



Single Electricity Market

SEMO Revenue and Tariffs

October 2009 – September 2012

April 30th 2008

COPYRIGHT NOTICE

All rights reserved. This entire publication is subject to the laws of copyright. This publication may not be reproduced or transmitted in any form or by any means, electronic or manual, including photocopying without the prior written permission of EirGrid plc and SONI Limited.

DOCUMENT DISCLAIMER

Every care and precaution is taken to ensure the accuracy of the information provided herein but such information is provided without warranties express, implied or otherwise howsoever arising and EirGrid plc and SONI Limited to the fullest extent permitted by law shall not be liable for any inaccuracies, errors, omissions or misleading information contained herein.



1 EXECUTIVE SUMMARY

Background

The All-Island Single Electricity Market (SEM), commenced operation on 1st November 2007, and is administered by the Single Electricity Market Operator (SEMO), formed through a contractual joint venture between EirGrid and SONI. SEMO have operated under two price controls with the most recent tariff period running for a duration of 1 year from 1st October 2008 until 30th September 2009. This price control was subject to rate-of-return regulation, with the energy and capacity cash-flows being regarded as a cost pass-through.

Price Control Principles

SEMO contend that the Single Energy Market has demonstrated sufficient maturity which now justifies the implementation of a revised format for the forthcoming Price Control. In particular, SEMO believe that the application of multi-annual incentive regulation has the potential to deliver benefits to consumers if it builds in appropriate incentives and an appropriate risk/reward balance. On this basis SEMO propose that the Price Control takes the following form:

1. The price control period should run for a term of 3 years (1st October 2009 to 30th September 2012)
2. Imperfection costs are to be passed through as per the current arrangements.
3. Capital costs are to be catered for the duration of the Price Control.
4. A 5 year rolling retention mechanism will be used for the distribution of operating expenditure efficiency savings over the duration of the price control.
5. Exchange Rate risks are catered for on a cost pass through basis.
6. Appropriate and reasonable cost indexation is to be applied.
7. The price control is to exclude Exceptional Market changes.
8. The regulatory reporting arrangements and regulatory reporting regime is to be consistent with a 3 year price control.
9. A form of incentivisation is to be included for Opex, Capex (Major Market Changes) and KPIs on an annual basis for the 3 year duration.
10. Energy and capacity cash-flows will be treated on a cost pass-through basis.
11. The cost of capital is to remain consistent with the level applying to the System Operator controls.
12. Uncertain costs that cannot be reasonably foreseen by the business should be dealt with on a cost pass-through basis.
13. Forecasts of the following items will be identified on a yearly basis for the 3 year price control:
 - TSO Dispatch Balancing Costs
 - The number of Demand Units, Generator Units and Supplier Units
 - Annual Load Forecasts
 - Energy Imbalances
 - Make Whole Payments

SEMO Revenue Submission

The total revenue sought by SEMO to cover its costs for the price control period is €77.3 Million and €312,000 for Make Whole Payments for year 2009-10. A detailed analysis of the various costs categories can be seen in Sections 5 and 6. A summary table outlining the costs sought by SEMO for 2009-12 as shown below. The k factor agreed for the first Price Control (2007-08) will roll into year 1 of the New Price Control Period and the k factor for the second Price Control (2008-09) will roll into year 2. All figures throughout this price control are in euros and presented in thousands.

	2009-2010	2010-2011	2011-2012
Total Operational Cost	9,885	10,397	10,630
Depreciation	12,980	13,840	14,720
WACC	2,160	1,630	1,054
Total Revenue	25,025	25,866	26,404

Table 1: Summary of SEMO Revenue Submission

SEMO Charges

SEMO propose the following tariffs to recover the proposed allowed SEMO revenue:

- Accession fee = €1,500
- Participation fee = €3,500
- Market Operator Fixed charge for Generator Units = €121 per MW TBC
- Market Operator Fixed charge for Supplier Units = €509 per Unit TBC
- Market Operator Variable charge for Supplier Units = €0.690 per MWh TBC

Note These charges to be agreed closer to the tariff setting time. Best indicative values have only been provided.

Imperfections Charge

The Imperfections Charge includes the net cost of Dispatch Balancing costs (constraints, uninstructed imbalances, testing charges), energy imbalances and make whole payments and results in an imperfections charge to supplier of €3.045 per MWh.

Dispatch Balancing Costs

Dispatch Balancing Costs refers to the sum of Constraint Payments, Uninstructed Imbalance Payments and Generator Testing Charges. The TSOs' forecast of Dispatch Balancing Costs in nominal terms is €106 million for the 12 month period from October 1st 2009 to September 30th 2010.

Constraints

The largest portion of Dispatch Balancing Costs is made up of constraint costs.

Uninstructed imbalances

It is assumed that the costs of uninstructed imbalances (for over and under generation) will, on average, be recovered by the uninstructed imbalance payments for the forecast period. Therefore, a zero net cost has been provided for this.

Generator-Under-Test Tariffs

The testing tariffs have been set at a level that should, on average, recover the additional costs imposed. Therefore a zero provision has been made for the net contribution of Generator Testing Charges to Dispatch Balancing Costs.

Energy Imbalance Charge

Money received from suppliers will not always equal the money paid out to generators and SEMO is required to finance any differences ensuring that generators are paid for their loss adjusted market schedule quantities, The energy imbalance costs for the first year of SEM, on average, balanced. Therefore a provision of zero has been made for energy imbalance charges for year one of the 3 year price control. TBC.

Make Whole Payments

For the first 12 months of the market Make Whole Payments amounted to €311,652 i.e. 12 months to 31st October 2008. Therefore the proposed provision for year one of the 3 year price control for Make Whole payments is €311,652.

2 TABLE OF CONTENTS

1	Executive Summary.....	2
2	Table of Contents.....	5
3	Introduction	7
3.1	The Single Electricity Market.....	7
3.2	SEM Developments to Date	8
3.3	SEMO Strategy.....	8
3.4	SEMO Work Programme 2009-2012	8
4	Structure of the Price Control.....	10
4.1	Price Control Duration.....	10
4.2	Operational Expenditure	11
4.3	Capital Expenditure	11
4.4	Regulatory ASSET BASE	12
4.5	Cost of Capital	13
4.6	Indexation Cpi-x.....	13
4.7	K Factor Inter year adjustments for over or under-recovery	14
4.8	Incentivisation	14
4.9	Uncertain Costs	15
4.10	Exchange Rates.....	16
5	Operating Costs.....	17
5.1	Internal Operational Expenditure	17
5.1.1	Payroll	17
5.1.2	IT & communications	19
5.1.3	Facilities	19
5.1.4	Professional Fees	20
5.1.5	General and Administrative Costs	21
5.2	Corporate Services	22
5.3	Summary of Operating Costs.....	22
6	Asset Base.....	23
6.1	Assessment of Asset Base	23
6.2	Status of SEMO’s RAB.....	23
6.3	2009/12 Capital Expenditure.....	23

6.3.1	Capex Categories	24
6.4	Depreciation	28
6.4.1	Method and Timeframe for Depreciation	28
6.4.2	Treatment of New Capital Investment	28
6.4.3	Value of Depreciation for New Tariff Period	28
6.5	Interest Provisions.....	28
6.6	Weighted Average Cost of Capital (WACC)	29
6.7	Capital Expenditure Summary.....	30
7	Summary.....	31
7.1	SEMO Price Control Summary.....	31
8	Incentivisation.....	32
8.1	Forms of Incentivisation	32
8.1.1	Key Performance Indicators Incentive	32
8.1.2	Major Market Changes Capex Incentive	34
8.1.3	Opex Incentive	35
9	Appendix 1 – Calculations of Depreciation and WACC	36
10	Appendix 2 - determination of the demand figure used in SEMO’s revenue submission	38
11	Appendix 3 – Summary of the SEMO Price Control Proposals	40

3 INTRODUCTION

“the pool system, which allows everyone to see what the market prices for electricity are, has brought greater transparency to the business.”

Irish Times 29/03/2009 (Viridian Group managing director Harry McCracken)

3.1 THE SINGLE ELECTRICITY MARKET

The Single Electricity Market (SEM) is the wholesale electricity market operating in the Republic of Ireland and Northern Ireland. As a gross mandatory pool physical market operating with dual currencies and in multiple jurisdictions the SEM represents the first market of its kind in the world. The Single Electricity Market provides for a competitive, sustainable and reliable wholesale market in electricity aimed to deliver long-term economic and social benefits that are mutually advantageous to Northern Ireland and the Republic of Ireland.

The Single Electricity Market Operator (SEMO) facilitates the continuous operation, administration and development of the Single Electricity Market. SEMO is a joint venture between EirGrid plc and SONI Limited. There are currently 128 Generator Units and 59 Supplier Units participating in the market. The market traded approximately €3.6 billion in payments and charges in 2008.

The Market Operator business has been subject to two, one year pass-through (ex post) revenue controls. A feature of this kind of short-term pass-through control, is that the business is protected from risk and allowed to recover its costs, however it has no incentive to manage those costs and no opportunity for retention of cost savings. Given the increased maturity of the SEM and the licensees. The Regulatory Authorities agreed to explore the concept of a longer and revised format revenue control. This is more akin to traditional revenue or price cap incentive regulation.

The licensees believe that the application of a multi-annual revenue control, and specifically over 3 years, does have the potential to deliver benefits to consumers if it builds in appropriate incentives and an appropriate risk/reward balance. In particular, a well targeted regime will incentivise the Market Operator to contribute actively to market development to the ultimate benefit of consumers and to improve the level of service to its customers. A key benefit of incentive regulation is reduced regulatory burden in the form of both ongoing reporting requirements and less frequent revenue reviews.

This submission sets out the licensees' proposals and views of the revenue and control parameters required of a 3 year revenue control.

3.2 SEM DEVELOPMENTS TO DATE

The SEM has been in existence since November 2007 and in that short period of time SEMO has provided stable and reliable market operations, and the various market participants have become accustomed to the SEM environment. This inherent stability has created a platform from which the SEM can now progress to provide greater support and transparency to market operations that can further facilitate competition and has led to minimising energy prices for consumers.

Since SEM go live there has been a considerable increase in investment in power generation along with a similar increase in the number of suppliers. This has increased market competitiveness and along with recent reductions in fuel costs has resulted in significant price decreases for consumers. As the market matures there are increasing demands being made of SEMO as developments and changes are progressed i.e. the increase in renewable generation capacity as driven by Government targets which need to be accommodated within the market mechanism. Sustained and targeted investment in SEMO will secure future benefits can be realised which will far out way the investment that SEMO is proposing.

3.3 SEMO STRATEGY

SEMO's strategy is to operate SEM on a commercial basis and to drive efficiency and innovation into the operation and development of the market for the benefit of participants and customers.

SEMO recognises the important role it has to provide reliable and efficient market services. In this regard SEMO has to ensure that it is sufficiently resourced and provided with the required cost recovery mechanism to develop its organisation capability to ensure it can consistently provide a service now and into the future that can accommodate changes to the market. Through transparency, open engagement and reliable operation of the market SEMO wishes to maintain and develop the trust of all stakeholders. SEMO needs to further improve the SEM by developing solutions and managing change ie, amendments to market rules, improved processes and IT system changes require high skilled and knowledgeable staff to deliver solutions.

SEM must provide a stable platform for the trading of electricity while large structural changes are taking place in the industry in both jurisdictions. Some of these changes include the facilitation of renewables and the development of greater market interconnection with Great Britain and Europe.

SEMO must engage with all stakeholders in developing and implementing fair and equitable market rules to accommodate the large quantities of renewable energy consistent with government targets and interconnection that will come on stream over the duration of this price control.

3.4 SEMO WORK PROGRAMME 2009-2012

In the next three years a sizable number of significant market changes will be developed and implemented by SEMO. Funding and resources are required to enable SEMO to meet its obligations and commitments and the

requirements of all energy stakeholders. This funding needs to be sufficient to support the following key initiatives which are necessary to the SEM:

- To facilitate the introduction of additional types of Interconnectors.
- To support the European, Northern Ireland, Republic of Ireland and the dual Regulatory strategies for the significant increases in renewable energies.
- To support diverse market innovations such as:
 - Fuel Mix
 - Capacity Payments Mechanism
 - Market Coupling
 - Global Aggregation
- The implementation of significant modification proposals to support:
 - Revenue Commissioners Direction on VAT
 - Technical Offer Data Validation
 - Dual Rating
 - Moyle Optimisation and SO – SO trades
 - Other material modification proposals
- To facilitate non Trading and Settlement Code changes
- To support the creation of the SEMO Design Authority and Structured Release management
- To support the large number of resource intensive market audits
- To address the backlog of market changes undelivered since Market Opening

4 STRUCTURE OF THE PRICE CONTROL

The SEM Committee is very pleased with the success of the market in its first year of operation. Generators are actively participating in the market and bidding in their short run marginal cost which leads to the dispatch of the most efficient generating units in the system. This was a key strategic objective of the new market design and will lead to increased competition and the best price for consumers.

SEMO has performed well and continues to show improvement.

SEM Committee Annual Report published March 2009

The Regulators and TSOs have indicated their preference for a longer term price control and with this consideration it is acknowledged that a longer duration impacts how SEMO operates and finances its activities. This section sets out SEMO's views of the parameters for a longer term control which will incentivise the Market Operator to contribute actively to market development to the ultimate benefit of consumers and to improve the level of service it provides to its customers. The main changes to the previous price controls include:

- A preference for a longer Price Control as indicated by the Regulators, TSOs & SEMO
- An allowance for Capital Expenditure
- Incentivisation through Key Performance Indicators and Operational Expenditure savings
- A rolling mechanism for the retention of cost savings

The introduction of these changes will not only provide an incentive to SEMO over the price control period but it will also lessen the regulatory burden currently being sustained by both SEMO and the Regulators.

4.1 PRICE CONTROL DURATION

Early meetings with the Regulators and System Operators indicated that there was little appetite for another one year price control. One year price controls were considered to be too resource intensive (Regulators, TSOs and SEMO resources) and as such prevented SEMO from developing longer term work plans and proposals. Initially the possibility of introducing a five year price control was proposed. However, due to the difficulty of forecasting costs for five years it is proposed that for a more effective and sustainable price control, the 3rd SEMO revenue period will run for a three years.

This longer duration will allow SEMO to take a more strategic view when developing market changes, delivering IT system changes and controlling operational costs.

PROPOSAL 1

It is proposed that the new SEMO revenue period will run for a three year period from:

1st October 2009 to 30th September 2012

It is noted that the subsequent tariff setting will take place on an annual basis.

4.2 OPERATIONAL EXPENDITURE

The operational expenditure identified for SEMO covers Payroll, IT & Communications, Facilities, Professional Fees and General & Administrative costs. It is proposed that savings in operational expenditure are to be retained by SEMO for a period of 5 years. It is widely recognised that such a mechanism provides the appropriate balance between incentivising efficiencies and delivering the benefits of those efficiencies to consumers.

PROPOSAL 2

It is proposed that savings in operational expenditure are to be passed back to the customer using a 5 year rolling retention mechanism.

4.3 CAPITAL EXPENDITURE

The consideration of Capex is a new element for consideration within the SEMO price control. Capex is designed to allow SEMO to invest in new and improved systems in order to fulfil its operational and management requirements. Three types of Capex are considered.

- Major Market Change Capex
- Business (predictable) Capex
- Annual IT Market Release Capex

Major Market Change capital expenditure is exclusive of this price control and will be addressed on a project by project basis.

SEMO are now seeking an up front capital allowance for:

- Business (predictable) Capex Items and
- Annual Market Releases

Business Capex is to be used for hardware and software upgrades and the implementation of additional operational support systems that will increase efficiencies, thereby benefiting market participants. Tables 10, 11 and 12 give a summary of the Business Capex Items being sought by SEMO. A Capex allowance is necessary to enable SEMO to plan for crucial system upgrades as and when the need arises and reduces the administrative burden that has been placed on both SEMO and Regulatory resources over the past two price control periods.

The Annualised Market Release Capex will be used to facilitate the rollout of biannual Central Market System software releases, the content of which will be approved by the Regulatory Authorities.

PROPOSAL 3

- Major Market Change CAPEX expenditure is to be sought on a project by project basis and costs are to be recovered on a cost pass through basis. (SEMO to be incentivised see section 8)
- It is proposed that SEMO be given an allowance for Business (predictable) and Market Release Capex.
- SEMO propose to recover all capital allowances (excluding Major Market Changes) on an annual basis.

4.4 REGULATORY ASSET BASE

The Regulatory Asset Base (RAB) is a valuation of SEMO's assets and is central to the formulation of Price Control. The value of the RAB now includes the Day 1+ project costs. Additional Capex items for Annual Market Releases and Business Capex are to be added to the Asset Base as and when they are realised. The values of these two capex categories have been included in the Revenue Submission and are reflected in the Total Operating costs.

Future major market changes cannot be accounted for and do not form any part of the Revenue Submission. The Market System Development Plan gives an indicator of some of the major projects facing SEMO.

SEMO assets are to be depreciated using straight-line depreciation over a five year period. The valuation of the RAB has been calculated by taking the historic (acquisition cost) value of the assets, revaluing them to nominal values using inflation, and depreciating using straight-line depreciation.

4.5 COST OF CAPITAL

The cost of capital determines the allowed return on the Regulatory Asset Base (RAB). SEMO propose that it continues with the existing Weighted Average Cost of Capital (WACC) mechanism when determining the cost of capital. The WACC is to be set at 5.8% (blended value) which SEMO believe is the appropriate cost of capital to be applied and reflects an acceptable risk to which the TSOs will be exposed.

4.6 INDEXATION CPI-X

RPI-X regulation is designed to protect regulated companies from the effects of inflation while incentivising possible efficiencies through the x-factor. We are entering an exceptional economic environment and, as such, consideration needs to be given to what method of indexation does capture the underlying cost evolution of the Market Operator's input prices. SEMO believes that an indexation of costs is still appropriate. It acknowledges that in the recent economic climate some indexation figures have changed however it is noted that these figures are not consistent across the jurisdictions against RPI and CPI. The latest indexation reflect the governments view in both ROI and UK of the current situation but they are confident and optimistic of growth in the economies by end of 2009 into 2010.

The proposal on indexation is as follows. For both RPI-X and CPI-X, the value of X should be set at 0.

The reasons for a zero X factor are:

- SEMO is not an inefficient organisation
- SEMO is still maturing and requires further investment
- Cost reductions may impact service levels

The indexation figure SEMO are seeking is **2.64%** which is down from the previous years figure of **4.87%**. The CPI figure from the Central Statistics Office was blended with the RPI figure from the UK in a ratio of 3:1. The table below shows how the 2.64 % figure was reached by SEMO.

2008/09	CPI	RPI
April	4.3	4.2
May	4.7	4.3
June	5.0	4.6
July	4.4	5.0
August	4.3	4.8
September	4.3	5.0
October	4.0	4.2
November	2.5	3.0
December	1.1	0.9
January	-0.1	0.1
February	-1.7	0.0
March	-2.6	-0.4
Average	2.52	2.98

Blended Ratio	75%	25%
Inflation figure for Price Control	2.64%	

Table 2: Method used for calculating inflation.

PROPOSAL 4

X should be set to **0**.
 The blended inflation figure SEMO are seeking is **2.64%**

4.7 K FACTOR INTER YEAR ADJUSTMENTS FOR OVER OR UNDER-RECOVERY

A ‘k-factor’ is used to accommodate any over, or under, recovery of funds from a previous revenue allowance. This re-balancing of revenue will take account not just of overall income, as against outgoings, but will also take account of any interest earned or payable arising from working capital provisions. The k-factor will account for both SEMO and Imperfection cost variances. The k factor will be applied on an annual basis.

4.8 INCENTIVISATION

SEMO propose introducing a number of forms of incentivisation with the purpose of:

- Delivering better Market Operations performance.
- Increasing internal SEMO operational efficiencies
- Rewarding the delivery of Capex Projects that are on time and within regulatory allowance and
- Passing on cost savings to consumers.

SEMO propose implementing the following incentivisation models.

- **Major Market Change Capex**– An incentive of 25% of project cost savings to deliver the project on time and within the regulatory allowance.
- **Key Performance Indicators (KPI)** – 4 Operational performance indicators that have the potential to deliver superior market operational performance. An incentive of €250k per annum (2.5% of Internal Opex) to be applied on an annual basis.
- **Opex Savings** – Savings made on operational expenditure are to be retained for a period of 5 years and returned to the customer after this time.

PROPOSAL 5

SEMO propose implementing incentivisation models to optimise Major Market Change Capex and Operational expenditure and to deliver superior market operational performance through the use of KPIs.

4.9 UNCERTAIN COSTS

Uncertain costs are defined as those that could not reasonably be foreseen by the business and comprise elements such as:

- Costs related to major market policy changes.
- Changes in legislation or regulation that impose a cost on the company.
- Restructuring costs driven by changes in legislation.

SEMO believes that such uncertain costs should be dealt with on a cost pass-through basis.

4.10 EXCHANGE RATES

The SEMO business model does not accommodate the hedging of exchange rates and as such currency variations are to be catered for on a cost pass through basis.

PROPOSAL 6

SEMO will pass through costs associated with exchange rates.

5 OPERATING COSTS

SEMO has the potential to build on the transparency which it already has to become a system in which generation is procured competitively at least cost and which creates the possibility for establishing a competitive supply market which aligns the trade in electricity with the public policy objectives of sustainability and reducing fuel poverty

Douglas McIlDoon 27th November 2008

5.1 INTERNAL OPERATIONAL EXPENDITURE

As SEMO continues to develop and as work volumes it now faces increases, SEMO propose an incremental growth in its operational expenditure. In the past 18 months SEMO has delivered significant transparency for all energy stakeholders which has contributed to increased generation investment. SEMO believes that it must continue to invest and develop its people, systems and processes.

SEMO wish to continue to facilitate greater market transparency, stability operational efficiency and service quality which requires a reasonable opex allowance. The table below indicates the proposed allowance for the 2009–12 price control period.

Internal Operational Costs	2009-2010	2010-2011	2011-2012
Total Internal Operational Cost	9,885	10,397	10,630

Table 3: Internal Operational Expenditure Summary proposed by SEMO

5.1.1 PAYROLL

SEMO'S Payroll costs seek to cover all staff costs, including Salaries, Contractors, Bonus, Employer's PRSI/National Insurance, Employer's Pension Contribution, Overtime, On Call/Shift, Car, and Other Benefits. The activities of these staff are determined by the legislation, licenses, and TSC.

The SEMO IT Business Analysis team is required to maintain the level of support it has provided in the past irrespective of the reduction in numbers since the departure of CSA support. Additional resources are required to cover current activities and to cover anticipated further activities as more significant Modification Proposals are approved; SEMO Design Authority (SDA) through which market participants are able to submit non T&SC changes is established; and more controls are required by Market Operations to promote a more robust and efficient operation of the CMS.

Database related activities are also a constant bottleneck and this has left SEMO exposed in many areas (i.e. security, archiving, alerts, performance, sizing, backups etc.) and a resource is required to allow a more proactive approach in supporting and maintaining the CMS database. Furthermore the backend to the new website will be based on Oracle database technology and therefore requires DBA support.

A website technical analyst resource is also needed to take responsibility for the operation and support of the hardware and software aspects for the new SEMO website during the project implementation phase and post-implementation on an on-going basis. Specific internet technologies will be deployed which are not currently supported by SEMO IT's existing skill set, and as such new skills will be required within SEMO IT.

Additional Controllers will be required in Market Operations to cope with the expected increase in registration of renewable generators (approximately 1500 MW of wind connecting in the coming years up to 2012). In addition support is required in order to act on auditors recommendations; run and test the system as part of the End User Acceptance Testing; input to the training of market participants and also to allow the bandwidth within the controller team to bring forward improvements to increase the performance of SEM and ensure that we are reducing the gap between the TSC obligations and SEMO's performance

There is also a requirement within the Market Operations team to conduct various analyses i.e., on the choice of solvers in the SEM (MIP vs. LR) as required per SEM Committee annual report, global aggregation, treatment of Energy Limited units, provision of data to meet data requests from internal, regulatory and external sources and to support the growing demands being placed upon the Market Operations controller team.

Several initiatives are currently being considered by the Regulators and SEMO for emerging market conditions and developments of the market. This will require assessment against benefit to customers and participants and upon approval lead to changes of systems rules processes and procedures. In order to address this area of work Market Development requires support to conduct studies, assessments and reviews on emerging issues currently on the agenda of Government and Regulators forward work programs. The key areas to be addressed are Interconnectors, Market Coupling, Impact of Wind Penetration and accommodation of significant amounts of wind in the market, Demand Side management (DSM) developments and the review of Capacity Payment mechanisms.

With this amount of work developing throughout this price control. period and SEMO's commitment to fulfilling its obligations in the market, it is anticipated that SEMO will need to recruit staff progressively over the 3 years. The costs associated with this level of commitment is as follows;

	SEMO Submission 2009-2010	SEMO Submission 2010-2011	SEMO Submission 2011-2012
Payroll Costs	4,741	5,136	5,421

Table 4: Payroll Summary Costs 2009-12 proposed by SEMO

PROPOSAL 7	It is proposed that the allowance for Payroll for the 3 years is:					
	Year 1	€4,741	Year 2	€5,136	Year 3	€5,421

5.1.2 IT & COMMUNICATIONS

A significant operational cost for SEMO is the ongoing support and development of SEM Central Market systems and its underlying communication links. This is due to complexity, security and resilience required to support a 24*7 market. Additional communications links are required over the coming months to secure system availability and provide the performance levels that Market participants have come to expect. A breakdown of the proposed allowance from SEMO is as follows:

	2009-10	2010-11	2011-12
Total IT Support & Maintenance	1,735	1,841	1,850
SEMO Communications Requirements	459	459	459
Total IT and Telecoms Costs	2,194	2,300	2,309

Table 5: Total IT and Telecoms Costs proposed by SEMO

PROPOSAL 8 It is proposed that the allowance for IT & Telecommunications for the 3 years is:

Year 1 €2,194k Year 2 €2,300k Year 3 €2,309k

5.1.3 FACILITIES

SEMO has office space in both jurisdictions and will continue to co-locate on property provided by both parent organisations and are charged accordingly. Facilities costs cover all shared space and include cleaning services, maintenance, car parking, security, mail service, copy bureau, switch board, catering and canteen services as well as rent, insurance and utilities.

PROPOSAL 9 It is proposed that the allowance for Facilities is **€1,529K** per annum.

5.1.4 PROFESSIONAL FEES

Professional fees cover SEMO requirements for external professional services in respect of:

- General Consultant support
- Disputes and Modifications Committee support
- Regulatory and Legal support
- Market Audit
- Corporate Audit
- Communications
- Recruitment

The proposed professional fees have increased due to the need for detailed knowledge and experience to assist in the following:

- To assess the significant impact that additional Interconnectors will have on the SEM
- To build an enduring renewable solution that is fair, equitable and transparent to all Market Participants.
- To investigate the optimal solution for regional market coupling and
- To investigate the possibility of the implementation of a satisfactory global aggregation solution for the SEM.

The costs associated with Professional Fees, are summarised in the table below.

Description	Year 1	Year 2	Year 3
Consultancy	370	370	300
Committees	120	120	120
Regulatory Legal	60	60	60
Market Auditor	250	300	300
Internal Audit	50	60	65
Communications	11	11	11
Recruitment	64	64	54
Total Professional Services Cost	925	985	910

Table 6: Summary of Professional Fees submitted by SEMO

PROPOSAL 10		
It is proposed that the allowance for Professional Fees for the duration of the 3 year Price Control is:		
Year 1 €925k	Year 2 €985k	Year 3 €910k

5.1.5 GENERAL AND ADMINISTRATIVE COSTS

This category covers the remaining expenses expected to be incurred operating the SEMO business. It includes Travel & Subsistence, Office Supplies, Bank Charges and Staff Training. The costs associated with each of these areas are detailed below.

Description	Year 1	Year 2	Year 3
Travel and Subsistence	154	152	157
Office Supplies	50	50	50
Bank Charges	30	35	35
Staff Training	118	124	132
Miscellaneous / Conferences	94 ¹	36	38
Total General & Administrative Costs	446	397	412

Table 7: Summary of General and Administrative Costs

PROPOSAL 11		
It is proposed that the allowance for General and Administrative Costs is		
Year 1 €446k	Year 2 €397k	Year 3 €412k

¹ 60k is to be use for hosting the APEX conference

5.2 CORPORATE SERVICES

The SEMO price controls to date have made reference to corporate services being charged from the parent companies. Corporate services are provided by EirGrid and SONI to SEMO, for example HR. It is anticipated that this will be an annual charge on the SEMO business provided by EirGrid and SONI and will be available for the ex post review. The costs to date for Corporate Services have not yet been agreed for the current year. In order to provide a cost, SEMO has suggested a best estimate of €50k per annum.

PROPOSAL 12

It is proposed that the allowance for Corporate Services is **€50K** per annum

5.3 SUMMARY OF OPERATING COSTS

The Total Internal Operational costs are summarised in the table below.

Description	Year 1	Year 2	Year 3
Payroll	4,741	5,136	5,421
IT & Communications	2,194	2,300	2,309
Facilities	1,529	1,529	1,529
Professional Fees	925	985	910
General & Administrative	446	397	412
Corporate Services	50	50	50
Total Operating Costs	9,845	10,397	10,630

Table 8: Summary Internal Operational Costs

6 ASSET BASE

“The Single Electricity Operator have, in all material respects, complied with the Code and relevant Agreed Procedures as defined in the Terms of Reference for the Market Audit issued by the Regulatory Authorities on 5th October 2007”

SEM Market Audit 2008 Deloitte & Touche

6.1 ASSESSMENT OF ASSET BASE

The SEMO Regulatory Asset base is historical cost inflated to current price terms. This method allows SEMO to recover the costs incurred in a stable, sustainable and predictable manner.

6.2 STATUS OF SEMO’S RAB

The value of the SEMO RAB for the SEM Establishment project is €51,226k. This reflects the RA approved value adjusted to March 2009 prices. Taking depreciation into account for 23 months to end September 2009 the opening value of RAB for the new tariff period is €31,589k

In 2008/09 an additional asset for the Day1+ project was added to the SEMO RAB. The estimated value for this is €9,110k (the final value has yet to be agreed with the RA's taking inflation and IDC into account). As a result SEMO have used this value in their calculations for the revenue submission. Depreciation for Day 1+ started in February 2009, resulting in an opening RAB value for the new tariff period of €8,048k.

Summary	March 2009 Inflated Original Value of RAB	RAB Value at 01 October 2009
Shared Costs for SEMO	51,226	31,589
Day 1+	9,110	8,048

Table 9: Value of SEMO RAB in September 2009

6.3 2009/12 CAPITAL EXPENDITURE

SEMO have had significant capital expenditure over the previous price controls. The Day 1+ project was delivered on time and below the regulatory allowance. This project involved the delivery of a number of logical groupings that allowed some of the requirements from Section 7 of the TSC to be replaced by enduring solutions. The central market systems however, require sustained capex investment to:

- Deliver Major Market changes
- Implement Market Modifications

- Accommodate Non T&SC change requests
- Resolve system defects
- Promote operational efficiencies
- Reduce the possibility of human error

SEMO prepare and maintain a Market System Development Plan (MSDP), which details the system development requirements for the following two years. The MSDP is to be revised and modified to align with biannual SEM system releases. The 2009-2011 MSDP will be ready for October 2009. This aligns with the start of the proposed three year price control.

6.3.1 CAPEX CATEGORIES

During discussions with the Regulatory Authorities in early 2009, SEMO raised the proposal of having a discretionary fund available to them to allow them to spend on business (predictable) capital projects without incurring delays in gaining regulatory approval before proceeding. The Regulatory Authorities stated that in principle this appeared a practical approach and suggested SEMO include a provision for capex as part of this Revenue Submission. With this in mind SEMO have identified the following categories of Capex items:

- Business Capex (predictable)
- SEMO IT Release Capex
- Major Market Changes

The business capex will cater for hardware, software and telecommunications upgrades. The IT Release Capex will allow SEMO to deliver market modifications, non Trading and Settlement Code changes, system defects and operational efficiencies. Major Market Changes capex is to be catered for on a cost pass through basis.

6.3.1.1 BUSINESS CAPEX

SEMO have identified a number of Business (predictable) Capex projects and systems that are required for the duration of the price control. The SAN hardware and Telecommunications links require immediate upgrading as they are close to capacity and are impacting system performance. Software upgrades are required for continued vendor support. Additional systems are being proposed to increase operational efficiencies and aid better decision support. All hardware for the SEM which was purchased in 2006 will need to be replaced by 2011 as the vendor will not support hardware older than 5 years. A summary of the Business Capex items can be seen in the table below. It should be noted that Unspecified provisions have been made for years 2 and 3.

Business Capex Item	Business Justification	Year 1
Axapta Upgrade	Current version of SEMO accounting system, Axapta, is out of support	100
Upgrade Servers / Network	The current Storage Area Network (SAN) is rapidly running out of capacity and requires immediate replacement	1,000
Upgrade Comms Links	The current Communication links connecting Belfast and Dublin have reached capacity and are starting to impact on market system performance	800
Printing / Enveloping Machine	Time saving of valuable resources, also reduces errors and potential repetitive stress injury.	50
SEMO Website	Website is required by market participants, SEMO and Regulators to provide prompt and accurate information	1,200
Administered Settlement System	Based on the AS review currently ongoing it appears very difficult to produce the schedules manually so a system is required.	100
Treasury System	The treasury function in SEMO is vital. Given the volume of money flowing through the market, the seasonal variances in cash balances and the nature of a dual currency, a proper treasury system for SEMO is recommended.	50
Electronic Fax Solution	Currently if there is a LCF or a GCF SEMO has to fax all market participants. Faxing is very manual and can be prone to errors, this solution would ensure that all data faxed is recorded and the resources utilised during a Communications failure could be utilised more efficiently	100
Discretionary Fund	For small capital projects	250
Hardware Replacement	Market participants have requested an on-line help desk system to facilitate readily available updates on logged calls	50
Total Business Capex		3,700

Table 10: Summary of the Business Capex Items Year 1

Business Capex Item	Business Justification	Year 2
On Line Registration System	Market Participants have been frustrated in relation to registration. Based on feed back at recent Working Groups development of an on line registration system would be a significant step forward.	250
Compliance / Change Mgmt System	To monitor and track market compliance and manage all market and IT change requests – this would also increased SEMO’s transparency and reduce Auditors time. Will support the SDA.	150
Hardware Replacement	Market participants have requested an on-line help desk system to facilitate readily available updates on logged calls	150
Discretionary Fund	For small capital projects	250
Unspecified Business Capex provision		1,450
Total Predictable Capex		2,250

Table 11: Summary of the Business Capex Items Year 2

Business Capex Item	Business Justification	Year 3
Online Help System	Market participants have requested an on-line help desk system to facilitate readily available updates on logged calls	150
Hardware Replacement	Market participants have requested an on-line help desk system to facilitate readily available updates on logged calls	300
Discretionary Fund	For small capital projects	250
Unspecified Business Capex provision		1,550
Total Predictable Capex		2,250

Table 12: Summary of the Business Capex Items Year 3

PROPOSAL 13		
It is proposed that the allowed Business Capex allowance be:		
Year 1 €3,700k	Year 2 €2,250k	Year 3 €2,250k

6.3.1.2 SEMO IT RELEASE CAPEX

SEMO IT have now moved to a biannual IT release strategy. Regular IT releases allows SEMO IT to co-ordinate its IT resources and retain vendor expertise and support for the Central Market System. This biannual release strategy should reduce development costs and focus Market Participants on the development of key market rules that will benefit the SEM. Capex expenditure to date has totalled:

SEM Go Live	€45,648k
Day 1+ ²	€9,110k.

SEMO are now looking for a total of €6,500k for the duration of the 3 year price control. Again, this excludes any major market changes. The table below outlines the proposed amounts and timelines.

IT Release Capex	Year 1	Year 2	Year 3
Scheduled Releases	1,500	1,000	1,000
Market Change Requests	1,000	1,000	1,000
Total IT Release Capex	2,500	2,000	2,000

Table 13: Summary of the IT Release capex

PROPOSAL 14
It is proposed that the allowance for IT Release Capex is:
Year 1 €2,500k Year 2 €2,000k Year 3 €2,000k

6.3.1.3 CAPEX FOR MAJOR MARKET CHANGES

Capex amounts for major strategic developments are usually conducted under Project arrangements i.e., major changes to the Trading and Settlement Code and supporting systems which will be provided for on a cost pass through basis. SEMO is to be incentivised to deliver this form of Capex. See section 8.

² Before inflation and Interest During Construction

6.4 DEPRECIATION

6.4.1 METHOD AND TIMEFRAME FOR DEPRECIATION

SEMO propose that straight-line depreciation over a five-year period is adopted. The capital costs will be recovered by the SEMO in a manner that is consistent with current international best practice and the method currently employed by the parent companies. SEMO propose that the above principle be maintained during the new tariff period.

6.4.2 TREATMENT OF NEW CAPITAL INVESTMENT

Figures for Major Market Capital Projects are to be submitted for approval separately. Interest during construction (IDC) will apply where EirGrid and SONI carry the cost of financing capital expenditure. The rates of IDC to be applied will be based on the Cost of Debt element from the WACC calculations for the respective parent companies. This equates to a rate of 3.73% for Eirgrid and a rate of 3.55% for SONI.

6.4.3 VALUE OF DEPRECIATION FOR NEW TARIFF PERIOD

The two key areas of capital spend are related to the SEM Establishment Costs and the Day 1+ Project.

The calculations of depreciation are detailed in Appendix 1.

PROPOSAL 15

It is proposed that the current depreciation to be charged for the 3 years is as follows

Year 1 €12,980	Year 2 €13,840	Year 3 €14,720
-----------------------	-----------------------	-----------------------

6.5 INTEREST PROVISIONS

In the Decision paper for the initial SEMO Revenue and Tariffs Period (Section 6.1.10), the Regulatory Authorities' decided that working capital provided by the parent companies should be consistent with the methodology currently in place for working capital provided by the parent companies while carrying out their transmission system operator functions.

Working capital provided by the parent companies to cover fluctuations during the tariff period, and allowed under-recovery of revenue during the tariff period, will be paid back in the subsequent tariff period(s) with the appropriate amount of interest.

In the current tariff period working capital is provided by the parent companies on a 3:1 basis. This means that the “Euribor rate” will be applied to three quarters, and the “Northern Bank Limited” rate will applied to one quarter, of the working capital provided. This reflects the cost of short-term financing required to provide SEMO’s working capital needs. It is assumed that this ratio still applies.

Note SONI still advocate that this rate needs to be revisited.

6.6 WEIGHTED AVERAGE COST OF CAPITAL (WACC)

SEMO should be allowed to recover its reasonably incurred capital costs. The recovery of these costs should include fair remuneration for the parent companies, that is, a fair WACC.

SEMO propose that the cost of capital for the parent companies be used for the new tariff period. These proposals lead to a pre tax WACC for SEMO as defined in the table below. The blended rate is based on the assumption of a 3:1 ratio between the WACCs for Eirgrid and SONI respectively. Using the updated capital costs and based on the 3:1 ratio by which EirGrid and SONI fund these costs, the proposed WACC results in the following amounts (see Appendix 1).

WACC	Split of RAB	WACC 09-12
Eirgrid	75%	5.63% ³
SONI	25%	6.30% ⁴
Blended Rate for SEMO WACC	5.80%	

Table 14: Value of pre tax WACC for SEMO

PROPOSAL 16

It is proposed that the WACC amounts to be charged for the 3 years is as follows

Year 1 €2,160

Year 2 €1,630

Year 3 €1,054

³ WACC as defined in 2006-2010 Transmission Price Control Review Decision Paper

⁴ WACC as defined in SONI Price Control 2007 2010 Decision Paper

6.7 CAPITAL EXPENDITURE SUMMARY

A summary of the capital expenditure proposed by SEMO Business and IT Release capex for the new tariff period covering Oct 2009 – Sept 2012 can be seen below.

Description	Year 1	Year 2	Year 3
Business Capex	3,700	2,250	2,250
IT Release Capex	2,500	2,000	2,000
Total Release Capex	6,200	4,250	4,250

Table 15: Summary Capital Expenditure

7 SUMMARY

“the single market and the overall liberalisation process still has some way to go, but is heading in the right direction”

THE FRIDAY INTERVIEW: Rafael Miranda, chief executive of Endesa Irish Times January 16th 2009

7.1 SEMO PRICE CONTROL SUMMARY

The total operating costs proposed by SEMO in its 3 year price control is €77.3 million for the tariff period October 2009 until September 2012. This amount will cover SEMOs proposed operational costs, capital costs⁵, depreciation and WACC.

Description	Year 1	Year 2	Year 3
Payroll	4,741	5,136	5,421
IT & Telecommunications	2,194	2,300	2,309
Facilities	1,529	1,529	1,529
Professional Fees	925	985	910
General & Administrative	446	397	412
Corporate Services	50	50	50
Total Internal Costs	9,885	10,397	10,630
Depreciation	12,980	13,840	14,720
WACC	2,160	1,630	1,054
Total Revenue	25,025	25,866	26,404

Table 16: Total Revenue Submission (April 2009 Prices)

⁵ Excludes Major Market Changes

8 INCENTIVISATION

“Price transparency puts pressure on competing firms to reduce their prices, which is good for consumers and good for the most efficient producers.”

BILL PRASIFKA Chairman of the Competition Authority Irish Times Feb 2nd 2009

8.1 FORMS OF INCENTIVISATION

SEMO intend to deliver three types of incentivisation that will facilitate the provision of superior service levels and will deliver cost savings that will benefit both consumers and participants. SEMO propose the following forms of incentivisation:

- **Key Performance Indicators** – 4 Operational performance indicators that will deliver superior service levels and will benefit all market participants.
- **Major Market Change Capex** – An incentive for SEMO to deliver projects on time and within budget and pass the costs savings back to consumers.
- **Opex Savings** – Savings made on operational expenditure are to be returned to the customer.

8.1.1 KEY PERFORMANCE INDICATORS INCENTIVE

SEMO are committed to delivering improved performance levels in the processing of crucial Market Operations data. SEMO’s performance will be monitored using four Key Performance Indicators (KPIs) which were considered to be the most important for market participants. For this extra performance SEMO propose that a risk / reward mechanism approximating to 2.5% of total internal costs should be the maximum risk that SEMO be exposed to⁶. This amounts to a risk/reward pot of approximately €250k per annum. Each of the KPI’s are weighted equally and symmetrical risk reward scale has been applied. The four KPIs on which SEMOs performance will be monitored are:

- Ex-Ante
- Ex-Post Initial
- Invoicing
- Credit Cover Increase Notice (CCINs)

⁶ Based on the model used for EirGrid’s TSO System Performance Incentives for 2009-10.

Ex-Ante

The Ex-Ante publication targets refer to the percentage of occurrences where the Ex-Ante Pricing reports are published on time. Currently the target time for publication is 13:00 every day, seven days a week. The Ex-Ante pricing runs are carried out on D-1 and give an indicative forecast of MSQs (Market Scheduled Quantities) and SMPs (System Marginal Price) for all units. The Ex-Ante is also important for setting the Interconnector Unit Nominations for all Interconnector Units. Unlike the prices and quantities, the Interconnector nominations are fixed and cannot be re-priced after the Ex-Ante is published.

Ex-Post Initial

The Ex-Post Initial publication targets refer to the percentage of occurrences where the Ex-Post Initial pricing reports are published on time. Currently the target time for publication is 17:00 every day, seven days a week. The Ex-Post Initial pricing runs are carried out on D+4 and give the final SMPs and MSQs for all participants. These figures are used for the final settlement of all market participants.

Invoicing

The Invoicing targets refer to the percentage of occurrences where Invoices to all participants are published on time. Currently for the weekly energy market and Variable Market Operator Charge (VMOC) invoices the target is Fridays at 12:00. Capacity is invoiced at 12:00 seven working days after the end of the month, and the Fixed Market Operator Charge (FMOC) invoices are published on the first Friday after the end of the month at 12:00.

Credit Cover Increase Notice (CCINs)

The credit cover increase notice targets refer to the percentage of occurrences where the CCINs are published on time. Currently the target time for publications is 17:00 every working day. CCINs reports are used to inform market participants that their posted collateral cover is less than their required collateral cover. They then have two working days in which to rectify this on receipt of the CCIN.

Note on chosen KPIs

The Invoicing KPI is a good example of a “downstream” measure that captures the performance of all settlement activities preceding it. For example, if there is significant delay in publication of daily settlement statements this will usually have a knock-on effect on invoicing and thus will impact the Invoicing KPI.

Assumptions

It is assumed that:

1. The metric is delivered within one hour of the targeted time;
2. External factors outside the Market Operators direct control are excluded e.g. Limited Communication failure by Market participant, late provision of data by System Operators or the Meter Data Provider, Government policy changes, Regulatory Authorities’ policy changes etc; and
3. The first two weeks after a System release are excluded from the annual target.

Metric	Weighting	Lower Bound	Target	Upper Bound
Ex-Ante	0.25	95%	97%	99%
Ex-Post Initial	0.25	95%	97%	99%
Invoicing	0.25	85%	90%	95%
Credit Cover Increase Notices	0.25	94%	96%	98%

Table 17 Summary of the proposed Key Performance Indicators

PROPOSAL 17

It is proposed that SEMO be exposed to a risk reward mechanism based on KPI performance to a value of **€250k** per annum.

8.1.2 MAJOR MARKET CHANGES CAPEX INCENTIVE

It is proposed that for Major Market Changes that SEMO should be rewarded for the delivery of a project on time and within the regulatory allowance. The process would work as follows:

1. The Regulatory Authorities would approve an amount on a project by project basis.
2. If the project is delivered on time and within regulatory allowance. SEMO then will retain 25% of savings made.

Worked Example	Amounts
Amount Approved by RAs if delivered on time and within regulatory allowance	€1,000,000
Actual Delivery Cost	€900,000
Project Capex Incentive (SEMO 25%, Customer 75%)	€25,000

Table 18 Worked example indicating how to incentivise Capex Projects.

PROPOSAL 18

It is proposed that SEMO be incentivised to deliver projects on time and within allowance for which SEMO will retain 25% of the amount saved.

8.1.3 OPEX INCENTIVE

SEMO propose that any Internal Operational savings are to be retained by SEMO for a period of 5 years and returned to the customer during the subsequent price control. Potential opex savings are fed back using a 5 year rolling retention mechanism in the subsequent price control. This incentive will encourage SEMO to minimise operational spend.

PROPOSAL 19

SEMO propose retaining annual operational savings for a period of 5 years.

9 APPENDIX 1 – CALCULATIONS OF DEPRECIATION AND WACC

2009/12 Revenue Submission				
SEM Project Asset			Day 1+ Asset	
Asset Value in March 2009 Prices	51,226,098		Est Asset Value at Feb 09	9,110,482
Monthly Depreciation	853,768		Monthly Depreciation	151,841
Annual Depreciation	10,245,220		Annual Depreciation	1,822,096
Depreciation To Date at /End Sept 09	19,636,671		Depreciation To Date at /End Sept 09	1,062,890
Asset Value at 01/10/2009	31,589,427		Asset Value at 01/10/2009	8,047,592

Table 19: A summary of the SEMO Depreciation figures.

SEMO Revenue and Tariffs & TSO Dispatch Balancing Costs for October 2009 – September 2012 April Submission

	Opening Asset Values			Depreciation				NBV	Average WACC	5.80% WACC Charge
	SEM	Day 1+	Additions in Revenue Period	SEM Asset	Day 1 +	Additions	Depreciation Charge			
Oct-09	31,589,427	8,047,592	1,950,000	853,768	151,841	32,500		40,548,910	195,902	
Nov-09	30,735,659	7,895,751	1,917,500	853,768	151,841	32,500		39,510,800	190,887	
Dec-09	29,881,891	7,743,910	1,885,000	853,768	151,841	32,500		38,472,691	185,871	
Jan-10	29,028,122	7,592,068	3,952,500	853,768	151,841	67,500		39,499,581	190,832	
Feb-10	28,174,354	7,440,227	3,885,000	853,768	151,841	67,500		38,426,471	185,648	
Mar-10	27,320,586	7,288,386	3,817,500	853,768	151,841	67,500		37,353,362	180,463	
Apr-10	26,466,818	7,136,544	5,750,000	853,768	151,841	100,833		38,246,919	184,780	
May-10	25,613,049	6,984,703	5,649,167	853,768	151,841	100,833		37,140,476	179,435	
Jun-10	24,759,281	6,832,862	5,548,333	853,768	151,841	100,833		36,034,033	174,089	
Jul-10	23,905,513	6,681,020	5,597,500	853,768	151,841	103,333		35,075,090	169,457	
Aug-10	23,051,744	6,529,179	5,494,167	853,768	151,841	103,333		33,966,147	164,099	
Sep-10	22,197,976	6,377,337	5,390,833	853,768	151,841	103,333	12,979,816	32,857,204	158,741	2,160,205
Oct-10	21,344,208	6,225,496	5,787,500	853,768	151,841	111,667		32,239,927	155,759	
Nov-10	20,490,439	6,073,655	5,675,833	853,768	151,841	111,667		31,122,651	150,361	
Dec-10	19,636,671	5,921,813	5,564,167	853,768	151,841	111,667		30,005,375	144,963	
Jan-11	18,782,903	5,769,972	6,602,500	853,768	151,841	130,833		30,018,932	145,029	
Feb-11	17,929,134	5,618,131	6,471,667	853,768	151,841	130,833		28,882,489	139,539	
Mar-11	17,075,366	5,466,289	6,340,833	853,768	151,841	130,833		27,746,046	134,048	
Apr-11	16,221,598	5,314,448	8,810,000	853,768	151,841	174,167		29,166,269	140,910	
May-11	15,367,830	5,162,606	8,635,833	853,768	151,841	174,167		27,986,493	135,210	
Jun-11	14,514,061	5,010,765	8,461,667	853,768	151,841	174,167		26,806,717	129,510	
Jul-11	13,660,293	4,858,924	8,287,500	853,768	151,841	174,167		25,626,940	123,810	
Aug-11	12,806,525	4,707,082	8,113,333	853,768	151,841	174,167		24,447,164	118,110	
Sep-11	11,952,756	4,555,241	7,939,167	853,768	151,841	174,167	13,839,816	23,267,388	112,411	1,629,660
Oct-11	11,098,988	4,403,400	8,565,000	853,768	151,841	187,500		22,874,278	110,511	
Nov-11	10,245,220	4,251,558	8,377,500	853,768	151,841	187,500		21,681,168	104,747	
Dec-11	9,391,451	4,099,717	8,190,000	853,768	151,841	187,500		20,488,059	98,983	
Jan-12	8,537,683	3,947,876	9,152,500	853,768	151,841	206,667		20,425,782	98,682	
Feb-12	7,683,915	3,796,034	8,945,833	853,768	151,841	206,667		19,213,506	92,825	
Mar-12	6,830,146	3,644,193	8,739,167	853,768	151,841	206,667		18,001,230	86,968	
Apr-12	5,976,378	3,492,351	10,832,500	853,768	151,841	245,000		19,050,620	92,038	
May-12	5,122,610	3,340,510	10,587,500	853,768	151,841	245,000		17,800,010	85,996	
Jun-12	4,268,842	3,188,669	10,342,500	853,768	151,841	245,000		16,549,401	79,954	
Jul-12	3,415,073	3,036,827	10,097,500	853,768	151,841	245,000		15,298,791	73,912	
Aug-12	2,561,305	2,884,986	9,852,500	853,768	151,841	245,000		14,048,181	67,870	
Sep-12	1,707,537	2,733,145	9,607,500	853,768	151,841	245,000	14,719,816	12,797,572	61,828	1,054,317

Table 20: Depreciation Breakdown for the 3 years of the price control

10 APPENDIX 2 - DETERMINATION OF THE DEMAND FIGURE USED IN SEMO'S REVENUE SUBMISSION

This Appendix explains the determination of the demand figure used in this year's revenue submission.

In the tables below, SEMO provides the current best forecast of the energy at the trading point (transmission boundary) for the Republic of Ireland and Northern Ireland for the period 1 October 2009 – 30 September 2010

	2009/10
Energy at the trading point	27,350

Table 21: EirGrid's Forecast of the Energy at the trading point (RoI) for the period 1 October 2009 – 30 September 2010 (GWh)

	2009/10
Energy at the trading point	8,819

Table 22: SONI's Forecast of the energy at the trading point (NI) for the period 1 October 2009 – 30 September 2010 (GWh)

Total Electricity Traded in SEM - All Island

Total Electricity Traded in the SEM is electricity traded by units participating in the SEM at the trading point. The trading point is at the transmission boundary.

TER and Units Sent Out are converted to Total Electricity Traded in SEM by removing:

- an estimation of transmission losses (~2%),
- an estimation of self consumption (2% ROI, 0% NI) and,
- an estimation of demand met by units outside the market.

The calculation of transmission losses, self consumption and generation outside of the market is not without its difficulties. The RAs should be aware that these numbers are at very best rough estimates as it is difficult for SEMO to accurately assess the likely scale of self-consumption (in ROI), the scale of transmission losses in the absence of bulk supply point metering and the likely scale of generation outside of the market.

Based upon these assumptions SEMO provides an indication of the likely number of units upon which Market Operator charges are to be based upon, although this may be subject to revision later in the year should further updated data become available.

	2009/10
Market Operator Charging	34,910

Table 23: Estimate of Number of Units Charged for Market Operator Charging Purposes (GWh)

In addition to the above, the following inputs were also provided by SEMO:

	2007/08 (11 months)	2008/09 (12 months)	2009/10 (12 months)
Energy	35,100 GWh	37,788 GWh	34,858 GWh
Supplier Units	23	53	59
Generator Units	102	126	128
Generator Capacity	9,050 MW	9,300 MW	10,193 MW

Table 24: Summary table showing the number of Supplier and Generator units and the Generator capacity.

11 APPENDIX 3 – SUMMARY OF THE SEMO PRICE CONTROL PROPOSALS

This Appendix summarises all the SEMO Price Control proposal on a single page.

Proposal Number	Proposal Detail
1	It is proposed that the new SEMO revenue period will run for a three year period from: 1st October 2009 to 30th September 2012
2	It is proposed that savings in operational expenditure are to be passed back to the customer using a 5 year rolling retention mechanism.
3	Major Market Change CAPEX expenditure is to be sought on a project by project basis and costs are to be recovered on a cost pass through basis. (SEMO to be incentivised see section 8) It is proposed that SEMO be given an allowance for Business (predictable) and Market Release Capex. SEMO propose to recover all capital allowances (excluding Major Market Changes) on an annual basis.
4	X should be set to 0. The blended inflation figure SEMO are seeking is 2.64%
5	SEMO propose implementing incentivisation models to optimise Major Market Change Capex and Operational expenditure and to deliver superior market operational performance through the use of KPIs.
6	SEMO will pass through costs associated with exchange rates.
7	It is proposed that the allowance for Payroll for the 3 years is: Year 1 €4,741 Year 2 €5,136 Year 3 €5,421
8	It is proposed that the allowance for IT & Telecommunications for the 3 years is: Year 1 €2,194k Year 2 €2,300k Year 3 €2,309k
9	It is proposed that the allowance for Facilities is €1,529K per annum.
10	It is proposed that the allowance for Professional Fees for the duration of the 3 year Price Control is: Year 1 €925k Year 2 €985k Year 3 €910k
11	It is proposed that the allowance for General and Administrative Costs is Year 1 €446k Year 2 €397k Year 3 €412k
12	It is proposed that the allowance for Corporate Services is €50K per annum
13	It is proposed that the allowed Business Capex allowance is: Year 1 €3,700k Year 2 €2,250k Year 3 €2,250k
14	It is proposed that the allowance for IT Release Capex is: Year 1 €2,500k Year 2 €2,000k Year 3 €2,000k
15	It is proposed that the depreciation to be charged for the 3 years is as follows Year 1 €12,980 Year 2 €13,840 Year 3 €14,720
16	It is proposed that the WACC amounts to be charged for the 3 years is as follows Year 1 €2,160 Year 2 €1,630 Year 3 €1,054
17	It is proposed that SEMO be exposed to a risk reward mechanism based on KPI performance to a value of 250k per annum.
18	It is proposed that SEMO be incentivised to deliver projects on time and within allowance for which SEMO will retain 25% of the amount saved.
19	SEMO propose retaining annual operational savings for a period of 5 years.