



INDEPENDENT  
MARKET  
OPERATOR



## ERA Submission

WEM - Allowable Revenue and Forecast Capital Expenditure  
Submission for the period 1 July 2016 to 30 June 2019

26 November 2015

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## Executive Summary

In accordance with the Wholesale Electricity Market Rules, this submission is made on behalf of the Independent Market Operator (IMO) seeking approval from the Economic Regulation Authority (ERA) for the Allowable Revenue and Forecast Capital Expenditure related to the functions of operating the Wholesale Electricity Market (WEM) in the South West interconnected System for the three-year Review Period commencing on 1 July 2016.

On 30 September 2015, the Minister for Energy, the Honourable Dr Mike Nahan announced the transfer of the system management and operation of the WEM to AEMO. The transfer of functions of the IMO to AEMO will take place at 8am on Monday 30 November 2015, but will not include the transfer of certain aspects of the rule change or compliance functions which will remain with the IMO until a decision is made on where these functions will reside.

Due to the timing of the Minister's announcement this submission has been prepared on a business as usual basis.

The Market Fee Rate impact of this submission sees the underlying fee rate progressively reduce in nominal terms across the Review Period, from \$0.457/MWh in 2015/16 to \$0.432/MWh in 2018/19.

After adjusting for indexation, the underlying fee rate reduces in real terms from \$0.457/MWh in 2015/16 to \$0.401/MWh in 2018/19.

This submission is seeking Allowable Revenue across the Review Period of \$50.788 million, which represents an increase of \$2.154 million or 4.4% on the approved Allowable Revenue for the current Review Period.

This compares to an effective indexation factor between the two Review Periods of 7.5%.

The IMO is seeking Forecast Capital Expenditure across the Review Period of \$13.782 million, which represents an increase of \$7.508 million or 119.7% on the approved Forecast Capital Expenditure for the current Review Period.

The IMO functions were expanded to include the Gas Services Information (GSI) activities in August 2013. The costs related to the GSI functions are subject to a separate Allowable Revenue and Forecast Capital Expenditure submission covering the same Review Period.

In summary, the IMO is seeking approval of its Allowable Revenue and Forecast Capital Expenditure across the three year Review Period as set out below:

	2016/17 (\$'000)	2017/18 (\$'000)	2018/19 (\$'000)	Total (\$'000)
<b>ALLOWABLE REVENUE</b>	<b>\$17,570</b>	<b>\$16,216</b>	<b>\$17,001</b>	<b>\$50,787</b>
<b>FORECAST CAPITAL EXPENDITURE</b>	<b>\$4,383</b>	<b>\$4,740</b>	<b>\$4,659</b>	<b>\$13,782</b>

## 1. Introduction

In accordance with Rule 2.22.3 of the Wholesale Electricity Market Rules (WEM Rules), the Independent Market Operator (IMO) must seek approval of its Allowable Revenue and Forecast Capital Expenditure from the Economic Regulatory Authority (ERA) for the Review Period, for each of the services listed in WEM Rule 2.22.1.

These services are defined as:

- Market Operations;
- System Planning (Capacity Planning); and
- Market Administration.

The IMO budget is based on the costs that would be incurred by a prudent provider of the defined services, acting efficiently, whilst effectively promoting the Wholesale Electricity Market Objectives.

The purpose of this submission is to provide relevant information to the ERA for it to assess and approve the IMO's Allowable Revenue and Forecast Capital Expenditure for the Review Period 1 July 2016 to 30 June 2019.

Allowable Revenue is defined as the revenue that may be recovered through fees to meet the costs of providing the IMO's services to the market.

Forecast Capital Expenditure is defined as the predicted sum of capital expenditure required for a Review Period.

The ERA must determine the Allowable Revenue and Forecast Capital Expenditure of the IMO for the Review Period by 31 March 2016.

### 1.1 Legislative Framework

The IMO is a body corporate that was established on 1 December 2004 to administer and operate the Wholesale Electricity Market (WEM) of Western Australia.

The key role and functions of the IMO in respect of its WEM obligations are set out in the following instruments:

- *Electricity Industry (Wholesale Electricity Market) Regulations 2004;*
- *Electricity Industry (Independent Market Operator) Regulations 2004;* and
- Wholesale Electricity Market Rules.

### 1.2 Wholesale Electricity Market Objectives

The *Electricity Industry Act 2004* sets out the objectives of the Wholesale Electricity Market:

- To promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected System;
- To encourage competition among generators and retailers in the South West interconnected System;

- To avoid discrimination in the market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- To minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
- To encourage the taking of measures to manage the amount of electricity used and when it is used.

### 1.3 Allowable Revenue and Forecast Capital Expenditure Approval Mechanisms

After the Allowable Revenue and Forecast Capital Expenditure for the Review Period is determined by the ERA, the IMO is required to prepare budgets annually that are consistent with the ERA determination.

The annual budgets are submitted to the Minister for Energy for approval and provide the basis for the establishment of the annual Market Fees. The fee calculation takes into account the current projected generation and consumption of electricity.

If an annual IMO budget proposal is likely to result in revenue recovery (over the Review Period) of more than 15% of the ERA determination, the IMO is required to apply to the ERA for a reassessment of its Allowable Revenue. On the basis of the amounts included in this submission, the 15% threshold equates to \$7.618 million.

Similarly if an annual IMO budget proposal is likely to result in capital expenditure (over the Review Period) being 10% greater than the capital expenditure approved by the ERA, the IMO is required to apply to the ERA to approve the adjusted Forecast Capital Expenditure. On the basis of the amounts included in this submission the 10% threshold equates to \$1.378 million.

These reassessment mechanisms exclude Declared Market Projects that involve major changes to the IMO's function or a major change to market systems. For the next Review Period, the threshold that would apply for a Declared Market Project is \$6.457 million.

Any Declared Market Project requires ERA approval before the project can commence.

### 1.4 Basis for this Submission

The IMO makes this submission on a business as usual basis. However, it is acknowledged that the business requirements of Market Participants and market stakeholders have a heavy influence on the IMO's workload and subsequent expenditure.

The Minister for Energy's announcement on 30 September 2015 that the functions of the IMO will transfer to AEMO on 30 November 2015 may impact the future business requirements on which this submission has been prepared. If this is the case, the submission may be subject to review under the funding arrangements that are put in place for the transfer.

The Market Rules place an obligation on the IMO to progress and administer proposed Rule Changes submitted within a prescriptive set of timeframes and while there is a degree of flexibility with regard to implementation timeframes, under normal circumstances the IMO is not in a position to delay the implementation of a Rule Change until the next Allowable Revenue period.

Consequently, while the Allowable Revenue and Forecast Capital Expenditure submission makes allowance for the operating and capital expenditure to support business as usual activity, it is possible that during a Review Period Market Participants will request the IMO to undertake activity that was not budgeted in this submission.

Where this has occurred in the past, the IMO has separately identified and justified the activity as a special project and incorporated this into the IMO's annual Operational Plans for the Minister's consideration.

## **1.5 Allocation of Costs across the IMO's Electricity and Gas Functions**

The IMO functions were expanded to include responsibility for the Gas Services Information (GSI) activities in August 2013.

This submission is specific to the IMO's responsibilities under the WEM Rules.

The costs related to the IMO's GSI related functions are subject to a separate Allowable Revenue and Forecast Capital Expenditure submission covering the same Review Period.

While many costs are directly attributable to the IMO's functions under the WEM Rules (e.g. the cost of consultants preparing forecasts for the Electricity Statement of Opportunities (ESOO)), some of the IMO's overheads are shared across both functions (e.g. accommodation). Where this occurs a detailed costing methodology has been used to apportion costs – a copy of this is contained in the detailed working papers.

## **1.6 Costings Exclusive of Energy Market Review Activity**

On 6 March 2014, the Minister for Energy launched the Electricity Market Review (EMR). The Review was designed to examine the structures of the electricity generation, wholesale and retail sectors within the South West Interconnected System in Western Australia and the incentives for industry participants to make efficient investments and minimise costs.

The IMO incurred expenditure on the EMR of \$0.4 million in 2014/15, and has included project provisions related to the EMR of \$0.799 million in its 2015/16 Operational Plan. This amount related to the backfilling of staff on secondment with the Public Utilities Office and AEMO transitional costs for the transfer of IMO functions to AEMO.

The EMR represents an extraordinary project outside the usual business activities of the IMO. To enable a valid comparison between the Review Periods, all costings related to the EMR have been excluded from the information included in this submission (i.e. budget and market fee values).

## 2. Recurrent Budget by Service

Rule 2.22.3 of the Market Rules requires the IMO to seek approval of its Allowable Revenue for each of the services it provides.

The proposed Allowable Revenue associated with each of these services is:

	2016/17 (\$'000)	2017/18 (\$'000)	2018/19 (\$'000)	Total (\$'000)
Market Operations	\$10,713	\$9,364	\$9,928	\$30,004
System Planning	\$2,459	\$2,415	\$2,430	\$7,303
Market Administration	\$4,399	\$4,438	\$4,643	\$13,480
<b>ALLOWABLE REVENUE</b>	<b>\$17,570</b>	<b>\$16,216</b>	<b>\$17,001</b>	<b>\$50,788</b>

## 3. Recurrent Budget Comparisons

### 3.1 Comparison: 2013/14 - 2015/16 Actual/Budget to 2016/17 - 2018/19 Submission

Description	2013/14 - 2015/16 Actual/Budget	2016/17- 2018/19 Submission	Increase/ (Decrease)	
	(\$'000)	(\$'000)	(\$'000)	%
Employee Benefits Expense	\$18,208	\$20,103	\$1,895	10%
Accommodation Costs	\$2,124	\$2,427	\$303	14%
Supplies and Services	\$14,283	\$15,648	\$1,364	10%
Borrowing Costs	\$1,349	\$1,073	-\$277	-20%
Depreciation	\$13,419	\$11,696	-\$1,722	-13%
<b>Total Expenditure</b>	<b>\$49,383</b>	<b>\$50,946</b>	<b>\$1,563</b>	<b>3%</b>
Less Interest & Other Income	-\$477	-\$159	\$319	-67%
<b>Net Expenditure (Allowable Revenue)</b>	<b>\$48,906</b>	<b>\$50,788</b>	<b>\$1,882</b>	<b>4%</b>

Further detailed information (e.g. breakdown by year) in respect to this comparison is provided at Appendix 1.

A simple comparison of the IMO financial performance between the current Review Period (Actual and Budget position) and the submission for the next Review Period (projected) reflects an increase in net expenditure of \$2.154 million or 4.4%.

There are however a number of abnormal or fixed increases which should be taken into account to arrive at a valid comparison between the two Review Periods:

- Accommodation costs increase by 4% p.a. in line with lease arrangements.
- Additional Demand Forecast costs of \$155,000 (31%) as additional resources are devoted to the improvement of the IMO forecasting capability.

- Full program of rule development and changes leading to an increase of \$110,000 (15%). 2014/15 and 2015/16 experienced abnormally low levels of expenditure under the influence of rule changes being deferred as a result of the Energy Market Review.
- Depreciation expenditure related to the Market Evolution Program reduces by \$3.928 million between the two Review Periods. MEP project expenditure of \$9.821 million was capitalised over five years with effect from 1 July 2012 as the project became functional. Corresponding borrowing costs reduce by \$430,000.
- The IMO has recently refreshed its key Strategic IT planning document, culminating in the production of the IMO's Fourth IT Roadmap for the period 2016 – 2019. The Roadmap identifies the IT systems and corresponding resources required to address the redundancy risks inherent in existing IT legacy systems. Further information on the activities proposed to take place in the Fourth IT Roadmap are outlined in Section 5 of this submission and in the Fourth IT Roadmap provided in the supporting documentation to this submission.

The financial impact of adjusting for the above issues is set out below:

Description	2013/14–2015/16	2016/17-2018/19	Increase/	
	Actual/Budget	Submission	(Decrease)	
	(\$'000)	(\$'000)	(\$'000)	%
Net Expenditure	\$48,906	\$50,788	\$1,882	4%
Less Abnormal Items:				
• Accommodation	\$2,124	\$2,427	\$303	14%
• Demand Forecast	\$499	\$654	\$155	31%
• Rule Changes	\$434	\$770	\$336	77%
• Borrowing Costs - MEP	\$439	\$9	-\$430	-98%
• Depreciation - MEP	\$5,892	\$1,964	-\$3,928	-67%
• Borrowing Costs - IT Legacy Systems	\$43	\$471	\$428	1000%
• Depreciation - IT Legacy Systems	\$214	\$2,354	\$2,140	1000%
<b>Net Expenditure – Adjusted for Abnormal Items between the Two Periods</b>	<b>\$39,261</b>	<b>\$42,139</b>	<b>\$2,878</b>	<b>7.3%</b>

After adjusting for the impact of abnormal and one off items, and replacing critical IT system components coming to the end of their useful life, the increase in expenditure between the two Review Periods is 7.3%.

This underlying 7.3% increase is comparable with the 2015/16 Western Australian State Budget Overview which contains annual CPI estimates through to 2018/19 of 2.5%, resulting in an effective indexation between the two Review Periods of 7.51%.



## 3.2 Market Fee Rate

### 3.2.1 Market Fee Rate – Movement 2015/16 to 2018/19

The IMO is required to calculate Market Fees each year based on its approved Operational Plan.

In accordance with Market Rule 2.22.7, where actual Market Fees are greater than (or less than) the IMO expenditure in any one year, then the surplus (or shortfall) needs to be applied as an adjustment to the Allowable Revenue budget two years hence.

This surplus or shortfall can arise as a result of either an over recovery of Market Fees due to a higher volume of energy traded in the market or as a result of a cost variation from budget in the Operational Plan.

These adjustments are identified when the Operational Plan (inclusive of budget arrangements) is submitted to the Minister for Energy's approval each year. Once approved by the Minister, the approved Market Fee rate is published on the IMO website.

The terms Unadjusted Market Fee Rate and Adjusted Market Fee Rate were used in previous IMO Allowable Revenue Submissions. The Adjusted Market Fee Rate equates to the rate that is ultimately approved by the IMO Board and published on the IMO website.

The Unadjusted Market Fee Rate was used in order to remove inter-period budget adjustments and abnormal revenue items (both of which have distorting impacts from one year to the next) so as to present the effective underlying movement in the Market Fee Rate.

Both sets of information are provided below, showing the movement from 2015/16 to 2018/19.

		New Triennium		
	2015/16	2016/17	2017/18	2018/19
<b>UNADJUSTED MARKET FEE RATE</b>				
Unadjusted Allowable Revenue <sup>1</sup> (\$'000)	\$17,270	\$17,623	\$16,269	\$17,054
Unadjusted Market Fee Rate (\$/MWh)	0.458	0.460	0.417	0.433
<b>ADJUSTED MARKET FEE RATE</b>				
Unadjusted Allowable Revenue <sup>1</sup> (\$'000)	\$17,270	\$17,623	\$16,269	\$17,054
Adjusted for:				
Inter Period Adjustment (\$'000)	14			
Interest & Other Income (\$'000)	-50	-53	-53	-53
Adjusted Allowable Revenue (\$'000)	\$17,234	\$17,570	\$16,216	\$17,001
Adjusted Market Fee Rate (\$/MWh)	0.457	0.459	0.416	0.432

<sup>1</sup> Unadjusted Allowable Revenue is the total budgeted expenditure. It is the amount that would normally be recovered from Market Participants through Market Fees. It ignores interest revenue and inter-period adjustments required under Market Rule 2.22.7.

### 3.2.2 Market Fee Rate Movement 2015/16 to 2018/19 – Adjusted for Indexation

The Western Australian State Budget 2015/16 Overview Paper provides annual CPI figures for Perth through to 2018/19.

Applying these figures to the Market Fee Rate information enables a valid comparative assessment across the four years as set out below:

		New Triennium		
	2015/16	2016/17	2017/18	2018/19
<b>UNADJUSTED MARKET FEE RATE</b>	0.458	0.460	0.417	0.433
Annual CPI Forecast Figures	Base	2.50%	2.50%	2.50%
<b>UNADJUSTED MARKET FEE RATE – CUMULATIVE INDEXATION APPLIED</b>	0.458	0.449	0.397	0.402
<b>ADJUSTED MARKET FEE RATE</b>	0.456	0.459	0.416	0.432
Annual CPI Forecast Figures	Base	2.50%	2.50%	2.50%
<b>ADJUSTED MARKET FEE RATE – CUMULATIVE INDEXATION APPLIED</b>	0.456	0.448	0.396	0.401

## 4. Recurrent Budget 2016/17 – 2018/19

### 4.1 Budget Categories

Budget expenditure in this submission has been broken into the cost categories required by the Auditor General for the IMO's Financial Statements.

These cost categories are:

- *Employee Benefits Expense* – salaries, superannuation, payroll tax and fringe benefits tax.
- *Supplies and Services* – includes IT expenditure, accounting, auditing, human resources, administrative costs, insurance, travel and training. In addition, consultant expenditure in support of service delivery.
- *Accommodation* – office rental, cleaning, electricity, maintenance and car parking.
- *Depreciation* – depreciation of fixed assets.
- *Borrowing* – interest expense.

## 4.2 Cost Comparisons

The budgeted expenditure for the Review Period is set out in the categories below:

	2015/16 (\$'000)	2016/17 (\$'000)	2017/18 (\$'000)	2018/19 (\$'000)	Total (\$'000)
Employee Benefits Expense	\$6,396	\$6,551	\$6,678	\$6,875	\$20,103
Accommodation	\$731	\$774	\$808	\$844	\$2,427
Supplies and Services	\$5,267	\$5,087	\$5,156	\$5,404	\$15,648
Borrowing Costs	\$339	\$360	\$349	\$363	\$1,073
Depreciation	\$4,537	\$4,851	\$3,277	\$3,567	\$11,696
Total Expenditure	\$17,270	\$17,623	\$16,269	\$17,054	\$50,946
Interest Revenue	-\$50	-\$53	-\$53	-\$53	-\$159
<b>ALLOWABLE REVENUE</b>	<b>\$17,220</b>	<b>\$17,570</b>	<b>\$16,216</b>	<b>\$17,001</b>	<b>\$50,788</b>

## 4.3 Annual Indexation

This submission incorporates the annual indexation of costs, which have been based on the Department of Treasury advice of 2.50% across the Review Period and is consistent with the rates used in the State Budget estimates.

Excluded from this indexation are costs that are covered by fixed price contracts, where the IMO has received specific advice for a cost category and borrowing costs.

## 4.4 Employee Benefits

### 4.4.1 Approved Positions

The IMO currently has 47 approved positions, corresponding to 45.7 FTE after adjusting for part-time positions.

The IMO has determined that no additional positions will be required to meet business needs in the next Review Period.

A detailed schedule showing the FTE split of all IMO staff between electricity and gas, together with a full reconciliation of all current approved positions to the positions approved in the previous ERA Determination is available as part of the detailed working papers which support this submission.

The detailed FTE split between gas and electricity is informed by a comprehensive costing methodology which allocates overheads between gas and electricity. This is also available as part of the detailed working papers.

The costing methodology identifies 40 FTE for WEM related responsibilities and 5.7 FTE for GSI related responsibilities.

#### 4.4.2 Salary Increases

Employee Benefit Expenses is the IMO's biggest expenditure category, accounting for 39.6% of the total budgeted expenditure across the Review Period.

The IMO reviews staff performance and recommends salary increases commensurate with performance with effect from 1 April of each year.

Annual salary increases across the Review Period have been budgeted at 2.90% pa in line with the AEMO Enterprise Agreement.

#### 4.4.3 Supplies and Services

The IMO is a small, professionally-staffed organisation which is strongly reliant on the outsourcing of specialist services to ensure highest quality input at an efficient cost.

Supplies and Services expense account for 30.8% of the total budgeted expenditure across the Review Period.

	2015/16 (\$'000)	2016/17 (\$'000)	2017/18 (\$'000)	2018/19 (\$'000)	Total (\$'000)
Corporate	\$1,141	\$1,032	\$1,019	\$1,170	\$3,222
Legal and Compliance	\$424	\$260	\$262	\$264	\$786
Development and Capacity	\$1,014	\$813	\$810	\$824	\$2,447
Operations and Technology	\$2,687	\$2,982	\$3,064	\$3,146	\$9,193
Total Expenditure	\$5,267	\$5,087	\$5,156	\$5,404	\$15,648

Operations and Technology incorporates the following costs:

- Wholesale Electricity Market System (WEMS) and Settlements maintenance and support;
- datacentre hosting by specialist service providers;
- high speed fibre links between head office, production and backup datacentres;
- specialist database support;
- IT desktop and infrastructure support; and
- telecommunications and internet access costs.

Operations and Technology budgeted costs are impacted by the inclusion of additional local support to reduce reliance on an overseas third party service provider supporting the settlements and metering systems, which is also impacted by the movement in exchange rates. Additional desktop support and additional software licence costs have also resulting from an increase in the number of applications being used across the business.

Corporate costs include staffing related costs (e.g. staff training, recruitment), corporate management issue (e.g. strategic planning, audit) and general administration expenses.

Legal and Compliance costs are heavily influenced by the market compliance audit. The budget for 2015/16 included an incremental compliance audit, as do each of the years in the Review Period.

Development and Capacity fluctuate dependent on cyclical reviews required under the Market Rules. Costs include the external costs of supporting Rule Changes determined by the Market Advisory Committee.

Notably, budgeted expenditure on supplies and services increases in nominal terms from \$5.267 million in 2015/16, to \$5.404 million in 2018/19. This is an increase of 2.6%, lower than the effective indexation factor between the two Review Periods is 7.5%.

#### **4.4.4 Accommodation**

Accommodation expenditure accounts for 4.8% of the total budgeted expenditure across the Review Period.

The IMO moved to new offices on Level 17 of 197 St Georges Terrace on 3 September 2012, which provides an area of 857m<sup>2</sup>.

The rental rate for the new premises commenced at \$660/m<sup>2</sup> with 4% annual increases built into the lease agreement on the anniversary date of 1 October each year.

The current lease agreement is for 10 years with an option for the IMO to exit from the lease after 5 years. This submission has been prepared on the basis that the IMO remains in the current accommodation for the Review Period.

Accommodation costs increase by 4% per annum in line with the current lease agreement.

#### **4.4.5 Depreciation**

Depreciation accounts for 23.0% of the total budgeted expenditure across the Review Period.

Depreciation is determined by the expected written down value of assets as at 30 June 2016, together with depreciation that flows from assets purchased over the Review Period.

Section 5 deals with the IMO's Forecast Capital Expenditure over the Review Period, which is predicated on the IMO's "Fourth IT Roadmap" for the period 2016 -2019, a copy of which is available in the detailed working papers supporting this submission.

#### **4.4.6 Borrowing Costs**

Borrowing costs account for 2.1% of the total budgeted expenditure across the Review Period.

All capital requirements over the Review Period are funded by way of fixed term funding provided by the Western Australian Treasury Corporation (WATC).

Projected borrowing costs across the Review Period have been calculated on existing loan facilities and the projected capital expenditure of the Fourth IT Roadmap. Future loan facilities are based on projected interest rates provided by WATC.

## 5. Forecast Capital Expenditure 2016/17 – 2018/19

Forecast Capital Expenditure is defined as the predicted sum of capital expenditure required for a Review Period.

During 2015, the IMO developed its key strategic IT planning document, culminating in the production of the Fourth IT Roadmap covering the Review Period 1 July 2016 to 30 June 2019.

The IT Roadmap is the primary strategic planning tool used to ensure that the planning, delivery, management and use of the IMO's IT systems optimally support the IMO's business requirements.

This IT Roadmap represents the fourth time the IMO has developed a technology roadmap and has been developed to support the IMO's Allowable Revenue and Forecast Capital Expenditure submission for the Review Period. The previous three IT Roadmaps have achieved significant improvements to the performance of the IMO's core IT systems.

The first Roadmap covered the period 1 July 2008 to 30 June 2010 with a key focus on the separation of the IMO Systems from the Department of Treasury and Finance.

The second Roadmap extends from 1 July 2010 to 30 June 2013 and has included a large body of work to bring core systems (such as settlements and metering) up to date with current release versions so they can be supported more effectively by the IMO's strategic vendors.

The Third IT Roadmap delivered new systems and significant improvements to the operational maturity of the existing systems which support the IMO's core business functions. Notably, during this period the IMO delivered the Gas Bulletin Board (part of the Gas Services Information (GSI) functions), whilst making considerable progress on providing greater data transparency with the new IMO website design, the development of data visualisations and the creation of a central repository for market data.

The Fourth version of the IT Roadmap reflects a need to evolve the Technology of the IMO in particular addressing the following:

- Reduce Legacy System Risk including:
  - Extracting and refreshing the Reserve Capacity Market component; and
  - Extracting the Registration system and replacing it with a standalone component.
- Streamline the Oracle licencing which impede development and production support options of Market Systems. This may involve investigating alternative databases.
- Migration of datacentres to improve the level of service and reliability.

In summary, the IMO's Fourth IT Roadmap will deliver on the following strategies:

- Provide robust and secure IT systems in support of the core business functions of the IMO;
- Evolve the IT systems and processes;
- Adopt process, systems and infrastructure that reduces risk, effort and provide tangible benefits;

- Provide and improve access to systems and data in relation to the WEM and GSI; and
- Remove obsolete and unsupported technologies.

This submission seeks Forecast Capital Expenditure across the next Review Period as set out below:

	2016/17 (\$'000)	2017/18 (\$'000)	2018/19 (\$'000)	Total (\$'000)
Forecast Capital Expenditure	<b>\$4,383</b>	<b>\$4,740</b>	<b>\$4,659</b>	<b>\$13,782</b>

The following categories have been used for the allocation of the Forecast Capital Expenditure in the Fourth IT Roadmap.

	2016/17 (\$'000)	2017/18 (\$'000)	2018/19 (\$'000)	Total (\$'000)
Wholesale Electricity Market Systems (WEMS)	\$1,951	\$3,074	\$2,797	\$7,822
WEMS – Metering and Settlements	\$565	\$164	\$486	\$1,215
Market Transparency	\$368	\$377	\$386	\$1,131
Infrastructure Market Systems	\$1,253	\$1,099	\$832	\$3,184
Corporate Support	\$246	\$26	\$158	\$430
<b>Total</b>	<b>\$4,383</b>	<b>\$4,740</b>	<b>\$4,659</b>	<b>\$13,782</b>

A copy of the Fourth IT Roadmap, which sets out in detail the Forecast Capital Expenditure requirements including depreciation across the Review Period is available as part of the detailed working papers. A comparison of the Forecast Capital Expenditure between the period 1 July 2013 to 30 June 2016 and 1 July 2016 to 30 June 2019 is provided as Appendix 2.

## Allowable Revenue

	Current Triennium - AR3				New Triennium			
	Actual/Projected				Budget			
	2013/14 <sup>1</sup> (\$'000)	2014/15 <sup>2</sup> (\$'000)	2015/16 <sup>3</sup> (\$'000)	Total (\$'000)	2016/17 (\$'000)	2017/18 (\$'000)	2018/19 (\$'000)	Total (\$'000)
Employees Benefit Expense	\$5,617	\$6,195	\$6,396	\$18,208	\$6,551	\$6,678	\$6,875	\$20,103
Accommodation Costs	\$684	\$709	\$731	\$2,124	\$774	\$808	\$844	\$2,427
Supplies and Services	\$4,915	\$4,101	\$5,267	\$14,283	\$5,087	\$5,156	\$5,404	\$15,648
Borrowing Costs	\$553	\$457	\$339	\$1,349	\$360	\$349	\$363	\$1,073
Depreciation	\$3,911	\$4,970	\$4,537	\$13,419	\$4,851	\$3,277	\$3,567	\$11,696
<b>Total Expenditure</b>	<b>\$15,680</b>	<b>\$16,433</b>	<b>\$17,270</b>	<b>\$49,383</b>	<b>\$17,623</b>	<b>\$16,269</b>	<b>\$17,054</b>	<b>\$50,946</b>
Less Interest & Other income	-\$217	-\$210	-\$50	-\$477	-\$53	-\$53	-\$53	-\$159
<b>Nett Expenditure</b>	<b>\$15,462</b>	<b>\$16,223</b>	<b>\$17,220</b>	<b>\$48,906</b>	<b>\$17,570</b>	<b>\$16,216</b>	<b>\$17,001</b>	<b>\$50,788</b>

<sup>1</sup> Per audited results.

<sup>2</sup> Per audited results (excluding EMR \$0.4 million in 2014-15)

<sup>3</sup> Per 2015/16 Operational Plan submitted to the Minister for Energy. Excludes \$ 1.778 million provided for in 2015/16 Operational Plan for EMR



## Forecast Capital Expenditure

	Current Triennium - AR3				New Triennium			
	Actual/Projected				Budget			
	2013/14 (\$'000)	2014/15 (\$'000)	2015/16 (\$'000)	Total (\$'000)	2016/17 (\$'000)	2017/18 (\$'000)	2018/19 (\$'000)	Total (\$'000)
Wholesale Electricity Market Systems (WEMS)	\$1,006	\$563	\$727	\$2,296	\$1,951	\$3,074	\$2,797	\$7,822
WEMS - Metering and Settlements	\$560	\$421	\$225	\$1,206	\$565	\$164	\$486	\$1,214
Market Transparency	\$674	\$619	\$446	\$1,739	\$368	\$377	\$386	\$1,131
Infrastructure Market Systems	\$367	\$218	\$383	\$968	\$1,253	\$1,099	\$832	\$3,183
Corporate Support	\$117	\$42	\$0	\$159	\$246	\$26	\$158	\$431
<b>Total Expenditure</b>	<b>\$2,724</b>	<b>\$1,863</b>	<b>\$1,781</b>	<b>\$6,368</b>	<b>\$4,383</b>	<b>\$4,740</b>	<b>\$4,659</b>	<b>\$13,782</b>