

Revised Regulatory Proposal to the Australian Energy Regulator 2009 to 2014



**Delivering efficient and
sustainable network services**

14 January 2009

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Front Cover:

*Parramatta by night, supported by
Integral Energy's Parramatta Field Service Centre.*

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Item No.	Description
A	<i>Economic scenarios for the Integral Region - A report for Integral Energy Prepared by the National Institute of Economic and Industry Research (NIEIR), December 2008</i>
B	<i>A reasonable averaging period when setting the NER WA CC parameters – expert report by Competition Economists Group (CEG), January 2009</i>
C	<i>Escalators affecting expenditure forecasts – expert report by CEG, January 2009</i>
D	<i>Integral Energy Revisions to Capital Expenditure Forecast</i>
E	CONFIDENTIAL - <i>Response to the AER's Draft Decision – Self Insurance – expert report by SAHA International Limited (SAHA), 14 January 2009</i>
F	<i>Debt and Equity Raising Costs – A response to the AER 2008 draft decisions for electricity distribution and transmission – expert report by CEG, January, 2009</i>
G	Directors' Certification Statement
H	CEO's Statutory Declaration

Attachments:

Item No.	Description
1	CONFIDENTIAL - Completed Post Tax Revenue Model (PTRM)
2	CONFIDENTIAL - Completed Roll Forward Model (RFM)
3	CONFIDENTIAL – Revised Energy and Customer Number Forecasts

Overview

Integral Energy Australia (Integral Energy) is a New South Wales (NSW) state-owned energy corporation with a proud 50-year history serving some of Australia's largest and fastest growing regional economies. Integral Energy provides distribution network services to almost 850,000 customers, or 2.1 million people, in households and businesses across a network franchise spanning 24,500 square kilometres in Greater Western Sydney, the Blue Mountains, the Illawarra and the Southern Highlands. Integral Energy's focus is on providing a safe, reliable and affordable electricity supply to its customers.

On 2 June 2008, Integral Energy submitted a Regulatory Proposal (the *original proposal*) to the Australian Energy Regulator (AER) for the regulatory control period from 1 July 2009 to 30 June 2014, in accordance with the requirements of the National Electricity Rules (the *Rules*) and the Transitional Rules.¹

Integral Energy's original proposal has been the subject of public consultation and a detailed review by the AER and its consultants. On 28 November 2008, the AER published a draft decision on its distribution determination for the NSW electricity distribution businesses (the draft decision).

This revised Regulatory Proposal (the *revised proposal*) applies to the regulatory control period from 1 July 2009 to 30 June 2014 (the *2009 regulatory control period*) and is submitted in accordance with the clause 6.10.3 of the Transitional Rules.

Integral Energy has carefully reviewed all of the matters raised by the AER in its draft decision including, in particular, where the AER has made adjustments to Integral Energy's *original proposal*. In many instances, Integral Energy has implemented the changes required by the draft decision. Where Integral Energy has not fully adopted the AER's draft decision, the *revised proposal* provides additional information, including expert reports, to address the matters raised by the AER and to demonstrate that the *revised proposal* satisfies the requirements of the Rules.

Integral Energy notes that although it has implemented many of the AER's adjustments to its *original proposal*, this does not necessarily mean that Integral Energy accepts the rationale provided by the AER or its consultants for making them.

Many of the revisions to Integral Energy's *original proposal* are required to address the onset of the global financial crisis that occurred following the preparation and lodgement of the *original proposal* on 2 June 2008. Consequently, neither Integral Energy nor the AER were able to

¹ See clause 11.15.2 of the Rules and Appendix 1 of Chapter 11, an amended form of Chapter 6 of the Rules applicable to the NSW and ACT distribution businesses, for the purposes of the 2009-2014 regulatory control period (the *Transitional Rules*).

adequately consider the impacts of the global financial crisis on the expenditure programs and forecasts put forward that ultimately formed the basis of the draft decision.

1.1 Revisions to the *original proposal*

Integral Energy's *revised proposal* incorporates a number of amendments to the *original proposal* as a result of the draft decision.

As requested by the AER, Integral Energy has revised its forecasts underpinning the *original proposal* for energy and customer numbers. Integral Energy notes that the AER has not accepted Integral Energy's energy and customer number forecasts, has not accepted Integral Energy's capital and operating expenditure forecasts and has requested Integral Energy to provide revised forecasts in these areas. While the AER has provided guidance on the matters for which Integral Energy was to revise its forecasts, Integral Energy considers that it is not reasonable to ignore the implications of the global financial crisis and the impacts that it has on Integral Energy and its customers.

Revisions to the *original proposal* include:

- Updated energy and customer number forecasts that take into account the requirements of the AER's draft decision and the downturn in economic conditions as a result of the global financial crisis;
- Associated reductions to capital expenditures as a result of the global financial crisis;
- A revised nominal risk free rate averaging period that recognises the weight of regulatory precedent, both in Australia and internationally, that strongly supports the view that it is not appropriate to adopt the most recent averaging period if it overlaps with abnormal levels or periods of economic crisis;
- Updated cost escalators that reflect the AER's draft decision and recent commodity price movements;
- An adjustment to operating costs to remove the forecast "fair value" adjustments to the provisioning for superannuation liabilities that are no longer relevant given current market conditions;
- An adjustment to the efficiency benefit sharing scheme (EBSS) excluded cost categories to enable Integral Energy to move to leasing arrangements for certain assets currently capitalised, including new vehicles; and
- Other adjustments as required to address the issues raised in the draft decision.

The inclusion of the above amendments in the *revised proposal* result in a number of consequential changes to individual the building block components and X factor calculations as outlined in this *revised proposal*.

The following section summarises the events that led to the onset of global financial crisis as context to the revised forecasts and customer outcomes contained in this *revised proposal* as outlined in subsequent sections.

1.2 The global financial crisis

As discussed in the attached National Institute of Economic Industry Research (NIEIR) and CEG expert reports, provided in Appendices A and B, respectively, the world economy faces its most difficult period since the Great Depression. While the global financial crisis is not expected to be as severe as the Great Depression because governments are now willing to intervene to minimise the associated economic effects, the scale of wealth destruction is expected to be of the same order of magnitude.

The shock to confidence and the scale of wealth destruction is so great, self funded retirees and those nearing retirement can now expect significant reductions to the standard of living they expected three months ago. For highly geared households, debt levels are constant while asset values (including houses) have declined sharply. This will constrain household expenditures for years despite lower interest rates.

However, the negative impacts of the September-October 2008 financial shock extend well beyond the direct wealth effects. For the first time since the second oil price shock in 1979 the world as a whole experienced an event which, across all countries, generated the expectation of a recession in 2009. This situation is expected to lead, over the remainder of 2009, to firms around the world:

- (i) Reducing capital expenditures;
- (ii) Cutting employment; and
- (iii) Reducing stock levels;

thus making the expectations of a recession (or at the very least, low growth) a reality.²

The general idea of a wealth distortion world slowdown over the 2009-2011 period, led by the current global financial crisis had its origins in the US sub-prime mortgage market, where housing loans were made without requiring significant deposits from borrowers, and were made to borrowers with relatively low levels of credit worthiness.

A significant number of loans were repackaged and on sold to financial institutions around the world using complex derivative products called “collateralised debt obligations” or “CDOs”. Housing prices in the US fell with the effect that many sub-prime borrowers had negative capital in their homes (i.e. house prices fell by more than the initial deposits). This result gave these borrowers a financial incentive to cease meeting mortgage obligations, which they did in large numbers.

² See NIEIR Report on GSP, provided as Appendix A.

As a consequence, the value of CDOs held by financial institutions also fell. However, the complexity of these instruments also meant that it was difficult for financial market players to be sure which institutions were exposed to these losses. This situation led to a general unwillingness of banks to lend to each other with a worldwide “credit crunch” being reported in August 2008 and the central banks in the US, Europe, Japan, Canada and Australia coordinating efforts to increase liquidity in financial markets. This “credit crunch” appears to have had a depressing effect on the real economy providing a “feedback loop” in the form of increasing loan arrears and increasing uncertainty about the viability of key financial institutions.

The global financial crisis built over time, accelerating with the collapse of the Bear Sterns investment bank, which avoided insolvency through a Government backed sale to JP Morgan Chase on the 16 March 2008.

The crisis came to a head on 7 September 2008 when the two largest buyers and securitisers of US mortgages, “Fannie Mae” and “Freddie Mac”, were placed in conservatorship.

In Australia, the global financial crisis has resulted in significant movements in economic indicators, including significant reductions in economic activity (see NIEIR report provided as Appendix A), which has significant implications for Integral Energy and its customers over the *2009 regulatory control period*. The economic conditions prevalent prior to the *original proposal* on 2 June 2008 are simply no longer relevant.

The effect of the global financial crisis is far reaching and impacts on Integral Energy’s *original proposal* in the following ways:

- Energy and customer number forecasts have declined due to the slowdown in economic activity;
- Capital expenditure is also expected to decline to some extent as a result of lower customer connections and deferral of some major projects;
- The nominal risk free rate is at an abnormal level that does not represent a reasonable expectation of interest rate movements over the *2009 regulatory control period*; and
- The costs of contributing to defined benefits superannuation schemes have increased as a result of the loss in value of the funds.

The following sections outline Integral Energy’s revised forecasts and expenditure programs.

1.3 Revised forecasts for the 2009 regulatory control period

In order to address the outcomes of the draft decision, including considering the impact of the global financial crisis, Integral Energy proposes the following revised forecasts for the *2009 regulatory control period*.

1.3.1 Revised energy and customer number forecasts

Integral Energy has incorporated the audited 2007/08 weighted average price cap (WAPC) information into its revised energy and customer number forecasts as requested by the AER in the draft decision. In addition, the revised energy forecasts are weather corrected and allocated according to the methodology applied in generating the original energy forecasts.

Integral Energy has also revised its energy and customer number forecasts for recent information obtained from NIEIR with respect to economic growth forecasts and customer numbers. In applying the NIEIR forecasts, Integral Energy has adopted the recommendations from MMA to use the “base case” Gross State Product (GSP) and customer number forecasts rather than applying the average of the “base case” and “low case” forecasts as in the *original proposal*.

Table 1.1 summarises Integral Energy’s revised energy and customer number forecasts.

Table 1.1: Revised forecasts for the 2009 regulatory control period

Forecasts	Forecast year ending 30 June				
	2010	2011	2012	2013	2014
Customer numbers – revised	860,392	866,018	873,565	885,078	896,496
Customer numbers – original	857,350	867,100	877,700	888,100	899,500
Total energy sales (GWh) - revised	17,373	17,313	17,526	17,967	18,202
Total energy sales (GWh) - original	17,927	18,160	18,460	18,664	18,906

As illustrated above, customer numbers for the Integral Energy network are forecast to grow from 860,392 in 2009/10 to 896,496 in 2013/14, representing an annual growth rate of 1.0%. Energy consumption is forecast to grow from 17,373 GWh in 2009/10 to 18,202 GWh in 2013/14, representing an average annual growth rate of 1.2%.

1.3.2 Revised forecast capital expenditure

Integral Energy’s proposes a revised capital expenditure program of \$2,735 million (from \$2,953 million in the *original proposal*) for the *2009 regulatory control period* that has been developed to meet the key network challenges of growth, an ageing network and the NSW DRP Licence Conditions.

For the revised capital expenditure program; Integral Energy has:

- Reduced its capital expenditure program by approximately \$244 million over the *2009 regulatory control period* to take account of the impacts of the global financial crisis and the associated downturn in economic activity; and

1

Overview

- Adopted the outcomes of the AER’s draft decision with the exceptions of the application of cost escalators, the correct application of inflation and the AER recommended reductions to the substation renewal program.

The implementation of all the above adjustments has resulted in a \$218 million reduction to the capital expenditure forecasts compared with Integral Energy’s *original proposal*. Integral Energy’s revised capital expenditure proposal is summarised in Table 1.2.

Table 1.2: Revised capital expenditure program for the 2009 regulatory control period

\$ million 2008/09	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Expenditure category						
Growth	203.8	257.1	221.0	207.6	210.8	1,100.4
Asset renewal/replacement	140.8	154.9	154.0	158.3	188.1	796.2
Reliability	14.5	14.7	15.1	15.4	15.4	74.9
Compliance	133.4	115.2	86.8	55.0	24.6	414.9
Other system	1.9	1.9	1.9	2.6	2.6	10.9
Total System	494.3	543.8	478.8	438.9	441.6	2,397.3
Non-system assets	73.2	72.4	72.2	62.9	56.9	337.6
Total	567.5	616.2	550.9	501.8	498.5	2,734.9
Total from original proposal	573.9	641.5	610.4	582.5	544.3	2,952.7
Note: numbers may not add due to rounding, and are net of capital contributions.						

Integral Energy 2009 revised regulatory proposal

1.3.3 Revised forecast operating expenditure

Integral Energy proposes a revised operating expenditure program of \$1,521 million (from \$1,477 million in the *original proposal*) for the *2009 regulatory control period*. Integral Energy has accepted the AER’s draft decision for its proposed operating expenditures, with some exceptions, including the following:

- An adjustment to reflect the increased costs associated with the removal of the “fair market” adjustment relating to Integral Energy’s contributions to the defined benefit superannuation scheme;
- An update to equity raising costs based on expert advice from CEG. Integral Energy has accepted the AER’s draft decision with respect to adding equity raising costs to the asset base and has therefore revised its operating expenditure forecasts accordingly;
- Debt raising costs are proposed in accordance with Integral Energy’s *original proposal*;

- Adopting the labour rate escalators included in the draft decision, but not updating these estimates without additional public consultation due to their subjective nature; and
- Maintaining the self insurance premium as set out in the *original proposal*.

Integral Energy acknowledges the AER's acceptance of the majority of its "core" operating expenditure program in recognition of the inclusion of aggressive productivity improvements.

Integral Energy's revised forecast operating expenditure program is summarised in Table 1.3.

Table 1.3: Revised operating expenditure program for the 2009 regulatory control period

\$ million 2008/09	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Core network operating expenditure³	289.6	291.0	296.5	302.7	303.8	1,483.7
Self insurance	3.1	3.2	3.3	3.3	3.2	16.1
Debt raising allowance	3.5	3.9	4.3	4.6	4.8	21.1
Equity raising	-	-	-	-	-	-
Total	296.3	298.1	304.0	310.5	311.9	1,520.8
Total from original proposal	287.9	286.7	291.1	302.2	308.9	1,476.8
Table may not add due to rounding						

The proposed operating expenditure program for the *2009 regulatory control period* has been prepared responsibly to meet regulatory and legislative obligations in an efficient manner. It factors in aggressive productivity savings to ensure costs are efficient and provides for meeting community requirements by funding trials that may ultimately lead to reductions in capital expenditure to meet peak demand.

1.3.4 Revised return on capital

Integral Energy considers that the AER's decision to reject Integral Energy's proposed averaging period was incorrect for the reasons outlined in this *revised proposal*, and that having regard to the current market evidence, it would be unreasonable to withhold agreement to the original proposed period.

Notwithstanding that view and without prejudice to that position, Integral Energy has decided to revise its regulatory proposal to address the AER's reasons for rejection, namely that the commencement date of the averaging period was not sufficiently proximate to the final decision. In providing an updated commencement date, Integral Energy has selected a date that would result in the averaging period concluding prior to the commencement of the abnormal financial market conditions.

³ This includes network operating and maintenance expenditure and corporate support costs.

Integral Energy considers that the impact of the global financial crisis on bond markets is such that adopting an averaging period so affected will result in a less reliable estimate of both the cost of equity and the cost of debt compared to adopting an averaging period further into the past. As discussed in Appendix B, reliable estimates can only be expected if the averaging period adopted is prior to September 2008 when the financial crisis reached a new level.

Integral Energy does not support the AER's suggestion that there is a compelling financial justification for the adoption of the closest averaging period to the beginning of the regulatory period. The weight of regulatory precedent, both in Australia and internationally, is firmly on the side of not adopting the most recent averaging period if this overlaps with abnormal levels of the risk free rate or periods of economic crisis.

To adequately address the impact of the global financial crisis, Integral Energy considers that the following alternatives with respect to an averaging period for the risk free rate and debt risk premium are appropriate:

- A 15 day averaging period (consistent with Integral Energy's proposed period length) as close as possible to the final decision, but prior to the onset of the global financial crisis. Integral Energy considers that the relevant dates would be 15 days ending on 5 September 2008, the closest trading day prior to when the US institutions "Fannie Mae" and Freddie Mac" went into conservatorship; or
- If the averaging period is to contain the effects of the global financial crisis, then the length of the averaging period must incorporate a sufficient period of time prior to its onset to ensure a representative period is selected. For this alternative, Integral Energy considers a 12 month averaging period ending on the AER's nominated end date for Integral Energy of 20 March 2009 as reasonable.

On balance, Integral Energy proposes that the former option (i.e. a 15 day averaging period immediately prior to the events of early September 2008) form the basis of the agreed averaging period for calculating the risk free rate on the grounds that it is the closest period to the commencement of the *2009 regulatory control period* that excludes the impact of the global financial crisis.

In accordance with the *Transitional Rules*, Integral Energy's *revised proposal* incorporates a nominal vanilla WACC value of 10.0% calculated using the averaging period of 18 August 2008 to 5 September 2008. Integral Energy notes that its revised WACC of 10.0% is a reduction from the WACC of 10.3% calculated using actual market data from the averaging period put forward by Integral Energy in its *original proposal*.

1.4 Opening Asset Base

The AER, in its draft decision, decided that the opening regulatory asset base at 1 July 2009 for Integral Energy is to be \$3,678 million for the next regulatory control period, as set out in table 5.8 of the draft decision.

In making its decision, the AER made a number of adjustments for updated CPI inputs and the corrections for the anomalies identified in section 5.4.1 of the draft decision. The AER also

decided to reject Integral Energy's proposal to add \$170 million to its opening asset base for an error in the asset lives of sub-transmission and zone substations.

Integral Energy has implemented the AER's draft decision with respect to the actual inflation input values and the use of the IPART approved WACC for 2003/04 and has revised its opening asset base accordingly.

Integral Energy does not accept the AER's draft decision to reject Integral Energy's proposal to add \$170 million to its opening asset base and maintains that the *Transitional Rules* provide for the RAB to be increased by \$170 million for an error in the asset lives of sub-transmission and zone substations.

Integral Energy has determined that its revised opening asset base as at 1 July 2009 is \$3,810 million.

1.5 Revised building block revenues and X factors

This section summarises the key building block revenue requirements and indicative pricing outcomes contained in this *revised proposal*.

1.5.1 Revised building block revenues

The revenue required to underpin Integral Energy's investment programs, as summarised in Table 1.4, has been calculated according to the requirements in the *Transitional Rules* and the AER's post tax revenue model (PTRM) and incorporates the consequential adjustments as described elsewhere in this *revised proposal*.

Table 1.4: Revised building block revenue requirements over the 2009 regulatory control period

\$m nominal	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Return on capital	381.8	429.0	482.3	529.9	575.0	2,398.0
Return of capital	164.7	129.4	130.3	114.6	118.1	657.1
Operating expenses	303.8	313.5	327.9	343.5	353.7	1,642.4
Tax allowance	41.5	42.9	45.0	42.7	46.6	218.7
Unsmoothed revenue requirement	891.8	914.8	985.5	1,030.7	1,093.3	4,916.1
<i>Original proposal</i>	826.1	860.3	928.7	999.6	1,080.2	4,694.8

Note: numbers may not add due to rounding

1

Overview

In order to fund its investment programs over the *2009 regulatory control period*, Integral Energy's revised unsmoothed revenue requirements increase from \$892 million in 2009/10 to \$1,093 million in 2013/14.

1.5.2 Revised X factors

Applying the forecast volumes and customer numbers for the *2009 regulatory control period* to the building block revenues results in an average price path that is adjusted (along with CPI) by the "X factors" as provided in Table 1.5. To meet the requirements of the *Transitional Rules*, Integral Energy has provided X factors based on a scenario with a higher initial year pricing increase (P_0) and constant real increases for the remaining four years of the *regulatory control period*. A negative X factor indicates an increase to average network prices.

Table 1.5: Revised X factors over the *2009 regulatory control period*

Nominal \$m	Forecast year ending 30 June				
Details	2010	2011	2012	2013	2014
X factor	-19.50	-6.95	-6.95	-6.95	-6.95
Original proposal	-18.2	-3.5	-3.5	-3.5	-3.5

For Integral Energy to deliver the service standards set out in the *revised proposal* for the expenditures, programs and projects required in an efficient and sustainable manner, an increase in expenditures is required over the *2009 regulatory control period*, resulting in an increase in average network prices.

1.6 Outcomes for customers

Integral Energy's *revised proposal* aims to comply with the NSW DRP Licence Conditions both for reliability performance, including individual feeder and feeder average performance standards, and for design standards, as well as to meet the requirements of other statutory and industry based obligations, including vegetation management.

Consistent with its *original proposal*, Integral Energy is aiming for a reliability improvement, as measured by unplanned SAIDI, of approximately 15% over the current year forecast of 93⁴ minutes, to approximately 80⁴ minutes by the end of the *2009 regulatory control period*. Integral Energy has also set a "stretch" reliability target of 75⁴ minutes for the same period, which would result in a 20% improvement over current levels.

⁴ Targets based on the NSW DRP Licence Conditions methodology

Implementation of this *revised proposal* with the proposed building blocks and resulting indicative price path would increase the prices that Integral Energy charges its customers:

- The average residential customer would pay an additional \$95 (or 26 cents per day) on the distribution component of their annual bill in the first year of the *2009 regulatory control period*; and
- The average business customer would pay an additional \$320 (or 88 cents per day) on the distribution component of their annual bill in the first year of the *2009 regulatory control period*.

These average increases for 2009/10 compare to the increases of \$89 (or 24 cents per day) and \$301 (or 82 cents per day) for an average residential and an average business customers, respectively, as expressed in the *original proposal*.

Integral Energy is concerned about the affordability of electricity distribution for its customers. However, it is also concerned about providing a safe and reliable network for its customers and the community. In order to ensure that a safe and reliable network is delivered in an affordable manner, Integral Energy has developed its expenditure programs using robust planning and governance processes and incorporating aggressive productivity savings to ensure its proposals are based on efficient costs.

Introduction

Under recent changes to the National Electricity Law (NEL) and *Rules*, the AER must make a distribution determination to impose controls over the prices relating to the *direct control services* offered by Integral Energy for the five years commencing 1 July 2009 (*2009 regulatory control period*).

In accordance with clause 6.10.3 of the *Transitional Rules*, Integral Energy may, not more than 30 business days after the publication of the draft decision, submit a revised regulatory proposal to the AER. Integral Energy is only able to make revisions so as to incorporate the substance of any changes required to address matters raised by the draft decision or the AER's reasons for its draft decision.

2.1 Scope of Integral Energy's revised regulatory proposal

In meeting the requirements of the *Transitional Rules*, Integral Energy's *revised proposal* sets out the funding requirements for the capital and operating investment programs that must be undertaken to ensure a safe and reliable network over the *2009 regulatory control period*.

This *revised proposal* outlines the *direct control services* and *negotiated distribution services*⁵ provided by Integral Energy by means of, or in connection with, use of Integral Energy's regulated distribution system for the *2009 regulatory control period* in accordance with clause 6.2.3A of the *Transitional Rules*.

This *revised proposal* is submitted in accordance with, and complies with, the requirements of the National Electricity Law, the National Electricity Rules (including the *Transitional Rules*) and other relevant regulatory and legislative instruments.

Integral Energy's *revised proposal* has been subject to close and robust scrutiny by management and independent experts. Key aspects have been subject to further scrutiny through Integral Energy's established network planning processes.

2.2 Claim for confidentiality

Clause 6.8.2(c)(6) of Appendix 1 of the National Electricity Rules, requires Integral Energy to include in this *revised proposal* an indication of the parts of the proposal Integral Energy claims to be confidential and wants suppressed from publication on the grounds that the information is confidential. Integral Energy claims confidentiality over the following attachments and appendices

⁵ Integral Energy currently does not provide any negotiated distribution services.

and requests that AER does not disclose the information contained in these attachments and appendices to any person outside of the AER:

- Appendix E – Expert report by SAHA International Limited;
- Attachment 1 - Completed Post Tax Revenue Model (PTRM);
- Attachment 2 - Completed Roll Forward Model (RFM);
- Attachment 3 - Revised Energy and Customer Number Forecasts.

2.3 Structure of the document

This *revised proposal* is structured in a format largely consistent with the AER's 28 November 2008 Draft Decision as follows:

Building block proposal for Direct Control Services classified as Standard Control Services		
3	Opening asset base	Chapter 3 sets out Integral Energy's opening asset base for the <i>2009 regulatory control period</i> .
4	Demand, energy and customer number forecasts	Chapter 4 details Integral Energy's demand, energy and customer number forecasts for the <i>2009 regulatory control period</i> .
5	Forecast capital expenditure	Chapter 5 provides Integral Energy's revised forecast capital expenditure for the <i>2009 regulatory control period</i> .
6	Forecast operating expenditure	Chapter 6 provides Integral Energy's revised forecast operating expenditure for the <i>2009 regulatory control period</i> .
7	Estimated corporate income tax	Chapter 7 provides an overview of Integral Energy's estimated cost of corporate tax.
8	Depreciation	Chapter 8 sets out the proposed depreciation allowance in Integral Energy's revised building block revenue proposal for the <i>2009 regulatory control period</i> .
9	Cost of capital	Chapter 9 sets out how Integral Energy has calculated its revised proposed return on capital and its approach to inflation used in the derivation of the building block revenue for the <i>2009 regulatory control period</i> .
10	Service Target Performance Incentive Scheme (STPIS)	Chapter 10 sets out Integral Energy's response to the AER's service target performance incentive scheme for the <i>2009 regulatory control period</i> .
11	Efficiency Benefit Sharing Scheme (EBSS)	Chapter 11 sets out Integral Energy's response and relevant considerations relating to the AER's efficiency benefit sharing scheme.

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12	Demand management incentives	Chapter 12 provides Integral Energy’s response and relevant considerations relating to the AER’s proposed demand management incentives.
13	Pass through arrangements	Chapter 13 provides details of Integral Energy’s nominated cost pass through events to form part of the AER’s cost pass through mechanism.
14	Building block revenue requirements	Chapter 14 sets out an overview of the completed revised post tax revenue model and Integral Energy’s total revenue requirements and includes the resulting “X factors” to achieve Integral Energy’s revenue requirements.
15	Customer impacts	Chapter 15 outlines the customer impacts associated with this <i>revised proposal</i> .
Classification of services, arrangements for negotiation and control mechanisms		
16	Classification of services and arrangements for negotiation	Chapter 16 sets out Integral Energy’s response and relevant considerations relating to the classification of services and arrangements for negotiation for the <i>2009 regulatory control period</i> .
17	Control mechanisms for direct control services	Chapter 17 sets out Integral Energy’s response and relevant considerations relating to control mechanisms for direct control services.
Direct Control Services classified as Alternative Control Services		
18	Alternative direct control services - public lighting	Chapter 18 sets out Integral Energy’s <i>regulatory proposal</i> for its public lighting services in response to the AER’s draft decisions on alternate control services over the <i>2009 regulatory control period</i> .
Appendices and Attachments		Separately provided.

Opening asset base

3.1 AER Draft Decision

In accordance with clause 6.12.1(6) of the *Transitional Rules*, the AER in its draft decision decided that the opening regulatory asset base at 1 July 2009 for Integral Energy is to be \$3,678 million for the next regulatory control period, as set out in table 5.8 of the draft decision.

In making its decision, the AER made a number of adjustments for updated CPI inputs and the corrections for the anomalies identified in section 5.4.1 of the draft decision. The AER also decided to reject Integral Energy's proposal to add \$170 million to its opening asset base.

3.2 Integral Energy response to matters raised in the AER draft decision

3.2.1 Adjustments for CPI inputs and IPART's WACC

The AER stated that it reviewed Integral Energy's inputs to the roll forward model (RFM) for the previous regulatory control period - July 2003 to 30 June 2004 - and has cross checked them against Integral Energy's regulatory accounts. The AER noted that variances were reconciled and explained by the treatment of public lighting and capital contributions within Integral Energy's regulatory accounts. The AER stated that it is satisfied that Integral Energy has completed the RFM with inputs that are in accordance with the requirements of the *Transitional Rules*, with the exception of two anomalies:

- The method used by Integral Energy to calculate actual inflation inputs to the RFM for adjusting the opening RAB is consistent with that approved by IPART however, the AER has applied the actual inflation input values to the relevant year; and
- Integral Energy used values of 2.5% and 10.19% for the forecast inflation and the nominal WACC inputs respectively for 2003/04. However, IPART determined an inflation forecast of 3.0% and the nominal WACC is 10.73% (based on a real WACC of 7.5%). The AER has amended the RFM to reflect the IPART approved values for 2003/04.

Integral Energy has implemented the AER's draft decision with respect to the actual inflation input values and the use of the IPART approved WACC for 2003/04 and has revised its opening asset base accordingly.

For 2008/09, Integral Energy has used the CPI figure of 3.0% as used by the AER in its draft decision. As noted by the AER in its draft decision, the inflation figure used for 2008/09 was an

end of year estimate, and therefore this estimate should be updated to include the December 2008 quarter figures which should be available in sufficient time for inclusion in the final decision.

Integral Energy has also revised its opening asset base to reflect actual 2007/08 capital expenditures as reported in the 2007/08 regulatory financial statements.

Integral Energy has not accepted the AER's draft decision to reject the proposal to include approximately \$170 million in the opening asset base as a result of the change in asset lives for specifically identified assets as discussed below.

3.2.2 Change in asset lives

The AER concluded that the Transitional Rules do not provide for Integral Energy's submission to increase its Regulatory Asset Base (RAB) by \$170 million for errors in asset lives as the threshold tests in second clauses S6.2.1(e)(8)(i) and (ii) in the *Transitional Rules* have not been met.

Integral Energy does not accept the AER's draft decision on this matter and maintains that the *Transitional Rules* provide for the RAB to be increased by \$170 million for an error in the asset lives of sub-transmission and zone substations. The calculation of the valuation of Integral Energy's RAB as at the first year of a regulatory control period under S6.2.1(e) is subject to S6.2.1(c) of the *Transitional Rules*.

In its Draft Decision, the AER states that except for specific exceptions it "*considers that clause S6.2.1(c) of the transitional chapter 6 rules when read with other provisions relating to the determination of RAB requires the AER to roll forward the values that are set out in the table*"⁶ for each NSW DNSP as at 1 July 2004.

Integral Energy considers that an adjustment to the valuation of its RAB as at 1 July 2004 specified in the table under S6.2.1(c) of the *Transitional Rules* can be effected by the provisions contained in S6.2.1(c).

Whilst Integral Energy recognises that an adjustment to the valuation of its RAB as at 1 July 2004 specified in the table under S6.2.1(c) of the *Transitional Rules* may be made under S6.2.1(e)(8) with respect to certain assets, it seeks an adjustment to the valuation of its RAB as at 1 July 2004 specified in the table under S6.2.1(c) of the *Transitional Rules*.

Integral Energy's considerations on this matter are provided below.

3.2.2.1 Detailed considerations

Schedule 6.2.1(c)(1) of the *Transitional Rules* specifies the value of the Integral Energy's regulatory asset base at \$2,283 million (as at 1 July 2004 in 2004 dollars). Under S6.2.1(c)(2), the value of the RAB as at 1 July 2004 must be adjusted "*for the difference between:*

⁶ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, p76

(i) any estimated capital expenditure that is included in those values for any part of a previous regulatory control period; and

(ii) the actual capital expenditure for that part of the previous regulatory control period.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.”

IPART determined that the value of Integral Energy’s RAB as at 1 July 2004 was \$2,283 million. In making this valuation, IPART relied on the value of the opening RAB as at 1 July 1999 (\$1,743 million⁷), which was based on an initial capital base valuation by GHD/Worley International Ltd/Arthur Andersen Consortium (GHD).

GHD valued Integral Energy’s network assets at 30 June 1998 at \$1,884 million⁸. After adjusting for non-system property plant and equipment (\$141.6 million) and capital contributions (\$293.9 million) in the GHD valuation, capital expenditure in 1998/99, indexation, depreciation and asset disposal, IPART determined the value of the opening RAB as at 1 July 1999 was \$1,743 million⁹.

The Optimised Depreciated Replacement Cost (ODRC) valuation of network assets by GHD was based on the available data and an estimation of the value of network assets overall. Subsequently, Integral Energy implemented new automated systems and undertook a comprehensive audit of its network fixed assets.

In 2002, NSW Treasury appointed Sinclair Knight Merz (SKM) in association with PricewaterhouseCoopers to carry out a valuation of the network assets of the electricity distribution providers in NSW. SKM released its report on NSW Distribution Asset Valuation (SKM report) in March 2003.

SKM found that during the years since the last valuation (June 1998), the completeness and quality of data records within Integral Energy had improved. It valued the Integral Energy network at \$3,373 million, effective 30 June 2002.¹⁰

SKM calculated that of the \$3,373 million in network assets belonging to Integral Energy, capital contributions totalled \$567 million with the remaining assets totalling \$2,806 million being network assets contributed by Integral Energy¹¹.

⁷ IPART Regulation of New South Wales Electricity Distribution Networks, Determination and Rules under the National Electricity Code, December 1999, pp 53 & 117

⁸ NSW Treasury, NSW Electricity Supply Industry ODRC Valuation of Network Assets, Report on Integral Energy, February 1999, p.1

⁹ IPART Regulation of New South Wales Electricity Distribution Networks, Determination and Rules under the National Electricity Code, December 1999, pp 49, 53 & 117

¹⁰ Sinclair Knight Merz Pty Limited, NSW Distribution Asset Valuation, Integral Energy, March 2003, p1

¹¹ Sinclair Knight Merz Pty Limited, NSW Distribution Asset Valuation, Integral Energy, March 2003, p 20

Among the major factors contributing to the increased valuation since the last valuation (June 1998) were:

- Better age profiling, bay by bay costing/dating of substations, application of brownfield and other factors; and
- Revision of some of the standard asset lives to more closely reflect the practical lives experienced by the DNSPs.

These factors identified in the SKM valuation have highlighted inaccuracies in the 1998 ODRC valuation and the consequent understatement of the RAB as at 1 July 1999.

An error in the 1998 ODRC valuation relating to asset lives of sub-transmission and zone substations has had the effect of understating the RAB by an estimated \$167 million, which when rolled forward in accordance with the *Transitional Rules* would increase the RAB as at 30 June 2009 by \$170 million.

IPART established the opening RAB for the 2004-09 regulatory period using a roll forward approach, however, made no adjustment to the opening RAB as at 1 July 2004 for the 1998 ODRC valuation of network assets.

S6.2.1(c)(3) of the *Transitional Rules* providing for the rolling forward the RAB as at 1 July 2004, takes into account the derivation of the value of Integral Energy's RAB as at 1 July 2004 (being \$2,283 million in July 2004 dollars) from past regulatory decisions and the consequent fact that they relate only to the regulatory asset base identified in those past regulatory decisions.

Integral Energy notes that the AER has stated that IPART was able to determine Integral Energy's RAB as a financial valuation¹². This financial approach adopted by IPART differs from the economic approach which was adopted by the ACCC at that time under the National Electricity Code.

S6.2.1(c)(2) and (3) of the *Transitional Rules* provides for an adjustment to the value of the RAB as at 1 July 2004 consistent with the economic statutory objectives and the revenue and pricing principles of the NEL and rectifies the previous approach to asset valuation adopted by IPART in its 2004 Determination.

Integral Energy, in accordance with S6.2.1 of the *Transitional Rules*, has incorporated this amount in its asset base roll forward. The SKM report has been provided to the AER and the AER's consultants as part of the review process.

3.3 Revised opening asset base

Integral Energy has determined that its revised opening asset base as at 1 July 2009 is \$3,810 million as shown in Table 3.1.

¹² AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, p77

Table 3.1: Revised opening asset base as at 1 July 2009

Nominal \$m	Actual 30 June				Projected 30 June
	2005	2006	2007	2008	2009
Opening RAB 1 July	2,283.5	2,454.1	2,706.5	3,019.7	3,278.3
Actual/projected capital expenditure/additions ¹³	257.6	340.0	385.6	377.4	560.6
Actual/ projected regulatory depreciation	(77.8)	(77.7)	(62.9)	(107.0)	(95.8)
Actual/ projected disposals	(9.2)	(9.9)	(9.5)	(11.8)	(9.0)
Actual/projected inflation	2.34%	2.67%	3.54%	2.33%	3.00%
Difference between forecast and actual 2003/04					(58.6)
Adjustment for return on difference					(35.7)
Change in asset lives					170.0
Closing balance 30 June	2,454.1	2,706.5	3,019.7	3,278.3	3,809.9
Note: numbers may not add due to rounding					

Integral Energy considers that the opening asset base, based on the completed Roll Forward Model, provided as Confidential Attachment 2 and as summarised above, is needed to operate its network efficiently, comply with the legal and regulatory obligations, and meet the service and planning standards on a sustainable basis.

¹³ Net of capital contributions.

Demand, energy and customer number forecasts

4.1 AER Draft Decision

Integral Energy provided a revised spatial demand forecast to the AER on 29 August 2008, which took into account a number of MMA's recommended changes to its methodology, and resulted in a reduction in its maximum demand forecast of 202 MW in 2013/14. The AER considered Integral Energy's revised spatial maximum demand forecasts provide a realistic expectation of the demand forecast required to achieve the capex and opex objectives in the *Transitional Rules*.

While the AER considered the revised energy forecasts provided by Integral Energy on 31 October 2008 represented reasonable inputs into the PTRM, the AER considered that there would be merit in providing a second revised energy forecast using audited WAPC energy data for 2007/08 as a starting point. The new data is to be weather corrected and allocated according to the methodology applied in generating the original energy forecasts, and should incorporate the revised customer number forecasts.

In accordance with clause 6.12.1(10) of the *Transitional Rules*, the AER decided that the other appropriate amounts, values or inputs with respect to energy consumption forecasting are to be provided by Integral Energy as a revised energy delivered forecast, within the input sheet of Integral Energy's post tax revenue model for standard control services, by COB on 20 February 2009. The AER decided that the other appropriate amounts, values or inputs with respect to customer number forecasting for Integral Energy are those that were provided to the AER on 31 October 2008, and that are contained in Table 6.8 of the draft decision.

4.2 Integral Energy response to matters raised in the AER draft decision

In accordance with the AER's draft decision, Integral Energy has:

- Incorporated the revised spatial maximum demand forecasts accepted by the AER in their draft decision;
- Incorporated the audited 2007/08 weighted average price cap (WAPC) information into its revised energy and customer number forecasts as requested by the AER in the draft decision;
- Adopted the MMA recommendation to incorporate the methodology of applying the NIEIR base case Gross State Product (GSP) forecasts for energy forecasting; and

-
- Adopted the MMA recommendation to incorporate the methodology of applying the NIEIR base case customer number forecasts.

Integral Energy notes that, as stated on page 355 of the draft decision, MMA found that Integral Energy's non-residential energy forecast relied heavily on an average of NIEIR's base and low case GSP forecasts. MMA stated that this approach is flawed, but considered that the energy forecast determined by Integral Energy was not unreasonable overall.

Similarly, MMA found that Integral Energy's customer number forecasts were significantly lower than trends experienced within the recent past, and materially lower than that forecast by NIEIR for the region. Again, Integral Energy used an average of NIEIR base and low case growth forecasts of household numbers in its region, resulting in lower forecasts of customer numbers.

As noted above, in order to address the AER (and MMA) concerns, Integral Energy has incorporated both the audited WAPC 2007/08 information into its revised energy and customer number forecasts and has adopted the MMA recommendation to incorporate the methodology of applying the NIEIR base case GSP and customer number forecasts.

While Integral Energy has maintained the methodology underpinning the updated forecasts provided to the AER on 31 October 2008 (subject to implementing elements of the draft decision as identified above), Integral Energy has revised its energy and customer number forecasts for updated information obtained from NIEIR with respect to GSP forecasts and customer numbers in order to take account of the global financial crisis that has emerged since the *original proposal*.

The updated NIEIR forecasts are provided in Appendix A titled "*Economic scenarios for the Integral Region - A report for Integral Energy Prepared by the National Institute of Economic and Industry Research (NIEIR), December 2008*". NIEIR also note that the impacts of CO₂ abatement policies by government have been incorporated in their report (page 15).

The following sections outline the basis for updating the forecasts for the impact of the global financial crisis and summarise the revised energy and customer number forecasts.

4.2.1 Impact of the global financial crisis

4.2.1.1 Economic impact of the global financial crisis

As detailed in the attached NIEIR report (Appendix A) the world economy faces its most difficult period since the Great Depression. While the global financial crisis is not expected to be as severe as the Great Depression (although the scale of wealth destruction is expected to be of the same order of magnitude), it is expected to be less severe because governments are now willing to intervene to minimise the associated economic effects.

The shock to confidence and the scale of wealth destruction is so great, self funded retirees and those nearing retirement can now expect significant reductions to the standard of living they expected three months ago. For highly geared households debt levels are constant while asset values (including houses) have declined sharply. This will constrain household expenditures for years despite lower interest rates.

However, the negative impacts of the September-October 2008 financial shock extend well beyond the direct wealth effects. For the first time since the second oil price shock in 1979 the world as a whole experienced an event which, across all countries, generated the expectation of a recession in 2009. This has led, over the remainder of 2009, to firms around the world:

- (i) Reducing capital expenditures;
- (ii) Cutting employment; and
- (iii) Reducing stock levels;

thus making the expectations of a recession (or at the very least low growth) a reality.¹⁴

4.2.1.2 Why did it happen?

The general idea of a wealth distortion world slowdown over the 2009-2011 period, led by the current global financial crisis (GFC), had its origins in the US sub-prime mortgage market, where housing loans were made without requiring significant deposits from borrowers and were made to borrowers with relatively low levels of credit worthiness.¹⁵

A significant number of loans were repackaged and on-sold to financial institutions around the world using a complex derivative products called “collateralised debt obligations” or “CDOs”. Housing prices in the US fell with the effect that many sub-prime borrowers had negative capital in their homes (i.e. house prices fell by more than the initial deposits). This situation gave these borrowers a financial incentive to cease meeting mortgage obligations which they did in large numbers.

As a consequence, the value of CDOs held by financial institutions also fell. However, the complexity of these instruments also meant that it was difficult for financial market players to be sure which institutions were exposed to these losses. This led to a general unwillingness of banks to lend to each other with a worldwide “credit crunch” being reported in August 2008 and the central banks in the US, Europe, Japan, Canada and Australia coordinating in efforts to increase liquidity in financial markets. This credit crunch appears to have had a depressing effect on the real economy providing a “feedback loop” in the form of increasing loan arrears and increasing uncertainty about the viability of key financial institutions.

The GFC built over-time but began to accelerate with the collapse of the Bear Sterns investment bank, which avoided insolvency through a Government backed sale to JP Morgan Chase on the 16 March 2008. Arguably, the crises came to a head in September 2008, although events in the immediately preceding months were the subject of open market and media speculation.

On the 7 September 2008 the two largest buyers and securitisers of US mortgages (“Fannie Mae” and “Freddie Mac”) were placed in conservatorship. On 14 September 2008 the bankruptcy of investment bank Lehman Brothers and the sale of Merrill Lynch to Bank of America (with US

¹⁴ See NIEIR Report provided as Appendix A.

¹⁵ See CEG report on averaging period, provided as Appendix B.

government guarantees attached) were both announced. On Tuesday 16 September 2008 it was announced that the US Government would effectively take over 80% of the equity in one of the world's largest insurers (AIG) which had suffered a liquidity crisis and was unable to find lenders to save it from insolvency. The US Government provided an \$85 billion credit facility in exchange for taking over 80% of the equity in AIG.¹⁶

As stated in the NIEIR Report at Appendix A, massive stimulatory packages are being applied, with this trend expected to continue. However, in the short term (i.e. at least the next two years), these measures are unlikely to be enough to stop negative growth outcomes for a number of reasons, including the following:

- *Households rapidly increasing their savings ratios from a combination of motives, including:*
 - *Loss of long run expected post retirement incomes;*
 - *Aversion to any further increases in debt; and*
 - *To build-up cash balances as a precautionary motive against an uncertain future;*
- *Unavailability of trade and roll-over finance as financial institutions also build cash balances. This is likely to require direct public sector directions to unblock credit markets by direct control of institutions. It is now clear that lack of trade credit and loss of confidence in payment will have a significant short term impact on Australia's export performance, especially in mining;*
- *Non-finance firms also building their cash balances to qualify for future financing and allow resources for the low cost take-over opportunities that will be in abundance. This will be a negative for economic activity because it will involve:*
 - *Cuts to employment;*
 - *Rapid reductions in inventories; and*
 - *Postponement or cancellation of investment projects.*¹⁷

Before economic recovery can occur, necessary further measures will likely include:

- direct (via central banks) financing of credit markets (wholesale, commercial); and
- turning fully or partly nationalised banks into utilities directed in the first instance at the maintenance of trade credit and project financing, along with cutting interest rates to low levels and injecting fiscal stimulus packages of between 2 to 4% of GDP.

¹⁶ See CEG Report on Averaging Period, provided as Appendix B.

¹⁷ Appendix A - *Economic scenarios for the Integral Region*; NIEIR, December 2008, Page 3

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Demand, energy and customer number forecasts

Rapid de-stocking by customers will also impact on Australia's export performance and lead to significant declines in mining production from what would have otherwise been the case.

As a partial offset, the rapid declines in commodity prices, in general, and oil, in particular, will also act as powerful built-in stabilisers to support real incomes. It will, of course, have the negative effect of transferring economic growth from commodity producing to commodity consuming countries.

The effect of the global financial crisis is far reaching and impacts on Integral Energy's *original proposal* in the following ways:

- Energy and customer number forecasts have declined due to the slowdown in economic activity;
- Capital expenditure is also expected to decline to some extent as a result of lower customer connections and deferral of some major projects;
- The nominal risk free rate is at an abnormal level that does not represent a reasonable expectation of interest rate movements over the *2009 regulatory control period*; and
- The costs of contributing to defined benefits superannuation schemes have increased as a result of the loss in value of the funds.

The following sections outline the impact of the global financial crisis on the energy and customer number forecasts. The impact on capital expenditure is discussed in Chapter 5 and detailed in Confidential Attachment 3. The additional costs of contributing to the defined benefits superannuation fund are discussed in Chapter 6.

4.2.1.3 Effect on energy forecasts

In response to the global financial crisis, Integral Energy has obtained revised expert GSP forecasts from NIEIR, provided as Appendix A. Table 4.1 summarises the NIEIR GSP forecasts used in the *original proposal* (average of base and low cases) with the GSP forecasts contained in this *revised proposal* (base case). For comparison purposes, the NIEIR GSP forecasts (base case) at the time of the *original proposal* are also provided.

Table 4.1: NIEIR Gross State Product (GSP) forecasts for the 2009 regulatory control period <<TBC>>

% Growth p.a.	Forecast year ending 30 June					
	2009	2010	2011	2012	2013	2014
NIEIR GSP (<i>original proposal</i> , average of base / low cases)	1.7	1.3	2.2	2.9	1.9	2.1
NIEIR GSP (<i>original proposal</i> , base case)	2.2	1.8	2.9	3.5	2.4	2.5
NIEIR GSP (<i>revised proposal</i> , base case)	-0.9	-1.6	1.2	2.5	4.3	2.1

As illustrated above, the NIEIR GSP forecasts show a significant downturn in economic activity in NSW in the early years of the *2009 regulatory control period*, followed by a moderate recovery in the later years.

Applying the updated GSP forecasts and holding other assumptions constant (with the exceptions of implementing 2007/08 WAPC data and using base case NIEIR forecasts), Integral Energy proposes revised energy forecasts as summarised in Table 4.2.

Table 4.2: Revised energy forecasts for the 2009 regulatory control period

Forecasts	Forecast year ending 30 June				
	2010	2011	2012	2013	2014
Total energy sales (GWh) - revised	17,373	17,313	17,526	17,967	18,202
Total energy sales (GWh) - original	17,927	18,160	18,460	18,664	18,906
Energy sales (% growth p.a.) - revised	-1.0%	-0.4%	1.2%	2.5%	1.3%
Energy sales (% growth p.a.) - original	0.9%	1.3%	1.7%	1.1%	1.3%

As illustrated in Table 4.2 above, energy consumption on the Integral Energy network is forecast to grow from 17,373 GWh in 2009/10 to 18,202 GWh in 2013/14, representing an average annual growth rate of 1.2% over the *2009 regulatory control period*.

4.2.1.4 Effect on customer numbers

As with energy forecasts, and maintaining the methodology for forecasting customer numbers (with the exceptions of using 2007/08 WAPC data and applying the base case NIEIR forecasts as provided in Appendix A), customer numbers are forecast to grow at a lower rate over the 2009 regulatory control period compared with the *original proposal* as a result of the global financial crisis.

As illustrated in Table 4.3 below, customer numbers for the Integral Energy network are forecast to grow from 860,392 in 2009/10 to 896,496 in 2013/14, representing an average annual growth rate of 1.0% over the *2009 regulatory control period*.

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Demand, energy and customer number forecasts

Table 4.3: Revised customer number forecasts for the 2009 regulatory control period

Forecasts	Forecast year ending 30 June				
	2010	2011	2012	2013	2014
Customer numbers – revised	860,392	866,018	873,565	885,078	896,496
Customer numbers – original	857,350	867,100	877,700	888,100	899,500
Customer numbers (% growth p.a.) - revised	0.4%	0.7%	0.9%	1.3%	1.3%
Customer numbers (% growth p.a.) - original	0.9%	1.1%	1.2%	1.2%	1.3%

4.3 Revised energy and customer number forecasts

In accordance with the AER’s draft decision, Integral Energy has:

- Incorporated the audited 2007/08 weighted average price cap (WAPC) information into its revised energy and customer number forecasts;
- Adopted the MMA recommendation to incorporate the methodology of applying the NIEIR base case Gross State Product (GSP) forecasts into energy forecasts; and
- Adopted the MMA recommendation to incorporate the methodology of applying the NIEIR base case customer number forecasts.

While Integral Energy has maintained the methodology underpinning the updated forecasts provided to the AER on 31 October 2008 (subject to implementing elements of the draft decision as identified above), Integral Energy has updated its energy and customer number forecasts for revised information obtained from NIEIR, provided in Appendix A, with respect to GSP forecasts and customer numbers in order to take account of the global financial crisis that has emerged since the *original proposal*. Integral Energy’s revised energy and customer number forecasts are provided in Confidential Attachment 3 and summarised in Table 4.4 below.

As requested by the AER, Integral Energy has included its revised forecasts in the PTRM provided as Confidential Attachment 1.

Table 4.4: Revised forecasts for the 2009 regulatory control period

Forecasts	Forecast year ending 30 June				
	2010	2011	2012	2013	2014
Customer numbers – revised	860,392	866,018	873,565	885,078	896,496
Total energy sales (GWh) - revised	17,373	17,313	17,526	17,967	18,202

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Forecast capital expenditure

5.1 AER Draft Decision

In accordance with clause 6.12.1(3)(ii) of the *Transitional Rules* the draft decision did not accept Integral Energy's forecast capital expenditure (capex) for the next regulatory control period. The AER made adjustments to Integral Energy's forecast capex on the basis that the expenditure for the following items did not reflect efficient expenditure required to meet the capex objectives under the Rules:

- Other substation renewal projects;
- Unspecified civil works; and
- Unspecified work on sub-transmission mains.

The AER also modified Integral Energy's cost escalation calculations to reflect:

- Methods the AER considers appropriate to forecast steel, copper and aluminium prices; and
- Updated source data, where appropriate.

Following the adjustments outlined above, and as detailed in Table 7.9 of the draft decision, the AER was satisfied an amount of \$2,914 million for Integral Energy's forecast capex reasonably reflects the capex criteria.

5.2 Integral Energy response to matters raised in the AER draft decision

Integral Energy originally proposed capital expenditure requirements for the *2009 regulatory control* period of \$2,953 million (\$2008/09), which it considered prudent, efficient and based on a realistic expectation of demand forecasts and cost inputs.

Integral Energy has prepared this *revised proposal* to be consistent with the draft decision, with the exception of the following specific adjustments which are discussed further in the sections below:

- Impact of the global financial crisis on capex;
- Inclusion of substation renewal projects;

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Forecast capital expenditure

- Application of cost escalators; and
- Application of inflation.

Integral Energy's revised capital program has also been updated to reflect the impact of the application of corporate overheads in a manner consistent with the cost allocation methodology previously accepted by the AER.

5.2.1 Impact of global financial crisis

In addition to the impacts discussed in Chapter 4.2.1, the expected impacts of the global economic downturn have been assessed to determine the flow-on effect on Integral Energy's network capital expenditure programs for the *2009 regulatory control period*.

The *original proposal* included capital expenditure in a number of categories including growth, asset renewal, reliability/quality of supply and environmental, safety and statutory obligations. These categories align with various drivers, not all related to growth. The non-growth categories are not expected to be materially impacted by the global financial crisis and have therefore not been adjusted for this event.

The forecast growth capital expenditure has been reduced due to an expected reduction in new customer connections and the deferral of a number of major growth projects.

Integral Energy's approach to the revision of growth capex forecasts is contained in Appendix D, and is summarised below.

5.2.1.1 Major Projects

The global economic downturn is expected to have an effect on the timing of the need for major projects required to supply "greenfield" land release areas and major commercial centres. Advice from the development industry indicates a slowing in the rate of development of new "greenfield" areas, but a continued focus on release of land that is adjacent to existing infrastructure.

Therefore, major projects that are under construction and are required to supply land release areas that have commenced development have not been adjusted. Major projects that are not yet approved for construction and that are required to supply new "greenfield" land release areas have been generally deferred by two years. Major projects that are not yet approved for construction and are required to supply increased development in some commercial centres have been deferred by up to three years.

Overall, the reduction to Integral Energy's capital program as a result of these adjustments to Major Projects is \$173m over the *2009 regulatory control period*.

5.2.1.2 Customer Connections

Growth in customer numbers is used to estimate the number of new connections required and the associated forecast network connection expenditure, which is classified into three sub-categories:

- Industrial and Commercial Connections;
- Non-urban Extensions; and
- Underground Residential Development.

The revised customer connection forecasts that Integral Energy has received from NIEIR have been used to develop revised capital expenditure forecasts for the three customer connection sub-categories identified above. There is at any time a significant volume of “works in progress” in the customer connection area, and hence there is a lag in the effect that new customer connection applications have on actual system expenditure. In order to allow for this lag, a three year rolling average with a one year lag in terms of impact has been incorporated into the modelling of customer connection capital expenditure forecasts.

Overall, the reduction to Integral Energy’s capital program as a result of these adjustments to customer connections expenditure is \$70m over the *2009 regulatory control period*.

The adjustments to Integral Energy’s capital expenditure program as a result of the global financial crisis (as detailed in Appendix D) total \$244m over *2009 regulatory control period* as summarised below.

Table 5.1: Adjustments to original capital program due to impact of global financial crisis (\$m 2008/09)

\$ million 2008/09	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Growth – Major Projects						
Original submission June 2008	237.9	269.9	228.9	210.0	151.6	1098.2
Growth – Major Projects						
Revised submission January 2009	227.1	246.8	179.9	147.9	123.2	924.9
Growth – Major Projects						
Expenditure reduction	-10.8	-23.1	-49.0	-62.1	-28.4	-173.3
Growth – Connections						
Original submission June 2008	29.1	29.9	30.8	31.8	32.8	154.4
Growth – Connections						
Revised submission January 2009	26.7	20.2	14.7	10.1	12.3	83.9
Growth – Connections						
Expenditure reduction	-2.4	-9.8	-16.1	-21.7	-20.4	-70.5
Total	-13.2	-32.9	-65.1	-83.8	-48.8	-243.8
Note: numbers may not add due to rounding						

5.2.2 Substation renewal projects

The AER in its draft decision, based on the advice of Wilson Cook, reduced renewal capital expenditure in the categories of Zone and Transmission Substation renewal by \$15 million in the final year of the regulatory period. The stated basis of the AER's reduction is that expenditure in the final year for this renewal category is above the trend of previous years' expenditure. Integral Energy does not agree with the proposed reduction as it is inconsistent with the renewal planning data and logic that Wilson Cook have outlined in Section 6 of their final report.

In particular, Wilson Cook stated that:

"A rising trend is evident in replacement capex, as illustrated in Figure 6.1 and as expected, given the age profile of the assets." (Section 6, page 19);

and that:

"We noted that fourteen further substation renewal projects for which business cases have not yet been developed are identified in the strategic asset renewal plan. These projects have been identified based on condition assessment and risk ranking and mostly fall at the end of the period."

Upon requesting further information on this area, Wilson Cook was referred to Integral Energy's comprehensive Substation Renewal Plan (previously supplied and discussed during the review) which identifies specific future candidates for renewal on the basis of age and condition. Integral Energy considers that the expenditure profile provided was not trend-based, but rather needs-based (as noted by Wilson Cook) as best as can be determined at this point in time.

The projects referred to by Wilson Cook as requiring investment due to condition assessment were specifically identified in the Integral Energy Strategic Asset Renewal Plan¹⁸ provided as Appendix J.6 to the *original proposal*. Of the fourteen projects listed in Appendix J.6, nine would be adversely impacted by a decision to reduce the renewal expenditure by \$15 million.

Integral Energy notes that Wilson Cook in its final report referred to Integral Energy's concerns regarding the reductions to the renewal program. However, it is not obvious that the final report has fully taken account of the material provided by Integral Energy as the final recommendation was to maintain the reduction to expenditure in this area. Integral Energy does not support the AER's decision to reject these expenditures in light of the information previously provided to the AER on the fourteen specific projects identified based on age and condition assessment. Integral Energy's position is further reinforced by Wilson Cook's acknowledgement in their report that a rising trend in replacement expenditure is expected.

Therefore, Integral Energy's revised capital expenditure forecast includes the \$15 million in expenditures for substation renewal from the *original proposal* that was removed by the AER in the draft decision.

¹⁸ Integral Energy Strategic Asset Renewal Plan 2008-2009 to 2017-18, 31 March 2008, Appendix J.6 to the *original proposal*, p108

The revised forecast renewal capital expenditure is provided in Table 5.2.

Table 5.2: Revised asset renewal/replacement capital expenditure

\$ million 2008/09	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Renewal/Replacement	140.8	154.9	154.0	158.3	188.1	796.1
Note: numbers may not add due to rounding						

5.2.3 Cost escalation

During recent years electricity network service providers have experienced real increases (increases higher than inflation) over a range of input costs. For example, strong commodity prices have influenced equipment costs and the tight market for skilled labour has affected wages growth. The AER acknowledged these trends in its draft decision.

To assess the impact of real cost increases on Integral Energy's capital (and operating) forecasts for the *2009 regulatory control period*, Integral Energy, in conjunction with the other NSW electricity businesses, retained Competition Economists Group (CEG) to prepare revised forecasts for a range of input cost factors, provided as Appendix C. The AER raised a number of methodological issues with CEG's original escalators, which Integral Energy considers have been addressed in CEG's updated report.

The revised forecasts provided in Appendix C have been applied to a weighted breakdown of Integral Energy's capital costs on the same basis as that applied in the *original proposal* to develop annual real escalators which, in turn, have been used to develop Integral Energy's capital expenditure forecasts.

5.2.3.1 Forecast real input cost escalators

The AER has indicated that, where possible, the values of escalators will be updated closer to the beginning of the next regulatory control period.

In the case of raw materials, a forecasting methodology has been bedded down and largely agreed in the draft decision process. This involves updating two different data sources:

- Prices from futures markets - the outcome of a large number of trades between a large number of market participants; and
- Consensus forecasts - the average of a large number of professional forecasters.

Subject to the adjustments discussed in Appendix C, it is reasonable to base future commodity prices on a well established data source, such as London Metals Exchange (LME) futures, for estimating copper and aluminium prices.

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Forecast capital expenditure

However, the process is very different for ‘updating’ wage and construction forecasts. In this case the AER has used forecasts based solely on the opinions of a single forecaster for the draft decision, namely, Econtech.

Econtech’s forecast in the draft decision is very similar to the earlier forecast provided by Macromonitor. This makes the AER’s proposed sole reliance on the Econtech forecast less problematic. On this basis and the fact that the Econtech forecasts are more recent it is reasonable for the businesses to revise their submissions to rely on this Econtech forecast.

However, it would not be reasonable for the businesses to subscribe to, nor the AER to attempt to impose without further consultation, any future revisions to the Econtech forecast used and published in the AER’s draft decision.

Ultimately, Econtech’s forecasts are the outcome of their professional judgement. This judgment can only be assessed and consulted on in the context of a given forecast. It is of limited value to consult on one set of forecasts (the forecasts in the draft decision) if those forecasts are to be changed by Econtech at a later date without consultation.

Consequently, Integral Energy considers that the AER should rely on the current set of Econtech forecasts for wages and construction costs set out in the draft decision.

If the AER decides that it wants to update the Econtech wages and construction forecasts, it must allow businesses and other experts to test the reasonableness of these forecasts through consultation.

A summary of the input cost escalators used to calculate Integral Energy’s revised capital expenditure escalators is shown in Table 5.3.

Table 5.3: Revised forecast real input cost escalators

Input cost escalators	Percentage year ended 30 June (Real)					
	2009	2010	2011	2012	2013	2014
Labour	1.5	3.9	3.4	3.0	2.8	2.1
Aluminium	5.3	7.6	6.6	3.5	-0.8	-1.1
Copper	-14.8	-4.1	7.1	5.6	-6.0	-6.4
Steel	42.9	-8.2	2.1	-3.8	-4.7	-5.0
Oil	-0.2	0.9	6.8	2.9	0.3	-1.0
Construction	1.1	-0.3	2.4	2.2	-0.1	-1.5
Land	4.1	4.1	4.1	4.1	4.1	4.1
Other	0.0	0.0	0.0	0.0	0.0	0.0

Source: *Escalation factors affecting expenditure forecasts*, Competition Economists Group, (see Appendix C).

To apply the correct weighting for each input cost, Integral Energy prepared a detailed breakdown of a representative year’s capital expenditure into appropriate components with common cost drivers for escalation. Integral Energy then applied input cost weightings to each line item in

accordance with the categories, category weightings and input cost weightings applied by Integral Energy, consistent with those applied in the *original proposal*.

5.2.3.2 Capital program real cost escalators

The values contained in Table 5.4 below are the outcome of the process described in Section 5.2.3.1 above.

Table 5.4: Revised forecast capital expenditure annual real cost escalators

Capital expenditure component	Weight (%)	Percentage year ended 30 June (Real)					
		2009	2010	2011	2012	2013	2014
Labour	25.6	1.5	3.9	3.4	3.0	2.8	2.1
Primary Equipment	4.3	-0.4	-0.1	0.3	1.2	-0.2	-0.2
Secondary Systems	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Oil	0.2	-0.2	0.9	6.8	2.9	0.3	-1.0
Power Transformers	4.3	2.4	-1.1	1.2	0.3	-1.0	-1.1
Distribution Equipment	2.0	-0.4	-0.1	0.3	0.2	-0.2	-0.2
Distribution Transformers	5.2	2.4	-1.1	1.2	0.3	-1.0	-1.1
Copper Cable	1.7	-6.7	-1.8	3.5	2.7	-2.7	-2.9
Aluminium Cable	0.8	2.4	3.5	3.3	1.7	-0.4	-0.5
Concrete poles	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Wood Poles	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Copper conductor	0.1	-9.6	-2.6	4.6	3.7	-3.9	-4.1
Aluminium Conductor	0.5	5.3	4.1	4.0	1.9	-0.7	-0.9
Buildings	2.3	1.1	-0.3	2.4	2.2	-0.1	-1.5
Civil	5.6	1.1	-0.3	2.4	2.2	-0.1	-1.5
Fencing	1.6	1.1	-0.3	2.4	2.2	-0.1	-1.5
Major Projects (Land)	3.8	4.1	4.1	4.1	4.1	4.1	4.1
Capitalised overheads (ex lab)	5.7	0.0	0.0	0.0	0.0	0.0	0.0
Balance	34.3	0.0	0.0	0.0	0.0	0.0	0.0
Annual Escalator (above CPI)		0.8	1.0	1.5	1.3	0.7	0.4
Cumulative over 2007/08		0.8	1.8	3.4	4.7	5.4	5.8

The above escalators have been applied to Integral Energy's capital expenditure forecasts.

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Forecast capital expenditure

5.2.4 Application of inflation in conversion from \$2007/08 to \$2008/09

In its *original proposal*, Integral Energy prepared its capital expenditure forecasts in \$2007/08, consistent with its normal annual capital planning process. The requirement to submit the *original proposal* in dollars for the year 2008/09 (\$2008/09) necessitated the application of one year's inflation as measured by the change in the Consumer Price Index (CPI) average of eight capital cities.

In its *original proposal*, Integral Energy applied a change in CPI of 2.3% to restate its \$2007/08 capital expenditures in \$2008/09, which was the CPI figure used by Integral Energy in the Roll Forward Model (RFM) and by IPART in its 2008/09 regulated network price change approval process.

In its draft decision, the AER found that 2.3% was the applicable CPI for application to inflate \$2006/07 to \$2007/08 and nominated an end of year estimate of 3.0% for inflating \$2007/08 to \$2008/09 .

Integral Energy has implemented the AER's approach to applying CPI in this *revised proposal* and notes the following:

- For internal consistency, the revised CPI figure must be applied to both the conversion of Integral Energy's capital expenditure forecasts from \$2007/08 to \$2008/09 and to the roll forward model for the same period, and
- Given that the figure of 3.0% noted by the AER in its draft decision was an end of year estimate, the final decision should be updated to include the December 2008 quarter figures, which should be available in sufficient time for inclusion in the final decision.

5.3 Revised forecast capital expenditure

As discussed above, Integral Energy's *revised proposal* implements the findings of the draft decision, with the exception of the following adjustments:

- Impact of global financial crisis on capex;
- Inclusion of substation renewal projects;
- Application of cost escalators; and
- Application of inflation.

Integral Energy's revised capital program has also been updated to reflect the impact of the application of corporate overheads in a manner consistent with the cost allocation methodology previously accepted by the AER.

A summary of Integral Energy's revised capital expenditure forecast for the 2009 regulatory control period, addressed in Appendix D, is provided in Table 5.5 below. Integral Energy's

revised capital expenditure program has reduced by approximately \$218 million over the period compared with the *original proposal* due to the implementation of the above adjustments.

Table 5.5: Revised forecast capital expenditure for the 2009 regulatory control period

\$ million 2008/09	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Expenditure category						
Growth	203.8	257.1	221.0	207.6	210.8	1,100.4
Asset renewal/replacement	140.8	154.9	154.0	158.3	188.1	796.1
Reliability and quality of service enhancement	14.5	14.7	15.1	15.4	15.4	74.9
Compliance	133.4	115.2	86.8	55.0	24.6	414.9
Other system	1.9	1.9	1.9	2.6	2.6	10.9
Total System	494.3	543.8	478.8	438.9	441.6	2,397.3
Non-system assets	73.2	72.4	72.2	62.9	56.9	337.6
Total	567.5	616.2	550.9	501.8	498.5	2,734.9
Total from original proposal	573.9	641.5	610.4	582.5	544.3	2,952.7
Note: numbers may not add due to rounding						

Integral Energy's capital expenditure forecast has been prepared in accordance with, and incorporates, the expenditure which Integral Energy considers is required to achieve each of the following objectives:

- Meet or manage the expected demand for standard control services over the period;
- Comply with all applicable regulatory obligations or requirements associated with the provision of standard control services;
- Maintain the quality, reliability and security of supply of standard control services; and
- Maintain the reliability, safety and security of the distribution system through the supply of standard control services.

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Forecast operating expenditure

6.1 AER Draft Decision

In accordance with clause 6.12.1(4)(ii) of the *Transitional Rules* the AER did not accept Integral Energy's proposed operating expenditure (opex) for the next regulatory control period. The AER's reasons are set out in section 8.6 of the draft decision.

On the basis of its own analysis of Integral Energy's proposed opex forecast and the advice of Wilson Cook, the AER applied a reduction of \$17 million to Integral Energy's proposed opex, with the reductions made in the areas of self insurance, debt raising costs and equity raising costs. The AER noted Integral Energy's forecast controllable opex was derived using labour cost escalators for the labour component and CPI escalators for non-labour components. The labour cost escalators are subject to adjustment, as noted in section 8.6.2 of the draft decision, and hence the forecast controllable opex will be adjusted for this reason.

The AER accepted Wilson Cook's recommendation that Integral Energy's proposed "controllable" opex was consistent with the requirement of the *Transitional Rules* (without making adjustments for defect management expenditure and other operating costs) in light of the ambitious productivity reductions in other areas of forecast opex proposed by Integral Energy.

In its draft decision, the AER reduced Integral Energy's proposed operating expenditure forecast from \$1477 million to \$1460 million.

6.2 Integral Energy response to matters raised in the AER draft decision

Integral Energy has implemented the findings of the draft decision with respect to the proposed operating expenditure forecast, with the exception of the following matters, discussed further below:

- Real labour cost escalators;
- Defined benefit adjustment to superannuation;
- Self insurance premium;
- Debt raising costs; and
- Equity raising costs.

Integral Energy's revised operating expenditure forecast program has also been updated to reflect the impact of the application of corporate overheads in a manner consistent with the cost allocation methodology previously accepted by the AER.

6.2.1 Real labour cost escalation of core network operating costs

6.2.1.1 AER Draft Decision

The AER considered that the opex forecasts of the NSW DNSPs should take into account the real increase expected in wages growth in the NSW electricity, gas and water (EGW) sector. The AER did not consider that the averaging methodology employed by the NSW DNSPs (based on advice from CEG) to forecast wages growth in the EGW sector for NSW – taking the average of Econtech and Macromonitor forecasts - was sufficiently robust. In addition, given that actual wage data is available for 2007/08, the AER will apply the actual wage increase provided for under the NSW DNSPs' current work place awards or enterprise bargaining agreements. From 2008/09 onwards the AER will apply Econtech's NSW labour cost forecasts to the Integral Energy opex and capex proposals.

The AER considered that Integral Energy's proposed approach of using CPI as escalators - that is, no real increase - for non-labour opex components to be reasonable and consistent with past regulatory practice, and was therefore accepted.

The AER reviewed the type of labour escalators applied by Integral Energy and was satisfied with the analysis put forward by Integral Energy for corporate support costs to support its proposal.

However, as noted above the labour cost escalators were updated for the draft decision, and hence the forecast for opex will vary from that originally proposed by Integral Energy.

6.2.1.2 Integral Energy response

As discussed in section 9.12.2 of its *original proposal*, and to assess the impact of real cost increases on Integral Energy's capital and operating forecasts for the *2009 regulatory control period*, Integral Energy, in conjunction with the other NSW electricity businesses, retained CEG to prepare forecasts for a range of input cost factors.¹⁹

In its *revised proposal*, Integral Energy has updated the labour cost escalators included in its operating expenditure program based on the EGW labour cost growth forecasts applied by the AER in Table 8.14 of the draft decision. The forecast labour cost escalators applied by Integral Energy are set out in Table 6.1 below.

¹⁹ *Escalation factors affecting expenditure forecasts*, Competition Economists Group – 2008 (see Appendix K).

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Table 6.1: Real wage growth escalators applied to operating expenditure

Real wages growth (% compounding)	Forecast year ending 30 June				
	2010	2011	2012	2013	2014
Electricity sector	3.9	3.4	3.0	2.8	2.1

As indicated in Chapter 5, Integral Energy's rationale for revising its *original proposal* to incorporate the EGW labour cost escalators in the draft decision is set out in the CEG report provided as Appendix C.

Integral Energy considers that, while it is appropriate to update commodity prices where the forecasts are based on well established market data sources, such as the London Metals Exchange (LME), it is not appropriate for the AER to rely on whatever future amendments Econtech believes are appropriate without further consultation.

Consequently, Integral Energy considers that the AER should rely on the current set of Econtech forecasts for wages and construction costs set out in the draft decision.

If the AER decides that it wants to update the Econtech wages and construction forecasts, it must allow businesses and other experts to test the reasonableness of these forecasts through consultation.

6.2.2 Adjustment for changes in defined benefit superannuation costs

In its *original proposal*, Integral Energy included a specific adjustment to its expenditure programs of approximately \$12 million per year, or approximately \$68 million (in \$2008/09) over the *2009 regulatory control period* to recognise reductions in the provision for defined benefits superannuation obligations arising from growth in superannuation portfolios expected at that time. This adjustment was based on a general formula linked to the 10 year risk free rate, in an attempt to recognise the expected performance of superannuation funds.

However, the well publicised reductions in the total value of superannuation fund portfolios arising from the global financial crisis means that the previous assumptions of steady annual growth in superannuation portfolios implicit in Integral Energy's *original proposal* is no longer valid for the *2009 regulatory control period*.

Indeed, based on media reports, significant additional provisioning above the core expected contributions would be more likely over at least the next two financial years than reductions in Integral Energy's provisioning for superannuation obligations.

Recognising the significant reductions in the value of superannuation portfolios and the uncertainty regarding future performance of the superannuation funds over the *2009 regulatory control period* Integral Energy has revised its *original proposal* to remove the annual reductions in provisions for its superannuation obligations.

Integral Energy also notes that despite the reasonable expectation of material increases in provisions for superannuation liabilities over at least the next two financial years, estimates of the magnitude of these costs, and robust forecasts of future “fair value” adjustments thereafter, is not practical in the time available for the *revised proposal*.

As a consequence Integral Energy’s *revised proposal* has removed the forecast “fair value” adjustments to the provisioning for superannuation liabilities over the *2009 regulatory control period*. Integral Energy is cognisant that this approach implies that superannuation portfolios will fully recover the accumulated losses in value and returns by the end of the *2009 regulatory control period*.

6.2.3 Self insurance allowances

6.2.3.1 AER Draft Decision

The AER stated in the draft decision that it was satisfied that Integral Energy’s proposed allowances for self insurance for the following risks reflect the efficient costs that a prudent operator in the circumstances of Integral Energy would require to achieve the opex objectives:

- Fraud risk;
- Earthquakes of magnitude 5;
- Insurers’ credit risk;
- Counterparty credit risk;
- Risk of non-terrorist impact of planes and helicopters;
- Workers compensation.

For other risks, the AER was not satisfied that robust analysis was provided which supported the probability of an event occurring or the costs associated with the event, and therefore the calculation of the self insurance premium. The AER therefore reduced Integral Energy’s allowance from \$16 million to \$10 million (\$2008/09) for the next regulatory control period.

6.2.3.2 Integral Energy response

Integral Energy has implemented the findings of the draft decision with respect to the allowances for the following self insurance items over the *2009 regulatory control period*:

- Fraud risk;
- Earthquakes of magnitude 5;
- Insurer’s credit risk;
- Counterparty credit risk;

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- Risk of non-terrorist impact of planes and helicopters; and
- Workers compensation.

Integral Energy has not implemented the reductions in the draft decision with respect to the following items identified in the *original proposal*:

- Bushfire risk; and
- Key person risk.

Integral Energy originally engaged SAHA International to undertake an actuarial assessment of the above risks and the corresponding self-insurance premium and included this assessment as Appendix O in the *original proposal*. In response to the draft decision, Integral Energy has engaged SAHA to provide expert advice on the AER's findings and reasons for decision with respect to earthquakes (Magnitude 6), bushfire risk and key person risk, discussed in the sections below. The revised SAHA report is provided as Appendix E.

Appendix E also contains a letter from an Independent Actuary (Ms Julie Evans) detailing her role in the project undertaken by SAHA in quantifying the self insurance risks for the NSW DNSPs. As stated in Appendix E:

"My role is one of peer review:

- *I have reviewed your methodology and risk premium calculations*
- *I have reviewed the assumptions for reasonableness, based on the information provided in the reports and in discussions with your team*
- *I have reviewed the report for consistency with my understanding of the scope, and the way in which it communicates the information available, the methodology and the results of the study.*²⁰

Integral Energy has implemented the reductions in the draft decision with respect to earthquakes of magnitude 6 and has not included an allowance for this risk in the self insurance premium for the *revised proposal*.

6.2.3.2.1 Bushfire risk

6.2.3.2.1.1 AER draft decision

In its draft decision, the AER rejected the self insurance premiums for bushfires ignited by a DNSPs' assets proposed by the NSW DNSPs on the basis that the estimate of the probability of

²⁰ Appendix E - *Response to the AER's Draft Decision – Self Insurance*; SAHA International Ltd

occurrence and costs associated with the event are not sufficiently robust to be used to determine the self insurance premiums.

The AER noted that SAHA's forecast costs associated with minor and major bushfires ignited by third parties were derived on the same basis as those for a major bushfire ignited by the DNSPs' assets - that is, based on the proposed relationship between damage costs and damage area. In making its decision, the AER identified a number of issues associated with the functional relationships used.

Based on its assessment, the AER rejected the self insurance premiums in relation to both minor and major bushfires ignited by a third party on the basis that the probability of occurrence and associated costs have not been reasonably determined. Accordingly, the AER did not accept the proposed self insurance premiums of \$1.18 million per year for Integral Energy.

6.2.3.2.1.2 Integral Energy response

Integral Energy has reviewed the draft decision and considers that it is not reasonable for the AER to reject the original proposed self insurance premium of \$1.18 million per year and to allow no self insurance premium on the basis that "the probability of occurrence and associated costs have not been reasonably determined". Integral Energy considers that the occurrence of bushfires ignited by a DNSP's assets or ignited by third parties has a probability greater than zero and that the cost of such an event would be greater than \$0. Recently, Integral Energy has been subject to one major claim, which resulted from a bushfire which occurred at Appin on 25 December 2001. It is unclear whether the AER has based its finding on an actuarial assessment, as is standard industry practice and which formed the basis of the original Integral Energy proposal based on the expert report from SAHA.

Based on the analysis undertaken by SAHA, which has included an actuarial review, Integral Energy maintains that the originally proposed allowance of \$1.18 million per year is reasonable and therefore has included this amount in this *revised proposal*. Integral Energy has engaged SAHA to review the AER's draft decision on this matter, and provides expert advice included as Appendix E.

6.2.3.2.2 Key person risk

6.2.3.2.2.1 AER draft decision

The AER noted that Integral Energy had indicated that approximately 5% of total employees were considered key employees. The AER was not satisfied that a prudent operator would seek insurance for the sudden departure or death of this number of its employees and questioned that the coverage of a simultaneous event of the magnitude of this type would be possible. Further, the AER considered that the analysis provided by SAHA was not supported by information concerning the history of sudden departure or death of employees. The AER noted that in any year it would be expected that only a fraction of these key employees would suddenly depart or die. The AER therefore did not accept the self insurance premiums for key employees of \$0.119 million per year for Integral Energy.

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6.2.3.2.2 Integral Energy response

Integral Energy has reviewed the draft decision and considers that it is reasonable to suggest that the probability of the sudden departure or death of key employees is greater than zero and that the cost of such an event would be greater than \$0.

SAHA made an assessment to estimate the probability of a key person leaving the service of Integral Energy business. This calculation was based on a combination of information relating to probabilistic rates of resignation, mortality and disablement referenced in an Actuarial Review of the Victorian Energy Industry Superannuation Fund (prepared by William M Mercer 2006), as stated within the original self insurance risk report.

This probability was then multiplied by the estimated financial exposure (summation of the previously aforementioned costs of key personnel leaving) in order to estimate an annual exposure.

The AER's Draft Decision, states that the self insurance premiums are calculated on the basis of the sudden departure or death of all key employees in the one year. This is in fact incorrect, as SAHA has applied the probability of each key employee leaving in any year. Most of these probabilities equate to approximately 1.5% - 2%, or once every 50 – 75 years approximately.

Allowances for key person risk have been approved within other industries within Australia, and also by the AER. In December 2003, the Australian Competition Tribunal varied the ACCC's amended revision to the Access Arrangement for the gas transmission system (GasNet), by ensuring the following allowances for the asymmetric risks:

- for uplift liability risk, \$65,000 per annum;
- for **key person risk**, \$72,000 per annum; and
- for employment practises risk, \$35,000 per annum

The Tribunal determined that the asymmetric risks referred to above were to be self insured by the applicant (GasNet).

Based on the analysis undertaken by SAHA, which has included an actuarial review, Integral Energy maintains that the originally proposed allowance of \$0.119 million per year is reasonable and therefore has included this amount in this *revised proposal*. Integral Energy has engaged SAHA to review the AER's draft decision on this matter, and provides expert advice included as Appendix E. Table 6.2 summarises Integral Energy's revised forecast self insurance premiums.

Table 6.2: Revised forecast self insurance premiums

\$ million 2008/09	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Self insurance	3.1	3.2	3.3	3.3	3.2	16.1

Note: numbers may not add due to rounding

6.2.4 Debt raising costs

6.2.4.1 AER Draft Decision

The AER's methodology for debt raising costs is based on advice from the Allen Consulting Group (ACG) stating that the debt raising cost being considered should be the transaction cost of re-financing fixed rate bonds to the value of the notional gearing component of the regulated firm's regulatory asset base.

Given that Integral Energy has an opening RAB of \$3.7 billion and an assumed benchmark gearing ratio of 60:40, the notional debt component of Integral Energy's opening RAB is therefore around \$2.2 billion. Based on the ACG methodology, this debt size would require around 11 bond issues of \$200 million per issuance. The AER considered that an allowance of 8.1 basis points per annum (bppa) for debt raising costs is a reasonable benchmark for Integral Energy. This benchmark is multiplied by the debt component of Integral Energy's opening RAB to provide an average allowance of \$2.1 million per annum (\$2008/09).

6.2.4.2 Integral Energy response

To raise debt, a company has to pay financing costs or transaction costs over and above the debt margin allowed in the cost of capital. Such costs are dependent on market conditions.

In a report provided to Integral Energy and attached to the *original proposal*, CEG advised that a margin of 15.5 basis points was appropriate for Integral Energy for the *2009 regulatory control period*. Applying this margin to the debt proportion of total capital contained in the PTRM resulted in debt raising costs of approximately \$21.1 million over the 2009 regulatory control period.

Following release of the draft decision, Integral Energy engaged CEG to review the findings of the draft report and the AER's reasons for decision with respect to debt and equity raising costs. CEG's report is provided at Appendix F. Based on the CEG advice, Integral Energy has maintained its original position of applying a margin of 15.5 bppa to the value of debt, to calculate the debt raising allowance. Applying this margin in the revised PTRM results in a revised debt raising cost allowance of between \$3.5 and \$4.8 million per annum as shown in Table 6.3 below.

Table 6.3: Forecast debt raising cost allowance

\$ million 08/09	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Debt raising allowance	3.5	3.9	4.3	4.6	4.8	21.1

Note: numbers may not add due to rounding

Integral Energy notes that its revised proposed debt raising allowance of \$21.1 million is approximately \$0.2 million lower than the debt raising allowance in the *original proposal*.

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Forecast operating expenditure

6.2.5 Equity raising costs

6.2.5.1 AER Draft Decision

The AER's approach to establishing a benchmark allowance for equity raising costs is based on the methodology recommended by ACG. In establishing this allowance, the following need to be established: (1) how much new equity is required to fund forecast capex, and (2) the benchmark unit cost as a percentage that is to be applied to the equity requirement.

In considering indirect equity raising costs, the AER accepts that underpricing can occur for both initial public offerings and seasoned equity offerings. However the AER does not agree with CEG's proposal that this underpricing or indirect costs need to be included in the benchmark equity raising (issuance) costs allowed in a revenue determination.

The AER was not satisfied that there was a need to take account of the indirect unit cost of raising equity under the benchmark regulatory framework. Accordingly, the AER decided to maintain its current approach of using the direct unit cost of raising equity to determine a benchmark equity raising cost allowance when a case for external equity financing associated with forecast capex has been established.

Based on the capex allowance for Integral Energy in the draft decision, the AER's modified benchmark cash flow analyses over the next regulatory control period indicated that the total amount of additional equity required is \$12 million for Integral Energy. Accordingly, the AER decided to apply an updated benchmark unit cost of 2.75% for subsequent equity issues. When applied to the additional equity requirement established above, the total amount of benchmark equity raising costs associated with the Integral Energy's capex for the next regulatory control period is \$0.4 million (\$2008/09).

Accordingly, \$0.4 million will be amortised over the life of Integral Energy's regulatory asset base (RAB) over the next regulatory period.

6.2.5.2 Integral Energy response

Integral Energy has implemented the AER's stated methodology of addressing equity raising costs in the asset base as though they were a capital, rather than operating, expenditure. As Integral Energy would normally report these costs as an operating expense item (and these costs were originally put forward as operating expenditures), equity raising costs are discussed in this Chapter 6 rather than in Chapter 5 (capital expenditure).

In responding to the AER's draft decision, Integral Energy engaged CEG to provide advice on an appropriate equity raising margin. The CEG report is provided as Appendix F. In its report, CEG makes a number of relevant observations regarding the AER's approach to calculating an allowance for equity raising costs:

- Cash-flow modelling must take into account the repayment of debt (and/or offset against the raising of new debt) required to maintain the 60% gearing assumption;

-
- It is not obvious that retained earnings are necessarily a cheaper source of funding than external equity raising; and
 - Even if retained earnings are lower cost, it does not follow that it is costless. That is, even if it is reasonable to assume that retained earnings are the most efficient means to fund a portion of the equity expansions, it does not follow that the AER can provide zero compensation for the costs of raising equity in this manner.

6.2.5.2.1 “Pecking order” theory

The AER has historically applied a cash flow analysis to determine whether there is sufficient internal cash flow to fund the equity portion of forecast capital expenditure based on the assumed gearing ratio. The AER describes this approach as being consistent with the ‘pecking order’ approach to capital raising.

The pecking order theory of capital financing provides a rationale for why a firm can prefer financing new investment via retained earnings in preference to paying a dividend and then raising new capital. This theory is based in large part on the potential for information asymmetry between insiders and outsiders to be such that it can be rational for outsiders to reduce the price at which they are willing to purchase newly issued securities. However, it does not state that retained earnings is a costless way to raise equity; rather it states that, up to some point, it is lower cost to raise equity internally than externally.

At its simplest, the pecking order theory states that a firm will minimise costs by always choosing the form of capital raising that is ‘lowest cost’. However, it is a mistake to interpret ‘lowest cost’ too narrowly. Specifically, an efficiently run business will not make capital financing decisions based solely on which option minimises direct transaction costs (i.e., payments to third parties) associated with raising capital. An efficient firm will consider all costs (including indirect costs) that its decision places on existing shareholders.

In Appendix F, CEG sets out its detailed reasoning as to why the AER has not provided a sufficient allowance for equity raising costs, including providing expert evidence that the AER has erred in not providing an allowance for the indirect costs of raising equity.

6.2.5.2.2 Costs of reinvesting internally generated equity

Integral Energy’s modelling of the CEG report regarding the costs of using internally generated equity has identified that \$505.2 million can be reinvested at zero cost. This reinvestment is that which is required to maintain the returns on equity previously raised from shareholders. In the context of the CEG report, this reinvestment is that which is costless up to point “A” in Figure 1.²¹

In addition, this modelling has identified that a further \$722.7 million of equity returns is to be invested under the AER’s methodology in new capital expenditure. For the reasons set out in the CEG report this investment is not costless. In the context of the CEG report, this reinvestment is

²¹ Page 33, *Debt and equity raising costs – A response to the AER 2008 draft decisions for electricity distribution and transmission*, Competition Economists Group – 2008 (see Appendix F).

that which incurs cost between points "A" and "C" in Figure 1.²² The cost of using equity returns to expand the asset base is estimated at \$26.0 million.

6.2.5.2.3 Maintenance of the gearing assumption

In Appendix F, CEG sets out its detailed reasoning as to why the cash flow modelling used to calculate equity raising costs understates the amount of new equity that is required to finance capital expenditure.

In summary, the AER's cash flow modelling treats all net cash flows as being 100% equity, despite the fact that all assets, including cash, are subject to the gearing assumptions specified in the NER.

Take for example a situation where there is no capex planned in a year. The only retained economic value or net cash flow that should remain unallocated at the end of the year (all other things being equal) is the annual regulatory depreciation or return of capital. Under these conditions it is clear that debt and equity providers will need to be repaid the full amount of the return of capital to ensure that the residual capital is fully supported by the closing RAB value.

It is clear therefore that the cash generated from business activity for the year is funded by debt and equity capital the same as any other asset. It is also important to ensure that retained cash is not to be mistaken with economic profits attributable to equity holders, but rather is merely the result of exchanging non-current assets for current assets.

6.2.5.2.4 Dividend Payout/Yield

In making its draft decision the AER states that application of a dividend yield of 8% results in unsustainable outcomes. However, as set out in the CEG report, it is not obvious that an equity yield of 8% per annum is unsustainable recognising that the annual return on equity provided in the draft decision is 11.34%.

This view would be further supported using a view of economic profit. As the CEG report sets out the PTRM calculates and enforces an economic profit equivalent to the required return on equity as calculated by the CAPM. Accepting that the objective of the PTRM is to provide a specified economic profit, it follows that an economic view of the funds available for distribution to equity holders should also be used for consistency, rather than an accounting view with its inherent inconsistencies with the PTRM.

Integral Energy proposes that the AER review the modelling associated with debt and equity raising costs to ensure that it is consistent with the application of economic profit within the PTRM. Further, when selecting the appropriate basis for calculating the required returns to equity holders it is essential that the cash flows explicitly calculated for equity raising costs fully support the value flows mandated by the PTRM to achieve the required return on equity.

²² Page 33, *Debt and equity raising costs – A response to the AER 2008 draft decisions for electricity distribution and transmission*, Competition Economists Group – 2008 (see Appendix F).

With the appropriate adjustments Integral Energy believes that the AER's assessment of the funds available for distribution to equity holders and the resulting calculation of equity raising costs will have greater consistency with previous submissions on this matter.

Integral Energy's modelling of the revised CEG report outcomes, including adjusting the cash flow modelling to correctly account for economic profits that are attributable to equity holders, indicates that a firm with benchmark financing arrangements and with Integral Energy's capital expenditure program would need to raise an amount of \$214.4 million from external sources to fund capital expenditure required during the *2009 regulatory control period*. The cost of raising this additional equity is estimated at \$16.3 million.

6.2.5.2.5 Capitalisation of equity raising costs

As set out above, the cost of raising external equity is estimated at \$26.0 million, and the cost of reinvesting equity returns to expand the asset base is estimated at \$16.3 million.

As discussed in section 8.2.1 (Depreciation), Integral Energy has also revised the AER's approach to calculating the amortisation period for equity raising costs. The approach adopted by the AER in the draft decision was based on a weighted average of the standard lives for system assets. However, as the capital program underlying the need to raise new equity includes non-system assets, Integral Energy has remodelled the amortisation period to be more representative of the total underlying capital program. This adjustment reduces the amortisation period for equity raising costs from 43.2 years to 38.5 years.

Applying the AER's approach to recognising equity raising costs in the PTRM, Integral Energy has therefore included an allowance of \$39.6 million in the regulatory asset base for equity raising costs to be amortised over 38.5 years, and has removed any allowance for equity raising costs from its revised operating expenditure proposal.

6.3 Revised forecast operating expenditure

A summary of Integral Energy's revised operating expenditure forecast for direct control standard control services for the *2009 regulatory control period* is provided in the following Table 6.4. Based on the adjustments to the *original proposal* identified above in response to the draft decision, Integral Energy proposes a revised operating expenditure forecast of \$1,521 million (\$2008/09) for the *2009 regulatory control period*.

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Forecast operating expenditure

Table 6.4 Revised operating expenditure program for the 2009 regulatory control period

\$ million 2008/09	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Core network operating expenditure²³	289.6	291.0	296.5	302.7	303.8	1,483.7
Self insurance	3.1	3.2	3.3	3.3	3.2	16.1
Debt raising allowance	3.5	3.9	4.3	4.6	4.8	21.1
Equity raising	-	-	-	-	-	-
Total	296.3	298.1	304.0	310.5	311.9	1,520.8
Forecast total from original proposal	287.9	286.7	291.1	302.2	308.9	1,476.8
Table may not add due to rounding						

²³ This includes network operating and maintenance expenditure and corporate support costs.

Estimated corporate income tax

7.1 AER Draft Decision

In its draft decision, the AER has assessed each of the inputs to the PTRM that are used to calculate the expected cost of corporate income tax in accordance with clause 6.5.3 of the *Transitional Rules*. The AER considered that Integral Energy's proposed tax remaining and tax standard lives were appropriate. The AER also considered Integral Energy's proposed opening tax asset base appropriate and reasonable.

Table 9.1 of the draft decision states an estimated cost of corporate tax increasing from \$37.8 million in 2009/10 to \$41.2 million in 2013/14 and totalling \$195.6 million over the *2009 regulatory control period*.

7.2 Integral Energy response to matters raised in the AER draft decision

Integral Energy has implemented the findings of the draft decision. However, in reviewing the approach to calculating the allowance for corporate income tax in conjunction with the approach to calculating the allowance for equity raising costs, Integral Energy has identified what appears to be an error or anomaly in the AER's modelling with respect to the application of tax imputation credits, as discussed below.

7.2.1 Modelling of tax imputation credits

In the limited time available, Integral Energy has undertaken initial analysis of the interaction between the PTRM, the assumed gamma of 0.5 and the cash flows supported by the calculation of equity raising costs in the AER's draft decision.

Based on the initial findings of our analysis it is not clear that the draft decision delivers outcomes that are fully consistent with the assumption of 0.5 for gamma required by the *Transitional Rules*.

Integral Energy's analysis indicates that the cash flows supported by the proposed accounting dividend payout ratio are insufficient to distribute the imputation credits necessary to give effect to a gamma of 0.5. Indeed, the implied accounting dividend payout ratio that would be required in the draft decision to allow distribution of imputation credits consistent with the assumptions for

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Estimated corporate income tax

gamma in the PTRM ranges from 1,091% in 2009/10 down to 180% in 2014/15 as set out in Table 7.1 below.²⁴

Table 7.1: Dividend payout ratio required to achieve gamma of 0.5

Nominal \$m	Forecast year ending 30 June				
Details	2010	2011	2012	2013	2014
Net profit after tax (AER draft)	16.18	48.67	66.47	89.07	106.83
Dividends (AER draft)	11.33	34.07	46.53	62.35	74.78
Value of imputation credits (AER draft)	37.83	39.08	39.32	38.42	41.24
Face value of imputation credits (Calculated)	75.66	78.16	78.64	76.84	82.48
Dividends required to distribute all imputation credits (Calculated)	176.54	182.37	183.49	179.29	192.45
Dividend payout ratio required to achieve gamma of 0.5 (Calculated)	1,091%	375%	276%	201%	180%

Clearly such payout ratios are inconsistent with the AER's stated position on page 194 of the draft decision that an accounting dividend payout ratio exceeding 100% is unsustainable. However, Integral Energy agrees with the AER's later statement on page 194 that:

the assumption of the appropriate dividend payout ratio can be made so that the dividend ratio is consistent with the gamma value required by the NER.

Integral Energy considers that there exists an as yet unresolved tension between the AER's views of sustainable dividend policies and the NER requirements relating to value of gamma required by the NER. This tension is highlighted when the effective value of gamma resulting from the cash flows allowed by the application of the accounting payout ratio in draft decision is compared to the required gamma of 0.5.

Table 7.2 below attempts to calculate the effective value of gamma supported by the dividend cash flows while accounting for the terminal value of any undistributed imputation credits. For the ease of modelling it is assumed that theta is 0.5, although recognising that the gamma is fixed at 0.5, any different assumption for theta should not affect the value of undistributed imputation credits.

The results of the analysis below demonstrate that the effective gamma supported by the AER's decision is less than 0.5 for the entire regulatory period, and indeed appears to worsen over the

²⁴ Assuming the value of imputations distributed to shareholders (theta) is equal to 0.5.

course of the regulatory period. Whilst businesses would likely support an assumption of gamma being less than 0.5, the fact that economic profit has been calculated on the basis of a gamma of 0.5 appears to indicate that the “allowed” cash flows institute a material level of value destruction by not providing the necessary cash flows to effectively transfer the imputation credits to shareholders.

Therefore, as set out in relation to equity raising costs, and consistent with the AER’s own statements, Integral Energy proposes that the AER amend its assumption of dividend distributions to at least those that are required to distribute sufficient imputation credits to achieve the value of gamma required by the NER.

Table 7.2: Implied value of gamma derived from the draft decision

Nominal \$m	Forecast year ending 30 June				
	2010	2011	2012	2013	2014
Details	2010	2011	2012	2013	2014
Dividends (AER draft)	11.33	34.07	46.53	62.35	74.78
Imputation credits created (AER draft)	75.66	78.16	78.64	78.84	82.48
Total imputation credits distributed (Calculated)	4.86	14.60	19.94	26.72	32.05
Cumulative imputation credits distributed (Calculated)	4.86	19.46	39.40	66.12	98.17
Cumulative value of imputation credits distributed (Calculated)	2.43	9.73	19.70	33.06	49.08
Cumulative imputation credits retained (Calculated)	70.80	134.36	193.06	243.18	293.61
Value of new retained imputation credits (Calculated ²⁵)	31.39	28.18	26.02	22.22	22.36
Cumulative value of imputation credits retained (Calculated)	31.39	56.00	75.67	89.31	101.54
Cumulative Value of imputation credits distributed and retained (Calculated)	33.82	65.73	95.37	122.37	150.62
Effective Gamma (Calculated)					0.38

²⁵ Time value of money losses incurred from not distributing imputation credits in the year assumed. Calculated using 11.34% Post-tax Nominal Return on Equity (pre-imp) as per the AER draft decision as the annual discount rate.

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Estimated corporate income tax

Effective post tax nominal return on equity provided by cash flows (Calculated)						10.90%
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In the absence of further clarity from the AER as to the reasons for anomaly the results set out above, Integral Energy must conclude that the draft decision does not provide either sufficient cash flows or sufficient revenues to achieve the required return on equity specified by the CAPM as a result of errors in the modelling assumptions and/or calculations. Integral Energy has not adjusted the PTRM for this potential error or anomaly, and seeks the AER's assistance in reviewing this analysis prior to the final decision.

7.3 Revised estimated corporate income tax

Integral Energy has calculated its tax depreciation allowance based on relevant rates and methodologies in accordance with tax law and consistent with the requirements of the PTRM. Revisions to the cost of corporate income tax have resulted based on the consequential adjustments as described elsewhere in this *revised proposal*.

Table 7.3 shows Integral Energy's forecast tax depreciation allowance for the *2009 regulatory control period* as calculated using the AER's PTRM.

Table 7.3: Revised forecast tax depreciation over the 2009 regulatory control period

Nominal \$m	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Forecast tax depreciation	158.7	138.5	154.0	175.1	179.3	805.6

Depreciation

8.1 AER Draft Decision

In accordance with clause 6.12.1(8) of the *Transitional Rules* the AER decided not to approve the depreciation schedules submitted by Integral Energy without adjustment. The AER determined the depreciation allowance for Integral Energy as set out in table 10.6 of the draft decision.

The AER noted that Integral Energy's proposed standard asset lives are the same as those approved by IPART and considered that they continue to provide depreciation profiles that reflect the nature of those asset classes over their economic lives as required under the Rules. Accordingly, the AER accepted these standard asset lives.

In reviewing Integral Energy's PTRM, the AER found that the asset value for work in progress in its opening RAB was not depreciated in the PTRM because an appropriate asset life was not assigned. At the request of the AER, Integral Energy reallocated the work in progress asset value to other existing asset classes, which had consequential changes to the roll forward of each of the remaining asset lives as they rely on the weights of the relevant asset classes.

The AER reviewed Integral Energy's reallocation of its work in progress asset values and found it to be appropriate. The AER also reviewed the updated remaining asset lives and found that they had been appropriately rolled forward during the current regulatory control period.

8.2 Integral Energy response to matters raised in the AER draft decision

Integral Energy has implemented the standard and remaining asset lives as contained in table 10.5 of the draft decision and as reproduced in Table 8.1 below.

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Depreciation

Table 8.1 Revised standard and remaining lives for system and non-system assets

Asset class	Standard life (years)	Average remaining life (years)
System Assets		
Sub-transmission lines and cables	47.4	18.3
Distribution lines and cables	50.6	32.3
Substations	40.0	18.4
Transformers	44.3	21.9
Low voltage lines and cables	52.4	27.6
Customer metering and load control	25.0	3.6
Communication	8.4	0.3
Land	N/A	N/A
Easements	N/A	N/A
Emergency spares	23.6	8.7
Non-system Assets		
IT systems	5.0	1.2
Furniture, fittings, plant and equipment	13.0	10.5
Motor vehicles	8.0	2.8
Buildings	50.0	47.9
Land (non-system)	N/A	N/A
Other non-system assets	12.7	0.1

Integral Energy 2009 revised regulatory proposal

8.2.1 Remaining life for equity raising costs

In its draft decision, the AER included equity raising costs in the regulatory asset base. In order to amortise the costs, the AER attached a remaining life assumption to the equity raising costs that was based on an average of the system assets.

As noted in Chapter 6, Integral Energy has revised the AER's approach to calculating the amortisation period for equity raising costs. The approach adopted by the AER in the draft decision was based on a weighted average of the standard lives for system assets. However, as the capital program underlying the need to raise new equity includes non-system assets, Integral Energy has remodelled the amortisation period to be more representative of the total underlying capital program. This adjustment reduces the amortisation period for equity raising costs from 43.2 years to 38.5 years.

Integral Energy therefore has incorporated a remaining life assumption of 38.5 years for equity raising costs based on a weighted average of system and non system capital expenditures in 2009/10.

8.3 Revised forecast depreciation

Integral Energy has calculated its depreciation allowance based on the standard and remaining lives included in Table 10.5 of the draft decision and as reproduced in table 8.1 plus the adjustment to the equity raising remaining life assumption as discussed in section 8.2.1 above. Revisions to forecast depreciation have resulted based on implementation of these lives and the consequential adjustments to expenditures as described elsewhere in this *revised proposal*.

The total of the required regulatory depreciation allowance forecasts for the *2009 regulatory control period* is shown in Table 8.2.

Table 8.2: Revised forecast depreciation over 2009 regulatory control period

nominal \$m	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Details	2010	2011	2012	2013	2014	Total
Straight line depreciation	261.9	238.5	253.0	249.5	264.4	1,267.2
Inflation on opening RAB	(97.2)	(109.2)	(122.7)	(134.8)	(146.3)	(610.2)
Regulatory depreciation	164.7	129.4	130.3	114.6	118.1	657.1
Table may not add due to rounding						

Return on capital and inflation

9.1 AER Draft Decision

The Rules prescribe a number of the WACC parameter values to be adopted by the AER for the purposes of setting a rate of return for DNSPs. For the parameters where the values have not been prescribed—nominal risk-free rate and the debt risk premium—the NER sets out the methodology to be used by the AER for determining the values.

In accordance with clause 6.12.1(10) of the *Transitional Rules* the AER decided the other appropriate amounts, values or inputs to apply to Integral Energy are as specified in table 11.4 of the draft decision.

For this draft decision, the AER has determined a nominal vanilla WACC of 9.72% for the NSW DNSPs, which is slightly less than that proposed by the DNSPs. This difference is due to a decline in the risk-free rate since the NSW DNSPs submitted their regulatory proposals. The impact of the decline in the risk-free rate was partly offset by a rise in the cost of debt.

9.2 Integral Energy response to matters raised in the AER draft decision

Integral Energy has implemented the findings of the draft decision with respect to the cost of capital, with the exception of the following items as discussed below:

- The agreed period and associated start date for the nominal risk free rate and the debt premium; and
- The calculation of the best estimate of inflation.

In accordance with clause 6.5.2(c) of the *Transitional Rules*, Integral Energy originally proposed an averaging period to estimate the risk-free rate of 15 days in length, commencing 40 business days following submission of the *original proposal* on 2 June 2008.

As the proposed agreed period was for a future date whereby market data was not available, Integral Energy incorporated the nominal risk free rate and the debt risk premium from the SP AusNet final transmission decision of 6.09% and 2.11%, respectively, for indicative modelling purposes. Using the SP AusNet variables and the parameters specified in the *Transitional Rules*, Integral Energy proposed a nominal vanilla WACC of 9.76%.

Using the actual market data for the averaging period proposed by Integral Energy, Integral Energy proposed a rate of return on capital using a nominal risk free rate of 6.09% and a debt risk premium of 2.95%, resulting in a nominal vanilla WACC of 10.3%.

Integral Energy considers that the averaging period for the risk free rate and the debt risk premium should be one that is likely to provide a rate of return on capital consistent with providing the network service provider with a reasonable opportunity to recover at least the efficient costs the operator incurs in providing direct control network services, in the context of fixed parameters.

The Rules provide for the network service provider to propose the averaging period and Clause 6.5.2(c)(2)(i) of the *Transitional Rules* provides that the AER is not to “unreasonably withhold” its agreement to this period. Integral Energy considers that the AER’s role is to consider the case put forward by the service provider for its proposed averaging period and only if the AER considers that the period is not consistent with the relevant Rule and Law provisions, can it withhold agreement.

Integral Energy considers that the AER cannot withhold agreement simply because Integral Energy has not proposed a period consistent with the AER’s preferred regulatory practice or that it may result in a lower rate of return by selecting a later period.

Integral Energy has received advice that it has open to it the ability to seek a revised averaging period applying to the calculation of the WACC and that it is not precluded from doing so in light of the AER’s 8 July 2008 letter and Integral Energy’s response. Integral Energy submits that:

- The AER’s decision to reject Integral Energy’s proposed averaging period was incorrect in that, for the reasons outlined above, and having regard to the current market evidence it would be unreasonable to withhold agreement to the original proposed period; and
- Notwithstanding that view and without prejudice to that position, Integral Energy has decided to revise its regulatory proposal to address the AER’s reasons for rejection, namely that the commencement date of the averaging period was not sufficiently proximate to the final decision. In providing an updated commencement date, Integral Energy has selected a date that would result in the averaging period concluding prior to the commencement of the abnormal financial market conditions.

Integral Energy contends that in light of the evidence in relation to the abnormal financial market conditions (as discussed in this Chapter), it would be unreasonable for the AER to withhold agreement to the revised period for the reason that it is not sufficiently proximate to the final determination.

Clause 6.5.2 of the NER requires the AER to provide an adequate rate of return. Evidence provided in Attachment B establishes that determining a rate of return in an abnormal market will not provide an adequate rate of return. In the event that the AER does not agree to Integral Energy’s revised averaging period, it should not determine a rate of return based on an observation of nominal Commonwealth Government Securities in such an abnormal market without an appropriate adjustment. This position is without prejudice to the submission that the AER should agree to Integral Energy’s revised proposed period and was in error in rejecting the first proposed period.

9.2.1 Nominal risk free rate averaging period

9.2.1.1 AER Draft Decision

Clause 6.5.2(c) of the Rules requires the AER to determine the nominal risk-free rate using annualised Commonwealth Government Security (CGS) yields with a maturity of 10 years. The AER did not agree with the period proposed on the basis that it considered the proposed dates of the periods were too far removed from the final determination date and the commencement of the regulatory control period. The AER stated that a period too far removed from the final determination date may not provide the most relevant information. The AER further stated its draft decision is consistent with past practice by the AER and other state regulators, and supported by CAPM theory.

On 8 July 2008, the AER advised Integral Energy that it did not agree with the proposed averaging periods and proposed a period of 15 business days (noting that the length of the period had not changed from Integral Energy's proposal) starting on [REDACTED]

[REDACTED] If Integral Energy did not agree to the AER's proposed dates, Integral Energy was given an alternative of proposing a new averaging period, within the dates specified by the AER [REDACTED]

In its draft decision, the AER adopted a 15 day moving average for CGS yields with a 10-year maturity for the period ending 17 October 2008, which resulted in a proxy nominal risk-free rate of 5.34% (effective annual compounding rate). The AER indicated it will update the risk-free rate, based on the AER's specified averaging period, at the time of its final decision.

9.2.1.2 Integral Energy response

The averaging period is used to estimate the cost of equity and debt for the regulated business. This suggests that, other things equal, the optimal averaging period is one that is most likely to accurately estimate the cost of equity and debt for the regulated business.

As outlined in the attached expert report by Competition Economists Group (CEG) titled "A reasonable averaging period when setting the NER WACC parameters, December 2008" provided as Appendix B, in periods of economic crisis the yield on government bonds and the cost of equity tend to move in opposite directions. This can be understood in the context of a "flight to safety" and a "flight from risk" being two sides of the same coin – with the former pushing down Government bond yields and the latter pushing up the required return on equity and other risky assets.

As discussed in Appendix B, the world is currently experiencing a global financial crisis and the yield on 10 year nominal CGS is at unprecedentedly low levels. At the same time, the required risk premium for investing in equity would appear to be at historically high levels. Equity prices have halved over the last six months and the Reserve Bank of Australia is reporting equity market volatility at five times the level prior to the financial crisis.

Adopting an averaging period that is contaminated by the current financial crisis will likely result in an unprecedentedly low estimate of the risk free rate and, because the Rules do not allow an update of the Market Risk Premium (MRP), this will flow through to a correspondingly low estimate of the cost of equity. By contrast, if the true prevailing cost of equity is likely to be at historically high levels, this would be captured if the MRP were also updated during the averaging period.

It follows that adopting an averaging period proximate to the regulatory period cannot be presumed to give rise to an accurate estimate of the cost of equity unless the MRP is reset at the same time as the risk free rate. Such a presumption is especially likely to result in error if the averaging period is badly affected by abnormal financial market conditions such as can be clearly demonstrated to exist as outlined in section 4 of Appendix B.

Setting an averaging period during a period of financial crisis (as the world is currently in) will result in an estimate of the cost of equity that is an inaccurate estimate of the regulated business's true cost of equity. A more accurate estimated cost of equity would be determined if the averaging period was set in a more normal period for financial markets.

As set out in Appendix B, regulatory precedent strongly supports not adopting the most recent averaging period if there is evidence that the risk free rate in that period is abnormally low or depressed.

It would appear entirely appropriate that, if the yields on CGS were likely to be aberrant, due to the global financial crisis, over the entire averaging period then a different averaging period would be preferred that was less affected by the global financial crisis.

9.2.1.2.1 *Background to the global financial crisis*

Financial markets are currently being affected by what has come to be known as the 'global financial crisis'. This crisis is generally accepted as being the worst since the great depression. For example, even before the crisis was fully developed the International Monetary Fund (IMF) stated in April 2008:

"The financial market crisis that erupted in August 2007 has developed into the largest financial shock since the Great Depression, inflicting heavy damage on markets and institutions at the core of the financial system" ²⁶

Since then, the crisis has progressed further and reached its existing level in September 2008. On 7 September the two largest buyers and securitisers of US mortgages ('Fannie Mae' and 'Freddie Mac') were placed in conservatorship. On 14 September the bankruptcy of investment bank Lehman Brothers and the sale of Merrill Lynch to Bank of America (with US government guarantees attached) were both announced. On 16 September it was announced that the US Government would effectively take over 80% of the equity in one of the world's largest insurers (AIG) which had suffered a liquidity crisis and was unable to find lenders to save it from

²⁶ IMF, World Economic Outlook, April 2008.

insolvency. The US Government provided an \$85 billion credit facility in exchange for taking over 80% of the equity in AIG.

A more detailed chronology of the current crisis is provided in an appendix to the CEG report provided as Appendix B. However, in the context of the *revised proposal*, the two important facts are:

- There is a global financial crisis; and
- The events in September 2008 made the crisis worse (or, at least, showed it to be worse than previously realised).

9.2.1.3 *Integral Energy revised proposal*

As discussed in Appendix B, Integral Energy considers that the impact of the global financial crisis on bond markets is such that adopting an averaging period so affected will result in a less reliable estimate of both the cost of equity and the cost of debt compared to adopting an averaging period further into the past. As discussed in Appendix B, reliable estimates can only be expected if the averaging period adopted is prior to early September 2008 when the financial crisis reached a new level.

Integral Energy also does not support the AER's suggestion that there is a financial logic that compels the adoption of an averaging period proximate to the beginning of the regulatory period.

The weight of regulatory precedent, both in Australia and internationally, is firmly on the side of not adopting the most recent averaging period if this also overlaps with abnormal levels of the risk free rate or periods of economic crisis.

To adequately address the impact of the global financial crisis, Integral Energy proposes that the AER adopt one of the following alternatives:

- A 15 day averaging period (consistent with Integral Energy's proposed length of period) as close as possible to the final decision, but prior to the onset of the global financial crisis. Integral Energy considers that the relevant date would be 15 days ending on 5 September 2008, the closest trading day prior to when the US institutions "Fannie Mae" and Freddie Mac" went into conservatorship; or
- If the averaging period is to contain the effects of the global financial crisis, then the length of the averaging period must incorporate a sufficient period of time prior to its onset to ensure a representative period is selected. For this alternative, Integral Energy proposes a 12 month averaging period ending on the AER's nominated end date for Integral Energy of 20 March 2009.

On balance, Integral Energy proposes that the former option (i.e. a 15 day averaging period prior to the events of early September 2008) form the basis of the agreed averaging period for calculating the risk free rate on the grounds that it is closest period to the commencement of the *2009 regulatory control period* that excludes the impact of the global financial crisis.

Compared with the *original proposal*, Integral Energy's *revised proposal* results in a nominal risk free rate of 5.825%.

9.2.2 Debt Risk Premium

9.2.2.1 AER Draft Decision

The AER has decided to use the fair yields estimated by Bloomberg, rather than CBA Spectrum, for determining the benchmark debt risk premium margin for the NSW DNSPs.

The AER has previously used BBB 10-year corporate bond fair yields sourced from Bloomberg for the purposes of establishing a 10-year benchmark debt risk premium with a BBB+ credit rating. In late October 2007, Bloomberg ceased publication of its BBB fair yields for bonds with 9 year or 10-year maturities. The AER understands that the decision to cease publication was based on a lack of data for these long-dated corporate bonds (within the BBB credit rating category) from which Bloomberg could produce a fair yield. The longest maturity BBB bond fair yield now published by Bloomberg is 8 years.

Due to the unavailability of the Bloomberg fair yields for BBB rated 10-year corporate bonds, it is necessary to adopt an alternative proxy for deriving a 10-year BBB+ benchmark debt risk premium, as required by the Rules. The methodology applied by the AER is to take the Bloomberg fair yield for BBB rated 8-year corporate bonds and add the Bloomberg fair yield spread between A rated 8 and 10-year corporate bonds, in order to derive a proxy 10-year BBB+ corporate bond yield. The AER considers that this methodology remains appropriate for the purposes of determining the benchmark debt risk premium.

Consistent with previous regulatory practice, the AER considers that the debt risk premium should be determined over the same averaging period adopted for determining the risk-free rate. For the draft decision, the 15-day moving average benchmark debt risk premium for the period ending 17 October 2008, based on BBB+ rated corporate bonds with a maturity of 10 years, is 3.29% (effective annual compounding rate). Adding this debt risk premium to the nominal risk-free rate of 5.34% provides a nominal return on debt of 8.63%.

The debt risk premium will be updated by the AER based on this methodology at the time of its final decision. As outlined above in relation to the risk-free rate, the AER did not agree with the averaging period originally nominated by the NSW DNSPs and has substituted alternative averaging periods to use in its calculations for the final decision.

9.2.2.2 Integral Energy response

In calculating the debt risk premium, Integral Energy has adopted the same averaging period (i.e. a 15 day averaging period prior to the events of early September 2008) proposed for calculating the nominal risk free rate, and has also used the same start date for the averaging period as for the nominal risk free rate.

9.2.2.2.1 Methodology for calculating the debt risk premium

While there are some imperfections with the AER's approach of taking the Bloomberg fair yield for BBB rated 8-year corporate bonds and adding the Bloomberg fair yield spread between A rated 8 and 10-year corporate bonds to derive a proxy 10-year BBB+ corporate bond yield, Integral Energy considers that the AER's methodology is not unreasonable for the purposes of determining the benchmark debt risk premium.

9.2.2.2.2 Averaging period for the debt risk premium

As discussed in Appendix B, Integral Energy proposes that the AER adopt the same averaging period and start date as for the nominal risk free rate.

For the avoidance of doubt, Integral Energy proposes that a 15 day averaging period ending on 5 September prior to the events of early September 2008 form the basis of the agreed averaging period for calculating the risk free rate on the grounds that it is closest period to the commencement of the *2009 regulatory control period* that excludes the impact of the global financial crisis. Integral Energy proposes a revised debt risk premium of 3.00% which corresponds to the revised averaging period of 18 August 2008 to 5 September 2008.

9.2.3 Forecast inflation

9.2.3.1 AER Draft Decision

In its draft decision, the AER's approach to estimating inflation over a 10-year period was to apply the Reserve Bank of Australia (RBA) short-term inflation forecasts - currently extending out to two years - and adopt the mid-point of its target inflation band beyond that period (i.e. 2.5%) for the remaining eight years. An implied 10-year forecast is derived by averaging these individual forecasts. The AER considered that the RBA's inflation forecasts are objective and represent the best estimates of forecast inflation for the purpose of the draft decision.

The AER indicated that, in the absence of an objective market-based approach, its methodology remains appropriate for the purposes of determining an inflation forecast in its determinations. The AER updated the inflation forecast for the first two years of the regulatory control period using the latest published RBA inflation expectations and considered that, based on a simple average, an inflation forecast of 2.55% per annum produces the best estimate for a 10-year period to be applied in the PTRM for this draft decision.

9.2.3.2 Integral Energy response

CEG has been commissioned by Integral Energy to advise on the best approach to calculating inflation as discussed in the CEG report provided as Appendix B titled "*A reasonable averaging period when setting the NER WA CC parameters*". CEG's approach to inflation is summarised below.

In the Commonwealth Government Security (CGS) market there are two types of bonds issued – CPI indexed CGS and nominal CGS. The yield on CPI indexed CGS tends to be lower than the yield on nominal CGS because the former will benefit from inflation indexation and the latter will not. For this reason the yield on indexed CGS is often described as the ‘real’ yield meaning it is the yield that is received after the cost of inflation is removed.

It is relevant to note that the vast majority of bonds issued are nominal CGS and the Commonwealth has decided not to issue any new indexed CGS. As a consequence, the market for nominal CGS is considerably more liquid than indexed CGS.

The difference in yields between indexed and nominal CGS provides a measure of the value that investors place on both inflation indexation and liquidity. This difference is known as the “break even” inflation rate because it is the rate of actual future inflation at which an investor will receive the same payment whether or not they hold the indexed CGS or the nominal CGS.

9.2.3.2.1 *Past use of the “break even” inflation rate by the AER*

Until relatively recently it was the AER’s practice to use the break even inflation rate as the inflation forecast used as an input into the PTRM. This is a critical input into the PTRM because it effectively converts (within the PTRM) the nominal WACC calculated into a real return on capital. This real return is the number that matters to investors in regulated businesses as it determines the baseline real revenues that are then indexed to actual CPI during the regulatory period.

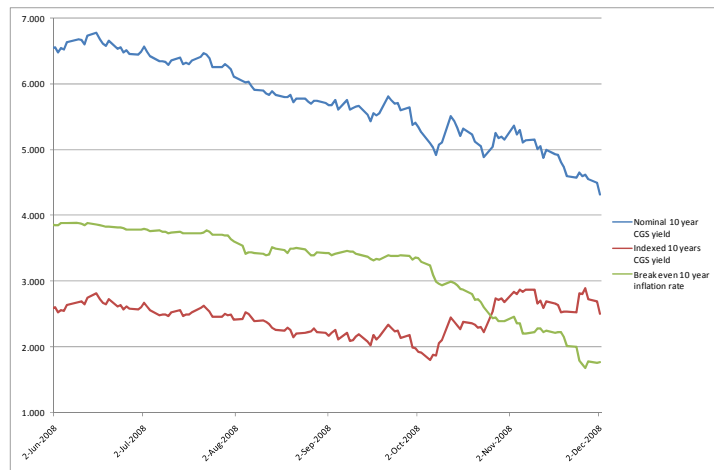
The AER determined that break even inflation from the CGS market overestimated actually expected inflation as investors were willing to pay a premium for inflation protection above and beyond that justified solely by the expected value of inflation. On the basis of acceptance of this bias, the AER stopped using break even inflation from the CGS market as its inflation forecast in the PTRM.

Instead of using break even inflation, the AER’s methodology is now to adopt RBA forecasts as providing the best estimate of expected inflation. In its draft decision, the AER assumed that in years beyond the RBA’s two year forecast period, inflation will be in the middle of the RBA’s inflation target range of 2% to 3% pa (i.e. the AER assumes 2.5% inflation in these years - the “AER averaging approach”).

Importantly, since the AER changed its inflation forecast methodology the relative bias in CGS bonds appears to have been reversed. Now, with the global financial crisis there is a high liquidity premium paid for nominal CGS that now exceeds the ‘peace of mind’ premium being paid for inflation protection using indexed CGS. Consequently, and as outlined in Appendix B, the change in the AER’s methodology applied in the new circumstances will make the estimate of the real risk free rate less accurate than the AER’s previous methodology.

The following figure, reproduced from CEG’s report provided as Appendix B, illustrates the movements in the CGS and indexed bonds as well as the “break even” inflation rate over time.

Figure 9.1: 10 Year CGS yields and break-even inflation



Source: A reasonable averaging period when setting the NER WACC requirements, December 2008. CEG report provided as Appendix B.

Figure 9.1 illustrates how nominal 10 year CGS yields have fallen over the last six months relative to indexed CGS yields (and consequently how the break-even inflation rate has fallen). From the 2nd June 2008 to 2 December 2008, 10 year nominal CGS yields have fallen 2.24% while indexed bond yields have effectively remained steady (falling only 0.09%). As a consequence, the break-even inflation rate on 2 December 2008 had dropped to 1.77%.

Integral Energy considers that the CEG methodology for calculating inflation is the preferred methodology but notes that the use of the AER's methodology for calculating inflation as contained in the draft report is not unreasonable if an averaging period for the nominal risk free rate is agreed that is prior to the commencement of the global financial crisis, or more specifically the 15 day period prior to the events of 5 September 2008.

If the AER does not agree to adopt the averaging period prior to the events ending 5 September 2008, the AER must adopt an approach that results in the lesser of:

- The "AER averaging approach"; and
- The "break even" approach.

9.3 Revised cost of capital and inflation

In summary, and as discussed in Appendix B, Integral Energy considers that the impact of the global financial crisis on bond markets is such that adopting a current averaging period will result in a less reliable estimate of both the cost of equity and the cost of debt than adopting an averaging period further into the past. This is especially true if that averaging period is prior to September 2008 when the financial crisis reached a new level.

The weight of regulatory precedent, both in Australia and internationally, is firmly on the side of not adopting the most recent averaging period if this also overlaps with abnormal levels of the risk free rate or periods of economic crisis.

On balance, Integral Energy proposes that a 15 day averaging period ending 5 September 2008 form the basis of the agreed averaging period for calculating the risk free rate on the grounds that it is the closest period to the commencement of the *2009 regulatory control period* that excludes the impact of the global financial crisis.

Based on the requirements of the *Transitional Rules* and the analysis provided above, Integral Energy proposes the revised WACC parameters, variables and outcomes shown in Table 9.1:

Table 9.1: Summary of WACC Parameters and Calculations

Parameter	Value
Parameters	
Equity Beta (β_e)	1.0
Market Risk Premium (MRP)	6.0%
Proportion of Debt to Debt Plus Equity (D / V)	60%
Credit Rating (S&P)	BBB+
Variables	
Nominal Risk Free Rate	5.83%
Nominal Risk Free Rate Averaging Period	15 days
Debt Risk Premium (DRP)	3.00%
Inflation	2.55%
Outcomes	
Nominal Pre Tax Cost of Debt	8.82%
Nominal Post Tax Cost of Equity	11.83%
Vanilla WACC	10.02%

In accordance with the *Transitional Rules*, Integral Energy's *revised pro posal* incorporates a nominal vanilla WACC value of 10.02% calculated using the averaging period of 18 August 2008 to 5 September 2008. Integral Energy notes that its revised WACC of 10.02% is a reduction from the WACC of 10.3% calculated using actual market data from the averaging period put forward by Integral Energy in its *original proposal*.

Service target performance incentive scheme (STPIS)

10.1 AER Draft Decision

In accordance with clause 6.3.2(a)(3) of the *Transitional Rules*, the AER decided that the application of the service target performance incentive scheme (STPIS) to apply to the NSW DNSPs is as specified in section 12.6 of the draft decision.

10.2 Integral Energy response to matters raised in the AER draft decision

Integral Energy broadly supports the AER's proposed adoption of a paper-based STPIS trial during the *2009 regulatory control period* based on a generally applicable national scheme. This approach is appropriate in light of the AER's consultation obligation under the *Transitional Rules*.

Integral Energy, however, does not support the AER's adoption of different exclusion clauses and feeder definitions to those currently defined in the NSW DRP Licence Conditions.

The AER's proposal requires the exclusion of major event days calculated using the 2.5 beta method. This approach is not the same 2.5 beta method used for reporting under the NSW DRP Licence Conditions. The AER's proposed methodology stipulates that five years of daily unplanned SAIDI data is to be used whereas the NSW DRP Licence Conditions reporting methodology requires the use of five years of daily planned and unplanned SAIDI data. As a result, the threshold for exclusion of events from the reported SAIDI will differ depending upon whether the AER's methodology or the NSW DRP Licence Conditions Methodology is used regarding planned SAIDI. This will lead to different reliability outcomes being reported which will lead to uncertainty and confusion amongst customers and other interested stakeholders.

The AER's proposal also has a different definition for CBD feeders than that used for the NSW DRP Licence Conditions. Under the NSW DRP Licence Conditions Integral Energy does not have any CBD feeders. However, under the AER's proposal it is possible that some of the Integral Energy feeders could be classified as CBD feeders for reliability reporting purposes. This will effectively mean that some feeders will have two classifications depending upon which reporting framework is being used. Again this will lead to uncertainty and confusion amongst customers and other interested stakeholders.

Integral Energy is concerned that these differences will require separate reporting requirements for the NSW DRP Licence Conditions and for the AER's STPIS and will also lead to different outcomes being reported. While this will not only be confusing for customers and other stakeholders it is also inefficient to require the businesses to establish two different reporting regimes for reporting the reliability outcomes for a single network.

In the future it could also lead to some perverse outcomes if, for instance, Integral Energy meets the NSW DRP Licence Conditions for reliability but does not meet a target set by the AER for the purposes of the STPIS. The reliability experienced by the customers would be the same, but the outcomes for the business could be quite different if the AER has allowed expenditures and set revenues that permit the business to satisfy the NSW DRP Licence Conditions but then penalises the business for not achieving a reliability target it has set based on a different reporting methodology.

10.3 Revised position on STPIS

Integral Energy will actively participate in the STPIS trial to ensure a scheme is developed that appropriately targets service incentives, while taking account of relevant regulatory obligations and other incentives that exist elsewhere within the regulatory framework, including the Efficiency Benefit Sharing Scheme (EBSS).

Integral Energy proposes that the reporting framework for the STPIS and the NSW DRP Licence Conditions be aligned so that only one reporting regime is required, thereby reducing the confusion for customers and other key stakeholders and avoiding unnecessary additional compliance costs.

Efficiency benefit sharing scheme (EBSS)

11.1 AER Draft Decision

In accordance with clause 6.12.1(9) of the *Transitional Rules* the AER decided the efficiency benefit sharing scheme (EBSS) to apply to Integral Energy is as defined in the AER's Efficiency benefit sharing scheme for the ACT and NSW 2009 distribution determinations, published in February 2008. The following opex cost categories will be excluded from the operation of the EBSS for the next regulatory control period:

- Debt raising costs;
- Self insurance costs;
- Insurance costs;
- Superannuation costs relating to defined benefit and retirement schemes; and
- Non-network alternatives.

These cost categories are in addition to the costs of pass through events which are excluded by the EBSS. In accordance with clause 6.3.2(a)(3) of the transitional chapter 6 rules, the AER decided that the application of the efficiency benefit sharing scheme to apply to the NSW DNSPs is as specified in section 13.6 of the draft decision.

11.2 Integral Energy response to matters raised in the AER draft decision

Integral Energy has implemented the findings of the draft decision with respect to the EBSS with the exception of the following amendments:

- The extension of the current exclusion for changes in capitalisation policy to apply to costs that change classification during the regulatory control period by virtue of the legal form in which the underlying service is acquired; and
- The inclusion of uncontrollable operating cost categories where the potential variations between forecast and actual costs are random and symmetric.

11.2.1 Extension of exclusions for changes in capitalisation policies

In accordance with the EBSS to apply from 1 July 2009, where a change in capitalisation policy occurs during the regulatory control period, the EBSS requires that the effect of this change should be removed from the calculation of the EBSS incentives, that is:

- Where a cost is forecast as being an operating expenditure for the regulatory control period, but is subsequently capitalised, that the EBSS will calculate the incentive carry-over as if the costs were expensed over the regulatory control period; and
- Where a cost is forecast as being a capital expenditure for the regulatory control period but is subsequently expensed, that the EBSS will calculate the incentive carry-over as if the costs were capitalised over the regulatory control period.

Consistent with this approach and its underlying policy intent, Integral Energy proposes that the above exclusion be extended to apply to circumstances where the legal form, and therefore the accounting classification of the service received by Integral Energy, results in a movement of costs between capital and operating expenditure over the regulatory control period.

For example, decisions relating to the choice between purchasing or leasing assets would fall into this category. In this example the service secured by the transactions are the same, being the use of a motor vehicle, it is only the manner in which the services are secured and the manner of the financial reporting the transactions that has changed.

Integral Energy does not believe that the EBSS will fully achieve the policy intent of assessing operating expenditures for the EBSS incentives on the basis in which they were forecast without extending the current capitalisation policy exclusion.

11.2.2 Symmetric Uncontrollable Costs

Integral Energy accepts and supports the AER's views that where costs are uncontrollable, it is not appropriate to impose an efficiency incentive on the DNSP as it would be unable to respond to the incentive mechanism.

However, Integral Energy also notes that despite uncontrollable costs being removed from the EBSS, they remain subject to the full incentives of the ex ante incentive framework. In the context of costs that have a symmetric risk of variance around the forecast value, this will merely result in random windfall gains or losses accruing to the DNSP.

Where actual costs can be shown to be symmetrically random from the reasonable forecast Integral Energy believes that it is appropriate for such costs to be included in the EBSS despite the absence of control. The basis for this belief is that once-off or random variances from the forecast are shared between the DNSP and customers under the EBSS. Applying the EBSS to symmetrically random costs will therefore both smooth the impacts of any windfall gains and losses over time and provide more equitable sharing of the risks and benefits of uncontrollable costs.

Integral Energy is only able to identify the annual adjustments to the defined benefits superannuation liability as the only class of operating expenditure that is sufficiently symmetrically random to have windfall gains and losses shared in the manner proposed.

11.3 Revised EBSS proposal

Integral Energy proposes that the EBSS exclusion for changes in capitalisation policies be extended to apply to circumstances where the legal form, and therefore the accounting classification of the service received by Integral Energy, results in a movement of costs between capital and operating expenditure over the regulatory control period.

Integral Energy proposes that the annual adjustments to the defined benefits superannuation liability be included in the EBSS to allow the equitable sharing of the expected symmetric windfall gains and losses.

Demand management incentives

12.1 AER Draft Decision

In accordance with clause 6.12.1(9) of the *Transitional Rules* the AER decided that, with the agreement of Integral Energy the demand management incentive scheme to apply to Integral Energy is the Demand Management Incentive Allowance (DMIA) set out in the AER's Demand management incentive scheme for the ACT and NSW 2009 distribution determinations – Demand management innovation allowance scheme, November 2008, and the D-factor scheme set out in IPART's Guidelines on the Application of the D-factor in the Tribunal's 2004 NSW Electricity Distribution Pricing Determination.

In accordance with clause 6.3.2(a)(3) of the transitional chapter 6 rules, the AER decided that the application of the demand management incentive scheme to apply to the NSW DNSPs is as specified in section 14.6 of the draft decision.

The AER seeks a submission from Integral Energy on the replacement DMIA. If Integral Energy agrees that the original DMIA is to be replaced by the replacement DMIA, the AER seeks written confirmation of Integral Energy's agreement for the purposes of clause 6.6.3(c) of the *Transitional Rules*.

12.2 Integral Energy response to matters raised in the AER draft decision

Integral Energy generally supports the AER's approach to the demand management innovation scheme. Integral Energy acknowledges that the AER's introduction of the DM innovation allowance is a positive move to encourage demand management innovation and intends to undertake innovative tariff and non tariff-based programs to pursue demand reductions across the network during the *2009 regulatory control period*.

Integral Energy agrees to the application of the demand management incentive schemes as outlined in the draft decision, with the following exception:

- Integral Energy proposes, consistent with the position taken in its *original proposal*, a demand management innovation allowance (DMIA) of \$1 million per annum to apply to Integral Energy, rather than the \$0.6 million allowance per annum as per the AER's revised DMIA.

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Demand management incentives

12.2.1 Demand management innovation allowance

Integral Energy considers that the AER's introduction of the DMIA is a positive move to encourage demand management innovation, and it intends to undertake innovative tariff and non-tariff based demand management programs during the next regulatory control period.

There is now far greater community awareness of the importance of improving energy efficiency and thereby reducing the amount of Australia's greenhouse gas emissions. This need culminated in the Federal Government publishing a White Paper on its proposed Carbon Pollution Reduction Scheme on 15 December 2008 with the Scheme planned to commence in 2010. It is clear that there is an important and growing role for electricity distribution networks to develop and deliver demand management solutions.

Integral Energy submits it seeks an increase in the annual allowance from \$0.6 million per annum to \$1 million per annum to support a higher level of innovative demand management activity for the benefit of consumers. Integral Energy submits the proposed increase in the allowance aligns its allowance with that of EnergyAustralia, and reflects Integral Energy's view that the relative sizes of the DNSPs should not reduce the amount of funding for demand management.

Integral Energy has not included any amount for the demand management innovation allowance in the post tax revenue modelling for this *revised proposal*.

12.3 Revised demand management incentives

While supportive of the demand management innovation allowance, Integral Energy maintains the approach outlined in its *original proposal* that an increase in the annual allowance to \$1 million is sought to support a higher level of innovative demand management activity for the long term benefit of consumers.

The increase in the annual allowance to \$1 million per year is in line with the AER's recommended annual allowance to be provided for EnergyAustralia and reflects Integral Energy's views that the need for demand management innovation is growing and that the relative size of the businesses should not reduce the amount of funding provided for this important element of the regulatory framework.

Pass through arrangements

13.1 AER Draft Decision

In accordance with clause 6.12.1(14) of the *Transitional Rules* the AER decided that the nominated pass through events that are to apply to Integral Energy for the next regulatory control period are a retail project event and a force majeure event as defined in section 15.7 of the draft decision.

The pass through events accepted by the AER are defined as follows:

- **Retail project event:** Any legislative or administrative act of the NSW Government to separate the retail electricity business of a DNSP in whole or in part from the electricity distribution function of the DNSP (including by way of a sale of the DNSP's retail business), which materially changes the costs to the DNSP of providing direct control services in the next regulatory control period; and
- **Force majeure:** Any major fire, flood, earthquake, storm or other weather-related or natural disaster, act of God, riot, civil disorder, rebellion or other similar cause beyond the control of the DNSP (but excluding any insurable events – that is, those events for which external insurance or self insurance is feasible) that occurs during the next regulatory control period and materially changes the costs to the DNSP of providing direct control services.

For the reasons set out in the draft decision, the AER does not consider that the other proposed pass through events proposed by Integral Energy meet the AER's assessment criteria and therefore it does not accept those events as nominated pass through events.

13.2 Integral Energy response to matters raised in the AER draft decision

13.2.1 Nominated pass through events

In its Draft Decision²⁷, the AER considered the following proposed pass through events are likely to be regulatory change events and therefore considered that separate nominated events are unnecessary:

²⁷ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, p 281

- The introduction of smart meters
- The introduction of an emissions trading scheme
- Distribution loss event
- Retailer of last resort
- Obligations relating to EMF
- Changes in reporting requirements.

Integral Energy does not accept the AER's draft decision on this matter as no certainty is provided that each of the nominated pass through events will meet the criteria of a regulatory change event and Integral Energy would be denied the opportunity to recover its efficient costs incurred in respect to the nominated pass through events. Each of the above nominated pass through events with the exception of an EMF event, are expressly defined to exclude events which fall within other categories of a pass through event (including a regulatory change event). The definition of an EMF event makes no reference to other categories of a pass through event. In the event the nominated pass through events are not regulatory change events, the additional material costs incurred by Integral Energy in respect to the nominated pass through events would not be addressed.

Among the criteria which the AER stated it will consider in deciding whether or not to include an event proposed by NSW DNSPs as a pass through event is whether *"the event is already captured by the defined event definitions"*²⁸. As stated above, the events proposed by Integral Energy are not already captured by the defined event conditions (including a regulatory change event) and therefore a separate decision on each nominated pass through event is necessary to address the recovery of unforeseen material costs.

The AER has also stated that the inclusion of these nominated pass through events would undermine the incentives for DNSPs to argue against the introduction of the events, even if the DNSPs have no choice in their introduction²⁹. In support of this statement the AER cites commentary by Wilson Cook with respect to the introduction of smart meters only.³⁰

Wilson Cook states that "dealing with the only proposal that appears to fall within our field – interval metering – we make the following observationswith some exceptions, the case for compulsory installation of these meters has not yet been made in Australia or elsewhere. It would be regrettable, therefore, if acceptance of this item as a pass-through removed the incentive for DNSPs to argue against it, if they do not consider the expenditure beneficial. Of course, there

²⁸ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, pp279 & 280

²⁹ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, p281

³⁰ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, p281

would be no choice if it were legislated – but there may be provision for pass-through under that heading already.”³¹

Wilson Cook does not state that the inclusion of these nominated pass through events would undermine the incentives for DNSPs to argue against the introduction of the events. Rather, it merely expresses its regret if a DNSP did not argue against the introduction of interval meters that was not cost beneficial because it was a smart meter pass through event.

Notwithstanding the above, an argument by a DNSP against the introduction of an event differs significantly from the introduction of the event itself and its related costs. Consistent with the NEL objective and the revenue and pricing principles, Integral Energy considers an effective incentive to promote economic efficiency with respect of direct control services should not prevent the reasonable opportunity to recover efficient material costs incurred in providing direct control network services.

In accordance with the NEL and Chapter 6 of the *Transitional Rules*, Integral Energy has incorporated these nominated events as pass through events.

13.2.2 Automated interval meter event

As stated above, the AER did not accept an automated interval event as a pass through event as it is likely to be regulatory change event and therefore considered that separate nominated events are unnecessary. It also stated that the inclusion of an automated interval event as a pass through event would undermine the incentives for DNSPs to argue against the introduction of an automated interval event, even if the DNSPs have no choice in their introduction³², and cited commentary by Wilson Cook to treat an automated interval event as a regulatory change event.

For the reasons stated above, Integral Energy does not accept the AER’s draft decision on this matter.

It is important to note that at present, there remains considerable uncertainty surrounding the form, associated costs and forecasting implications of the rollout, including the associated pilots and trials. Integral Energy has nominated an automated interval event to cover the situation where Integral Energy is required to undertake work, and incurs costs, associated with a full or partial smart meter rollout or with undertaking trials related to a smart meter rollout.

In April 2007, the Council of Australian Governments (COAG) committed to a national mandated rollout of electricity smart meters to areas where benefits outweigh costs, as indicated by the results of a cost benefit analysis. In June 2008 the Ministerial Council on Energy (MCE) agreed with the results of analysis conducted by NERA on its behalf that a roll out led by distributors would have the greatest positive net benefit and, in particular, that a roll out by NSW distributors

³¹ Wilson Cook & Co Limited, Review of proposed Expenditure of ACT & NSW Electricity DNSPs, Volume 3 – Integral Energy, Final, October 2008, p46

³² AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, p281

would have a positive net benefit. The MCE also noted that the NSW Government had, in December 2007, committed to the rollout of smart meters across the State.

Given the significant scale of any mass rollout of smart meters, it will be important to undertake significant trials to ensure implementation risks are identified and managed so that a smooth rollout can occur. The MCE has formed a National Stakeholder Steering Committee (NSSC) to co-ordinate industry trials. As the nature, scope and timeframes for any trials are yet to be confirmed, Integral Energy proposes that any necessary trials be treated as pass through events, rather than incorporating estimates of the costs into the expenditures contained in this revised regulatory proposal.

Wilson Cook has recognised that Integral Energy's definition of an automated interval meter event as a pass through event "*is reasonable but lacks a materiality threshold.*"³³ Rule 6.6.1 of the *Transitional Rules* provides for the AER to determine if a *positive change event* has occurred and the *approved pass through amount*.

The AER's preliminary position on the materiality threshold to apply for the 2009 regulatory control period, as specified in its November 2007 Issues Paper titled "Matters relevant to distribution determinations for ACT and NSW DNSPs for 2009-2014", is to adopt a threshold which assesses the revenue effect of a pass through event, which is similar to the current approach adopted in the ACT and in the NSW determinations made by the IPART.

The AER's preliminary position is that a pass through event is material if:

- The revenue impact in any one year exceeds 1% of the respective DNSP's revenue for the first year of the regulatory period; or
- The proposed capital expenditure exceeds 5% of the aggregate annual revenue requirement in the first year of the regulatory period.

However, Integral Energy notes that the AER has not made a final decision with respect to an applicable materiality threshold.

Integral Energy proposes setting a materiality threshold of \$NIL for an automated interval meter event to ensure that trials can be undertaken with no incentive to introduce larger (or smaller) trials than necessary to ensure the Government's policy objective can be delivered efficiently.

Accordingly, Integral Energy has amended its definition of a *smart meter rollout event* as follows:

An automated interval meters event is an event which results in Integral Energy being required to install automated interval meters (otherwise known as smart meters) for some or all of its customers or to conduct large scale metering trials during the course of the regulatory control period, regardless of whether that requirement takes the form of the imposition of a statutory obligation or not, and which:

³³ Wilson Cook & Co Limited, Review of proposed Expenditure of ACT & NSW Electricity DNSPs, Volume 3 – Integral Energy, Final, October 2008, p46

-
- (a) falls within no other category of pass through event; and
 - (b) increases the costs of Integral Energy providing the direct control services.

13.2.3 Electric and magnetic fields event

On Integral Energy's nominated Electric and Magnetic Fields (EMF) event, the AER has stated that:

"Integral Energy's proposed EMF pass through event covers both third party claims and changes in operational costs, whereas Country Energy is proposing changes in operational costs only be captured by this event. Country Energy informed the AER that it has insurance cover for third party claims through its liability insurance program. Integral Energy informed the AER that it has coverage for personal injury but not property.

Given that third party claims relating to EMF are insurable, the AER does not accept third party claims as a pass through event"³⁴.

Integral Energy and Country Energy have identical insurance cover for EMF with respect to third party claims. This EMF insurance coverage extends to personal injury but excludes diminution in the value of property as it is not insurable.

Integral Energy notes that among the criteria chosen by the AER upon which the AER will consider whether or not to include a proposed event as a pass through event is whether *"the event is not already insured (either external or self-insured)"³⁵*, and not whether it is insurable³⁶.

As EMF insurance coverage for diminution in the value of property is both not in place and not insurable, Integral Energy has incorporated the nominated EMF event as a pass through event.

Integral Energy has amended its proposed EMF event to exclude third party claims other than those related to the diminution in the value of property. The amended definition of an EMF event is as follows:

An electric and magnetic fields event occurs if during the course of the regulatory control period either of the following types of events occur:

- (a) *Integral Energy becomes liable for a ny claim for the diminution in the value of property where the claim is directly related to electric and magnetic fields from a ny of the assets it owns and operates or has owned and operated including claims by present and former employees of Integral Energy and/or third parties; or*
- (b) *The manner in which Integral Energy undertakes 'live-line' work is affected due to the potential exposure of the people undertaking this work to electric and magnetic fields*

and as a consequence of that event, the costs to Integral Energy of providing direct control services are materially increased.

³⁴ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, p284

³⁵ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, p280

³⁶ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, p284

13.2.4 Functional change event

Integral Energy has nominated a functional change event for inclusion as a pass through event. A functional event is defined as follows:

A functional change event is an event which results in the imposition of new obligations, or changes the nature of the existing obligations, on Integral Energy as a Distribution Network Service Provider which:

- (a) *occurs during the regulatory control period;*
- (b) *falls within no other category of pass through event; and*
- (c) *materially increases the costs of Integral Energy providing the direct control services.*

The AER has excluded a functional change event from being a pass through event on the basis that:

- it considers the intent of the *Rules* is to allow the costs associated with specific major unseen events outside the control of the DNSPs to be passed on to customers, not all unforeseen events;
- while a DNSP may not be able to control the outcome of the event, if it decides to change its operations it is exercising a management discretion and therefore has some control over its expenditure; and
- the introduction of a functional change event may act as a disincentive to DNSPs to argue against their introduction.³⁷

Sections 7A of the NEL (revenue and pricing principles) provides for a regulated network service provider to be given a reasonable opportunity to recover at least the efficient costs it incurs in providing direct control network services and complying with a regulatory obligation or requirement or making a regulatory payment.

The intention of this broad provision is to ensure a regulated network service provider can recover its efficient costs from its operations including compliance with all existing and new regulatory obligations or requirements (as defined in s2D of the NEL). Consistent with the revenue and pricing principles, the *Rules* are intended to provide for a regulated network service provider to recover its efficient costs in meeting its obligations, including those obligations which fall within the definition of a functional change event. Should a functional event be excluded from being a pass through event in the regulatory control period, Integral Energy would be effectively denied the opportunity to recover its efficient material costs in meeting its obligations.

³⁷ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, pp281 & 282

The AER has not expanded on why it considers the intent of the *Rules* is to limit pass through events to specific major unforeseen events only. As stated above, Integral Energy considers the intention of the *Rules* is to allow a regulated network service provider to recover efficient costs it incurs in meeting its obligations. This relates to obligations which are foreseen but whose costs are unknown and to obligations which are unforeseen until such time as they present themselves in the course of the regulatory control period. The application of a pass through event provides Integral Energy an opportunity to recover its efficient material costs related to meeting obligations from functional change events.

The AER has recognised that a DNSP may not be able to control the outcome of a functional change event. However, it has stated that if a DNSP decides to change its operations it is exercising a management discretion and therefore has some control over its expenditure, in which case it should seek a pass through of costs from the AER at the next regulatory reset.³⁸

The nature of a functional change event is that it results in the imposition of new obligations, or changes the nature of the existing obligations on the DNSP. Where a DNSP has no option but to change its operations in order to meet its obligations, there is limited or no management discretion.

Further, where a DNSP incurs efficient costs during the regulatory control period to meet its obligations, having to wait for a period of up to five years for the next regulatory period for the AER to commence consideration of any form of recovery of efficient costs incurred by the DNSP in meeting its obligations, would appear inconsistent with the revenue and pricing principles.

The AER has stated that the introduction of a functional change event as a pass through event may act as a disincentive to DNSPs to argue against their introduction, citing the commentary by Wilson Cook with respect to the introduction of smart meters³⁹.

As stated above, Integral Energy notes that Wilson Cook does not state that the inclusion of these nominated pass through events would be a disincentive for DNSPs to argue against the introduction of the events. Wilson Cook merely expresses its regret if a DNSP did not argue against the introduction of interval meters that was not cost beneficial because it was a smart meter pass through event. Moreover, an argument by a DNSP against the introduction of an event differs significantly from the introduction of the event itself and its related costs.

Consistent with the NEL objective and the revenue and pricing principles, Integral Energy considers an effective incentive to promote economic efficiency with respect of direct control services should not prevent the reasonable opportunity to recover efficient material costs in providing direct control network services. Accordingly Integral Energy has incorporated these nominated events as pass through events.

³⁸ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, p282

³⁹ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, p282

13.2.5 Insurance event

In its Draft Decision, the AER has excluded Integral Energy's nominated pass through events for Asbestos, Gradual pollution and Sabotage.

Integral Energy has defined an asbestos event as occurring if during the course of the regulatory control period Integral Energy becomes liable for any claims arising from the presence of asbestos or any asbestos related materials in any of its assets or the use of asbestos or any asbestos related materials in its operations and as a consequence, the costs to Integral Energy of providing direct control services are materially increased.

Integral Energy has defined a gradual pollution event as occurring if during the course of the regulatory control period either of the following events occur:

- (a) Integral Energy becomes liable for any claims directly arising from the conduct of its network operations which resulted in the pollution of the surrounding environment; or
- (b) the manner in which Integral Energy undertakes its network operations is affected due to the unacceptable risk of polluting the surrounding environment;

and as a consequence of that event, the costs to Integral Energy of providing direct control services are materially increased.

Integral Energy has defined a sabotage event as occurring if an act (including but not limited to, the use of force or violence or the threat of force or violence) of any person or group of persons (whether acting alone or on behalf of or in connection with any organisation or government) materially increases the costs to Integral Energy of providing direct control services and that event is not a terrorism event under the Rules.

The AER has excluded these nominated pass through events on the basis that the events are insurable and that DNSPs have some control over the events⁴⁰.

Accordingly, Integral Energy nominates an insurance event for which the risk of its occurrence is the subject of insurance taken out, for which an allowance is provided in the weighted average price cap. This insurance event is similar to the pass through event and the definition in the Rules currently applying to *Transmission Network Service Providers*, and is defined as follows:

An event for which the risk of its occurrence is the subject of insurance taken out by or for a Distribution Network Service Provider, for which an allowance is provided in the weighted average price cap for the Distribution Network Service Provider and in respect of which:

- (a) the cost of the premium paid or required to be paid by the Distribution Network Service Provider in the regulatory year in which the cost of the premium changes is higher or lower than the premium that is provided for in the annual revenue requirement for the provider for that regulatory year by an amount of more than 1% of the annual revenue requirement for the provider for that regulatory year;*

⁴⁰ AER, New South Wales Draft Distribution Determination 2009-10 to 2013-14, November 2008, pp283 & 284

(b) the risk eventuates and, as a consequence, the Distribution Network Service Provider incurs or will incur all or part of a deductible where the amount so incurred or to be so incurred in a regulatory year is higher or lower than the allowance for the deductible (if any) that is provided for in the annual revenue requirement for the provider for that regulatory year by an amount of more than 1% of the annual revenue requirement for the provider for that regulatory year;

(c) insurance becomes unavailable to the Distribution Network Service Provider; or

*(d) insurance becomes available to the Distribution Network Service Provider on terms materially different to those existing as at the time the distribution determination was made (other than as a result of any act or omission of the provider which is inconsistent with good electricity industry practice).
are materially increased.*

Revenue requirements

14.1 AER Draft Decision

The AER's draft decision resulted in a total revenue requirement over the *2009 regulatory control period* of \$4,632 million, compared to \$4,695 million proposed by Integral Energy. The main reasons for this difference reflect:

- removal of the \$170 million from Integral Energy's opening RAB; and
- Consequential adjustments as described elsewhere in this *revised proposal*.

In deciding on Integral Energy's X factors, the AER considered that X factors of -3.50% for 2010/11 to 2013/14 were reasonable in the context of price shocks and were also compliant with the relevant rule requirements. The AER has maintained this approach and the draft decision results in a reduction of the X factor in 2009/10 from -18.21% to -15.42% .

14.2 Integral Energy response to matters raised in the AER draft decision

Integral Energy has implemented the findings of the draft decision with respect to the calculation of the total revenue requirement with the following exceptions:

- Maintaining the \$170 million adjustment to Integral Energy's opening RAB; and
- Other adjustments to capex and opex as contained in this *revised proposal*, including revised real cost escalations.

Integral Energy's revised building block revenues and revised X factor calculations are set out below.

14.3 Revised building block revenues

The unsmoothed revenue requirement (notional revenue requirement) for each year of the *2009 regulatory control period* is calculated as the sum of the return on capital, return of capital, operating and maintenance expenditure and corporate tax allowance. Integral Energy's proposed annual revenue requirement over the *2009 regulatory control period* in accordance with clause 6.4.3(a)(7) of the *Transitional Rules* is shown in Table 14.1.

Table 14.1: Revised building block revenue requirements over 2009 regulatory control period

\$m nominal	Forecast year ending 30 June					Total
	2010	2011	2012	2013	2014	
Return on capital	381.8	429.0	482.3	529.9	575.0	2,398.0
Return of capital	164.7	129.4	130.3	114.6	118.1	657.1
Operating expenses	303.8	313.5	327.9	343.5	353.7	1,642.4
Tax allowance	41.5	42.9	45.0	42.7	46.6	218.7
Unsmoothed revenue requirement	891.8	914.8	985.5	1,030.7	1,093.3	4,916.1
<i>Original proposal</i>	826.1	860.3	928.7	999.6	1,080.2	4,694.8
Note: numbers may not add due to rounding						

The unsmoothed revenue requirements increase from \$892 million in 2009/10 to \$1,094 in 2013/04.

14.3.1 X factors

Applying the revised forecast consumption volumes for the 2009 regulatory control period to the building block revenues results in an average price path that is adjusted (along with CPI) by the X factors as provided in Table 14.2. Integral Energy has provided X factors based on a scenario with a higher initial year pricing increase (P_0) and a scenario with a constant X factor over the 2009 regulatory control period. A negative X factor indicates an increase to average network prices.

Table 14.2: Revised proposed X factors over the 2009 regulatory control period

Nominal \$m	Forecast year ending 30 June				
	2010	2011	2012	2013	2014
Details					
X factor	-19.50	-6.95	-6.95	-6.95	-6.95
<i>Original proposal</i>	-18.2	-3.5	-3.5	-3.5	-3.5

The above X factors result in real average distribution price increases over the period. While Integral Energy's regulatory proposal sets out the expenditures, programs and projects required to

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Revenue requirements

achieve deliver the service standards in an efficient and sustainable manner, an increase in expenditures is required over the *2009 regulatory control period*, which will result in a corresponding increase in average network prices.

Customer outcomes

15.1 AER Draft Decision

15.2 Integral Energy response to matters raised in the AER draft decision

The outcomes in this chapter are indicative only, and are based on the AER's acceptance of the expenditure programs and related funding requirements contained in this *revised proposal*. Any adjustments to the *regulatory proposal* would necessitate a commensurate adjustment to the indicative outcomes contained in this chapter.

15.2.1 Customer pricing impacts

Implementation of this *revised regulatory proposal* with the proposed building blocks and resulting indicative price path would increase the charges that Integral Energy imposes on its customers:

- The average residential customer would pay an additional \$95 (or 26 cents per day) on the distribution network use of system charges in the first year of the *2009 regulatory control period*; and
- The average business customer would pay an additional \$320 (or 88 cents per day) on the distribution network use of system charges in the first year of the *2009 regulatory control period*.

These average increases for 2009/10 compare to the increases of \$89 (or 24 cents per day) and \$301 (or 82 cents per day) for an average residential and an average business customers, respectively, as expressed in the *original proposal*.

15.2.2 Reliability outcomes

Integral Energy's *revised regulatory proposal* complies with the NSW DRP Licence Conditions for reliability performance, both for individual feeder and feeder average performance standards, and complies with the NSW DRP Licence Conditions for design standards, and with other statutory and industry based obligations including for vegetation management.

Through a combination of meeting its regulatory obligations and internal stretch targets, Integral Energy is aiming for a stretch reliability improvement, as measured by unplanned SAIDI, of

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Customer outcomes

approximately 20% over the current year forecast of 93⁴¹ minutes, to approximately 75¹³ minutes by the end of the 2009 *regulatory control period*.

Based on the reliability improvement performance achieved over the *current regulatory control period*, and subject to the AER making a determination which accommodates the expenditure levels contained in this *regulatory proposal*, Integral Energy believes it can achieve this ambitious target.

15.2.3 Security standard outcomes

Integral Energy has analysed the implications of the revenues contained in this *revised regulatory proposal* on the security standards of its network business. Integral Energy's analysis establishes that the revenue level is just sufficient to achieve Integral Energy's security standard obligations, including those contained in the NSW DRP Licence Conditions.

⁴¹ Targets based on the NSW DRP Licence Conditions methodology

Classification of services and arrangements for negotiation

16.1 AER Draft Decision on classification of services

In accordance with clause 6.12.1(1) of the *Transitional Rules* the AER decided that the following classification of services will apply to Integral Energy for the next regulatory control period:

- A distribution service provided by Integral Energy that was previously determined by IPART to be a prescribed distribution service (for the purposes of the current regulatory control period) is deemed to be classified as a direct control service and further classified as a standard control service.
- A distribution service provided by Integral Energy that was previously classified as an excluded distribution service by IPART, specifically the excluded distribution service of the construction and maintenance of public lighting infrastructure (for the purposes of the current regulatory control period) is deemed to be classified as a direct control service and further classified as an alternative control service.
- A distribution service provided by Integral Energy that was previously classified as an excluded distribution service by IPART, and is not the excluded distribution service of the construction and maintenance of public lighting infrastructure (for the purposes of the current regulatory control period) is deemed to be classified as an unregulated distribution service.
- Integral Energy has no services classified as negotiated distribution services.
- Other distribution services provided by Integral Energy are unclassified and not regulated under the Transitional Rules.

In accordance with clause 6.12.1(17) of the transitional chapter 6 rules the AER decided the procedures to be applied by the NSW DNSPs for assigning customers to tariff classes or reassigning customers from one tariff class to another are specified in Appendix A of the draft decision.

16.2 Integral Energy response to matters raised in the AER draft decision

Integral Energy has implemented the findings of the draft decision with respect to the classification of services, with the exception of the assignment of customers, as discussed below.

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Classification of services & arrangements for negotiation

16.2.1 Assignment of customers

Integral Energy is concerned that there might be an inconsistency between the arrangements for assignment of customers to tariffs as outlined in Appendix A of the draft decision and the methodology for calculating reasonable estimates as detailed in Appendix J of the draft decision.

This inconsistency could mean that in calculating prices for a particular year it is assumed that a customer will be assigned to a new tariff, but when the assignment takes place the customer objects and as a result of the process outlined in Appendix A of the draft decision the customer remains on their existing tariff.

Integral Energy believes that if the assignment of the customers is deemed reasonable at the time the weighted average price cap calculation is approved, then the assignment should be allowed to proceed. To do otherwise would mean that the process of reasonable estimates for the weighted average price cap is flawed.

16.3 Revised position on classification of services

Integral Energy has implemented the findings of the draft decision with respect to the classification of services, with the exception of the assignment of customers. Integral Energy believes that if assignment of the customers is deemed reasonable at the time the weighted average price cap calculation is approved then the assignment should be allowed to proceed.

16.4 AER Draft Decision on arrangements for negotiation

In accordance with clauses 6.12.1(15) and 6.7A.3 of the Transitional Rules the AER decided the negotiating framework in Appendix F of the draft decision is to apply to Integral Energy for the next regulatory control period. The preparation of the negotiating framework for 2014–2019 regulatory control period must be undertaken in accordance with the framework and approach processes for that regulatory control period.

In accordance with clause 6.12.1(16B) and 6.7A.4(a) of the transitional chapter 6 rules the AER decides the NCC for Integral Energy is at Appendix B of the draft decision.

16.5 Integral Energy response to matters raised in the AER draft decision

Integral Energy has implemented the findings of the draft decision with respect to the arrangements for negotiation.

Control mechanism for direct control services

17.1 AER Draft Decision

In accordance with clause 6.12.1(11) of the *Transitional Rules* the AER decided that the control mechanism for standard control services provided by Integral Energy is a weighted average price cap. The applicable formulae are set out in section 4.5 of the draft decision.

In accordance with clause 6.12.1(11) of the *Transitional Rules* the AER decided that Integral Energy's miscellaneous services, monopoly services and emergency recoverable works for the next regulatory period are set out in Appendix G of the draft decision and that the schedule of fees and/charges for miscellaneous services, monopoly services and emergency recoverable works for the next regulatory period are set out in Appendix H of the draft decision.

In accordance with clause 6.12.1(19) of the *Transitional Rules* the AER decided that Integral Energy must submit, as part of its annual pricing proposal, a record of the amount of revenues recovered from TUOS charges and associated payments in accordance with Appendix I of the draft decision.

In accordance with clause 6.12.1(13) of the *Transitional Rules*, the AER decided that the NSW DNSPs must demonstrate compliance with the standard control services control mechanism in accordance with appendices I and J of this decision.

17.2 Integral Energy Response

Integral Energy has implemented the findings of the draft decision and has updated the PTRM model accordingly to take into account the matters contained in this *revised proposal*.

With respect to Appendix J, Integral Energy believes that the AER should reconsider the requirement under J.1 (2) regarding the calculation of reasonable estimates for a new tariff or new tariff component being introduced in the absence of audited historical quantities.

When implementing a new tariff or tariff component, section J.1 (2) requires the DNSP to assume that a customer/s has the same consumption and load profile on the new tariff and/or tariff component. This implies that the sum of the reasonable estimates for Year (t-1) for each unit of measure on the new network tariff and/or tariff component plus the reasonable estimates for Year (t-1) for each unit of measure on the origin network tariff and/or tariff component, equals the actual audited quantities that occurred for the origin network tariff.

Integral Energy believes that the reasonable estimate requirements under section J.1 (2) will restrict the DNSP's ability to introduce innovative time of use energy tariffs and demand tariff structures. The reasons for Integral Energy's position are:

1. Reasonable estimates for maximum demand charges may not equate due to the nature of maximum demand based charging. For example, during the 2004 regulatory period, Integral Energy replaced its "anytime" maximum demand tariff component with a "peak period" maximum demand tariff component for all customers on a demand based tariff. As the "peak period" covers a smaller portion of the day, any customer on a demand tariff with a maximum demand that occurs outside the "peak" period no longer registered the same "maximum" as that calculated under the "anytime" structure. A lesser number (the maximum that occurs in the "peak" period) would have been billed under the new tariff. As such, under this scenario, the summation of the customers billable "peak" period maximum demand was less than the original "anytime" billable demand quantities of the origin "anytime" demand tariff ; and
2. Preliminary analysis of Integral Energy's Dynamic Peak Pricing Trial suggests that innovative time of use tariffs will reduce the energy consumed during the targeted peak period. Although further analysis must be completed, it appears that customers on the Trial have reduced their total energy consumption rather than shifted load to "off-peak" periods. Under the current reasonable estimate requirements, the DNSP would be unable to adjust quantities for the overall reduction in energy consumed when the customer is moved to a tariff with a more sophisticated time of use energy price signal.

Integral Energy has recently become aware of a potential requirement to introduce feed in tariffs during the 2009 regulatory control period. The introduction and ongoing administration of feed in tariffs may have regulatory implications and as such the following section is provided for the information of the AER.

17.2.1 Legislated Feed-in Tariffs

On 24 November 2008, in a joint statement from the Minister for Energy and Minister for Climate Change and the Environment, the New South Wales (NSW) Government signalled its intention to introduce a feed in tariff scheme by the middle of 2009.

A taskforce has been set up to determine the implementation details of the feed-in tariff scheme as it will apply to NSW. The taskforce is expected to report back to the NSW Government in January 2009.

Given the current uncertainty regarding the application of the scheme and the impact it may have on Integral Energy's distribution business, the AER's framework must be flexible enough to allow NSW distribution business's the ability to recover any costs that the scheme may impose.

It is anticipated that the introduction of any feed in tariff scheme that mandates the subsidisation of micro-generation units by the distribution business would be treated in a way similar to the recovery of the NSW Government's Climate Change Fund (i.e. as a levy that is outside the revenue and pricing arrangements contained in Chapter 6 of *Transitional Rules*). As such, any costs of the scheme incurred by the distribution business, including the payments made to

customers who have exported energy back to the grid at the mandated rate and metering configuration, would be outside of the WAPC and side constraint formulas.

Alternate control services – public lighting

18.1 AER Draft Decision

In accordance with clause 6.12.1(12) of the *Transitional Rules*, the AER decides that the control mechanism for alternative control services is:

- A schedule of fixed prices in the first year of the next regulatory control period for assets constructed before 1 July 2009 and a schedule of fixed prices in the first year of the next regulatory control period for assets constructed after 30 June 2009; and
- A price path, such as CPI, for the remaining years of the next regulatory control period.

Integral Energy is to submit its proposed schedules of fixed prices and price path to the AER by 16 January 2009 for consideration by the AER and for public consultation. Integral Energy must follow the approach set out in section 17.6.11 of the draft decision when preparing its proposed schedules of fixed prices and price path.

In accordance with clause 6.12.1(13) of the transitional chapter 6 rules, the AER decided that compliance with the alternative control services control mechanism is to be demonstrated through annual approval of changes in the schedules of prices.

18.2 Integral Energy Response

Integral Energy's public lighting is the only direct control service classified as an alternative control service for the *2009 regulatory control period*. The *Transitional Rules* require that a *regulatory proposal* for alternative control services include:

- The proposed control mechanism;
- A demonstration of the application of the proposed control mechanism; and
- The necessary supporting information.

Integral Energy originally proposed the following forms of control to public lighting services over the *2009 regulatory control period*:

- A schedule of fixed prices public lighting services for the first year of the *2009 regulatory control period*; and
- A price path for the remaining years of the *2009 regulatory control period*.

18.3 AER's process for alternate control services

The AER has established a separate process to consider public lighting prices that incorporates the following consultation process:

- Integral Energy is to submit proposed schedules of fixed prices and price path by 16 January 2009 for publication on the AER's web site;
- On 9 March 2009 the AER will publish its proposed 2009/10 tariffs and proposed price path and seek submissions on the proposal;
- Submissions on the AER's proposed tariffs and price paths will be due by 23 March 2009;
- The AER will include in its final determination a schedule of fixed prices and a price path for public lighting services for Integral Energy.

Integral Energy will provide a schedule of fixed prices and price path by 16 January 2009 as requested by the AER. Integral Energy will provide comment on the AER's approach to public lighting pricing in accordance with the AER's timeframes.

18.3.1 Approach to prices for assets installed prior to 1 July 2009

18.3.1.1 AER's approach to establishing a proposed schedule of prices for existing assets

In its Draft Decision the AER has requested that Integral Energy use the following approach to develop a proposed schedule of prices for public lighting assets constructed before 1 July 2009:

- Determine the 2009 closing asset base for public lighting using IPART's opening asset base and add actual capex less an allowance for depreciation based on average remaining lives;
- Allocate the 2009 closing asset base to individual public lighting customers using individual assets inventories;
- Calculate a total annual capital charge for each customer for each year of the next regulatory control period using the 2009 closing RAB for each customers and an average remaining life for assets related to each customer. No forecast capex or opex is to be applied in this building block model;
- Calculate an annual maintenance charge for each asset based on efficient labour and material costs;
- Calculate the total annual maintenance charge for each customer by multiplying the number of assets in the asset register for the customer by the annual maintenance costs associated with each asset; and
- Determine the total charge payable by a public lighting customer by adding the total annual capital charge to the total annual maintenance charge.

18.3.1.2 *Integral Energy's proposed approach to establishing a proposed schedule of prices for existing assets*

Due to the short timeframe in which to establish the proposed schedule of prices for public lighting assets constructed before 1 July 2009 and the fact that sufficient information regarding the lives and condition of the public lighting assets for individual customers is not available, it was not possible to establish a schedule of prices in accordance with the AER's proposed approach.

Integral Energy has used an alternate approach to establish the proposed schedule of prices which it believes achieves a similar outcome to that envisaged by the AER. Integral Energy's approach to developing the proposed schedule of prices for public lighting assets constructed before 1 July 2009 is as follows:

- Determine the 2009 closing asset base for public lighting consistent with the roll forward methodology accepted by IPART in its 2008 public lighting decision. Integral Energy proposes that the RAB value for public lighting at 1 July 2009 is \$37.5 million;
- Allocate the 2009 closing asset base to individual public lighting asset classes using individual asset class inventories;
- Calculate a total annual capital charge for each asset class for each year of the next regulatory control period using the 2009 closing RAB for each public lighting asset class and an average remaining life for the asset classes. No forecast capex been applied in this building block model;
- Calculate the capital charge per asset by dividing the asset class total annual capital charge by the known inventory for that asset class;
- Calculate an annual maintenance charge per asset for each asset class based on efficient labour and material costs;
- Determine the total annual charge payable per asset for each public lighting asset class by adding the total annual capital charge to the total annual maintenance charge; and
- Determine the total annual bill for each customer by multiplying the total charge payable for each asset class by the inventories of those asset classes for the respective customers and then summing the asset class totals.

18.3.1.3 *Public lighting RAB*

Integral Energy has rolled forward its alternative control services RAB to 30 June 2009 consistent with the roll forward methodology accepted by IPART in the 2008 public lighting decision.

18.3.1.4 *Opening regulatory asset base as at 1 July 2009*

Integral Energy has determined that its RAB value at 1 July 2009 is \$37.5 million as shown in Table 19.1.

Table 19.1: Establishing RAB at 1 July 2009

Nominal \$m	30 June				
Details	2005	2006	2007	2008	2009
Opening RAB 1 July	24.1	26.8	30.3	33.0	35.2
Actual Capital expenditure/additions	4.6	5.6	4.9	5.0	5.1
Depreciation	(2.6)	(2.9)	(3.3)	(3.6)	(4.0)
Actual disposals	-	-	-	-	-
Indexation	0.6	0.8	1.2	0.8	1.1
Closing balance 30 June	26.8	30.3	33.0	35.2	37.5
Note: numbers may not add due to rounding					

The opening value as at 1 July 2009 is consistent with IPART's February 2008 decision.

18.3.1.5 Depreciation

Integral Energy has used the 2009 closing RAB and average remaining lives for each asset class along with straight line depreciation to calculate the depreciation allowance for assets installed prior to 1 July 2009. The PTRM has been used to carry out this calculation for each asset class.

18.3.1.6 Return on capital and taxation

Integral Energy has applied the rate of return for its alternative control services at the same rate of a nominal vanilla WACC of 10.02% proposed for its standard control services set out in section 13.1.

Integral Energy has calculated its tax depreciation allowance in accordance with tax law on a straight line basis and consistent with the requirements of the PTRM.

18.3.1.7 Operating costs

Maintenance costs have been developed for each asset class based on efficient labour and material costs. These costs have been developed on a common basis for new and existing assets and are essentially the same between new and existing, other than some minor variations due to averaging resulting from asset class rationalisation..

18.3.2 Approach to prices for assets installed after 1 July 2009

Integral Energy has followed the approach requested by the AER in the Draft Decision to develop a proposed schedule of prices for public lighting assets constructed after 30 June 2009. The approach used by Integral Energy was as follows:

- Determined an annual capital charge based on efficient material and installation costs for public lighting assets currently being installed. The annual capital charge is based on an annuity approach using a standard life of 20 years for luminaries and brackets, 35 years for columns and poles and a WACC of 10.02% as per the AER's Draft Decision;
- Determined an annual maintenance charge for each public lighting asset currently being installed based on efficient labour and material costs;
- Calculated an annual charge for each asset by adding the relevant annual capital charge and the annual maintenance charge where appropriate;
- Calculated subsequent year prices by multiplying the 2009/10 prices by an appropriate escalator which incorporates CPI and real input cost escalators consistent with those used in Integral Energy's capex and opex forecasts for standard control services.

18.3.3 Proposed pricing schedules for public lighting

Integral Energy will provide schedules of fixed prices for 2009/10 and price paths for public lighting assets installed before 30 June 2009 and after 30 June 2009 by 16 January 2009 as requested by the AER.

18.3.4 Transitional issues

The AER have specified that the two different pricing regimes set out above will apply to assets constructed before 1 July 2009 and after 30 June 2009 respectively.

Integral Energy notes, however, that some form of transitional arrangements will be required due to the fact that there is potential for customers to commit to new public lighting installations before the new rates are finalised, but for construction of those assets to not be completed until after 1 July 2009. There is some potential for confusion regarding whether the new rates would apply to assets commissioned after the cut-off date, substantively constructed but not commissioned, or committed via acceptance of a quotation.

It is proposed that the transitional arrangements be further refined as part of the public lighting consultation process outlined by the AER.