines using a Delivery Metric. The calculation of the Delivery Metric is best demonstrated by the worked example below.

Table 12: Proposed TAO Construction & Energisation metric

Transmission Project	Target Energisation Date	Annual Target Delivery	Actual % delivery	Annual Weighted Delivery
Project A	2011	€10m	100%	€10m
Project B	2011	€4m	100%	€4m
Project C	2011	€0.5m	90%	€0.45m
" "	"	"	"	"
" "	"	"	"	"
Project N	2011	€6m	70%	€4.2m
Total		**€165m**		**€137m**

The Annual Weighted Delivery is calculated by multiplying the actual percentage delivery by the Target Delivery on each project. The actual outcome for a particular year is then calculated by summing the weighted delivery for each of the individual projects (€137million in table 12 above).

Comparing this delivery metric with the total Annual Target Delivery of €165 million gives an overall delivery of 83% for the year in the above example. This is in the 80-90% band of the proposed incentive mechanism, so a 2011/2012 revenue incentive amount of €1.27 million would be accorded to the TAO in the year. Failure to achieve any of the target (i.e. below 50% delivery) will result in an asymmetric penalty payment of €845k.

2.5 Delivery of Enhanced Network Capacity

As well as developing transmission network for the purposes of reaching the 2020 renewables/Gate 3 targets, the CER are proposing to place incentives on the TSO to investigate measures which make more efficient use of the network, such that additional network capacity is released to allow 'non-firm' generation to connect. Such measures include adoption/more progressive interpretation of network planning standards, operating security standards and the use of active network management techniques and tools such as dynamic line ratings and advanced protection/control schemes. These issues may particularly come into focus as levels of intermittent generation on the system increase in the coming years.

The CER welcomes the submission made by the TSO with regard to this proposal and it is recognised that a large-scale and detailed review by the TSO of the transmission planning standards is set to get underway in late 2010/early 2011. However, improvements in policies and practices or the introduction of more effective or appropriate technological solutions which will deliver long-term benefit to electricity customers is still important and one which the CER believes requires incentivisation.

Proposed 2011/2012 weighting

The CER also recognises that under the current industry model, the TSO has no direct financial incentive to seek out such efficiency improvements in relation to network development, as the outcome does not impact on its own internal revenues. This is particularly the case where the pursuit would require additional expenditure by the TSO. Therefore, the CER is proposing that this incentive mechanism be fully asymmetrical. There will be no lower bound or reduction in TSO revenues linked to this incentive. Full achievement of the target, which will be determined by the CER through of a review of a TSO economic cost benefit analysis, will result in a reward of all 25% of the incentive. However if a level of achievement is made, but which is not considered by the CER to be full achievement, the CER may allow rewards of less than all of the 25% of the incentive.

The incentive has been broken down into specific areas, assigned certain percentages, so as to incentivise the TSO to focus on all areas identified below and not just one area in particular.

Table 13: Delivery of enhanced network capacity parameters

2011/2012	Weighting	Criteria
Delivery of Enhanced Network Capacity	25%	TSO can clearly demonstrate to the CER, utilising an economic cost-benefit analysis, that a policy or design improvement introduced resulted (or will result) in a quantifiable benefit to the electricity consumer introduced in the previous incentive period. This must be done as part of the annual transmission revenue process. Areas of improvement: • Reduction in the cost of network build, including Stage 1 costs (5%); • Increased speed of network delivery and connections (5%); • Improved reliability of transmission equipment (5%); and • Increased capacity available for non-firm generation for the same level of network build (10%); • Others if proven by the TSO to deliver the objective of the incentive and which would not otherwise have been carried out.

2.6 Possible Future Incentives

The CER has previously indicated in Section 6.3.1 of the CER's Consultation paper on TSO and TAO transmission revenue for 2011 – 2015 (CER/10/102), that it intends to look at developing and implementing incentives for TSO in the area of reducing constraints costs (dispatch balancing costs) and ancillary services. Incentives in these areas will not be implemented in 2011. However this remains an objective and a priority for the CER. Reducing constraints costs and ancillary services costs are dealt with on an all-island basis and are regulated by the SEM Committee. The CER intends to work with the Northern Ireland Authority for Utility Regulation (NIAUR) and the Transmission System Operators north and south (SONI for Northern Ireland and EirGrid for Ireland) to develop and implement an appropriate incentive (s) in this area throughout the PR3 period.

3.0 Conclusion and Next Steps

The CER believes that the proposals, set out in this consultation will improve the security, reliability and quality of the services provided by the transmission utilities over the 2011/2012 period (and beyond), while operating in an increasingly efficient manner.

The effective roll-out of Gate 3 and the Government's target of 40% of Ireland's electricity consumption coming from renewable generation by 2020 are also key to these proposed incentives for both TSO and TAO. In the CER's view the targets which have been proposed are challenging for the utilities yet achievable.

As stated in CER/10/102 the effective management of Ancillary Services and Constraint levels by the TSO is of concern the CER. The creation of an incentive mechanism for the TSO to control and indeed reduce these external costs will remain an option for introduction at some point over the course of PR3, i.e. post completion of the 2011/2012 incentive period. The CER currently believes that it may be appropriate at that point in PR3 to introduce such an incentive, seeing as there should be sufficient experience garnered under the harmonised arrangements on which to base a suitable forecast and incentive design. It should also be noted that the second annual review of harmonised all island ancillary services will be carried out in 2011. Interested parties will have the opportunity to comment on the TSO's proposals for ancillary services at this stage.

The CER believes that continuing the trend of improved transmission system performance from PR2 into PR3 is vital and is therefore proposing to revise the incentive cap up to approx 4% of internal Opex for 2010 and 2011 – with certain measures of asymmetry introduced. With regards to the TAO, it is proposed that the incentive cap is set at approx 4% of Opex (Internal and External) for 2010 and 2011 – also with certain measures of asymmetry introduced. This will mean that the TSO and TAO can earn, with all targets achieved, similar amounts of incentives revenues in 2010 and 2011.

If the TSO was to achieve all targets, including the Delivery of Enhanced Network Capacity incentive, it would earn €1.67 million in 2011. If it was not to achieve any of the targets, €1.04 million would be subtracted from its transmission revenue in 2011. Similarly, if the TAO was to achieve all targets it would earn €1.88 million in 2011. If it was not to achieve any of the targets, €940k would be subtracted from its transmission revenue. Performance incentives are a key component of revenue regulation and the CER is confident that the proposed incentives above will encourage both the TSO and TAO to improve its performance over the 2011/2012 incentive period, ultimately to the benefit of the electricity customer, Generators and the electricity system in general.

Respondents to this consultation paper are asked to comment on all sections of this paper and on all aspects of the proposed incentives for both TSO and TAO. In particular the CER is interested in views in the following areas:

- Are the incentives and the mechanisms proposed appropriate or should alternatives incentives be looked at?
- Are the incentive mechanisms sufficiently ambitious and difficult to achieve?
- Should the rewards for TSO and TAO be increased for achievement of the incentives and should the penalties be increased for failure to achieve?

Following receipt of comments on Friday 21 January 2011, the CER will look to publish a final decision on 2011/2012 transmission revenue incentives by end Quarter 1 2011.