Issues Paper: Allowable Revenue and Forecast Capital Expenditure for the Independent Market Operator and System Management

2013/14 to 2015/16

20 December 2012

Economic Regulation Authority
WESTERN AUSTRALIA

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Contents

List of Tables

List of Figures

1 Introduction

1.1 Background and Scope of this Issues Paper

Under clauses 2.22.3 and 2.23.3 of the *Wholesale Electricity Market Rules* (**Market Rules**), the Economic Regulation Authority (**Authority**) is required to determine Allowable Revenue for the Independent Market Operator (**IMO**) and System Management, for each Review Period.[1] Since the commencement of the Wholesale Electricity Market in WA in September 2006, the Authority has previously determined Allowable Revenue for the IMO and System Management for two Review Periods. The first Review Period covered the period 1 July 2007 to 30 June 2010. The second Review Period covered the period from 1 July 2010 to 30 June 2013.

The purpose of the Authority's determination on the Allowable Revenue for the IMO and System Management is to ensure that only costs that would be incurred by a prudent provider who acts efficiently and seeks to achieve the lowest practicably sustainable cost of delivering the services, are allowed for the relevant services provided. This is one of the two external checking mechanisms provided in the Market Rules. After the Allowable Revenue is determined by the Authority, the IMO and System Management are required to prepare budgets annually that are consistent with the Authority's determination and submit them to the Minister for Energy for approval.

As a result of the Authority's Rule Change Proposal (RC_2011_02), the Authority's determination under clauses 2.22.3 and 2.23.3 of the Market Rules has been expanded to include the Forecast Capital Expenditure of the IMO and System Management.[2]

Sub clauses 2.22.3(a) and 2.23.3(a) of the Market Rules require the IMO and System Management to submit a proposal for its Allowable Revenue and Forecast Capital Expenditure to the Authority by 30 November of the year prior to the start of the Review Period. The IMO and System Management have each submitted to the Authority a proposal for Allowable Revenue and Forecast Capital Expenditure for the third Review Period covering the period from 1 July 2013 to 30 June 2016.[3] These proposals are available on the Authority's website.[4]

The Authority notes that the Wholesale Electricity Market (**WEM**) is a market that has been designed as a fit for purpose market and is relatively small in size in comparison to markets in other jurisdictions. The Authority is aware of the cost increases incurred by both the IMO and System Management in recent years. The Authority notes that the proposals submitted by the IMO and System Management would further contribute to cost increases in future years.

1 A Review Period covers the period of three Financial Years.

2 For further detail on the ERA's Rule Change Proposal (RC_2011_02), refer to the IMO website: http://www.imowa.com.au/RC_2011_02.

3 Independent Market Operator, ERA Submission Proposal for Allowable Revenue and Forecast Capital Expenditure 1 July 2013 to 30 June 2016, November 2012. Western Power, System Management Allowable Revenue and Forecast Capital Expenditure Application 1 July 2013 to 30 June 2016, November 2012.

4 ERA website, Determination of the IMO and System Management Allowable Revenue, http://www.erawa.com.au/markets/electricity-markets/determination-of-the-imo-and-system-management-allowable-revenue-and-ancillary-service-parameters/

Sub clauses 2.22.3(b) and 2.23.3(b) of the Market Rules require the Authority, in determining Allowable Revenue and Forecast Capital Expenditure for the IMO and System Management, to undertake a public consultation process which must include publishing an Issues Paper and issuing an invitation for public submissions.

The Authority has prepared this Issues Paper to assist interested parties in understanding and making submissions on the proposals.

The remainder of this Issues Paper addresses the following matters:

- the requirements of the Market Rules for determinations of Allowable Revenue and Forecast Capital Expenditure;
- the process to be followed by the Authority in making determinations on Allowable Revenue and Forecast Capital Expenditure; and
- summary information on the proposals submitted by the IMO and System Management.

1.2 How to Make a Submission

A notice has been posted on the Authority's website advising the release of this Issues Paper. This notice invites interested parties to make submissions in print and electronic form (where possible) on the Allowable Revenue and Forecast Capital Expenditure proposals submitted by the IMO and System Management by **4:00 pm (WST) on Friday, 8 February 2013**.

Submissions should be addressed to:

Determination of Allowable Revenue and Forecast Capital Expenditure for the IMO and System Management, 2013/14 to 2015/16 – Issues Paper

Postal address: PO Box 8469, PERTH BC WA 6849
Office address: Level 4, 469 Wellington Street, PERTH WA 6000
Email address: publicsubmissions@erawa.com.au

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Submissions made to the Authority will be treated as in the public domain and placed on the Authority's website unless confidentiality is claimed. The submission or parts of the submission in relation to which confidentiality is claimed should be clearly marked. Any claim of confidentiality will be dealt with in the same way as is provided for in section 55 of the *Economic Regulation Authority Act 2003*.

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1.3 Summary of Issues

Submissions are invited from interested parties on the process that the Authority intends to follow in making a determination on Allowable Revenue and in approving Forecast Capital Expenditure for the IMO and System Management.

Submissions are invited from interested parties on the key assumptions indicated by the IMO to have been applied in deriving its proposed Allowable Revenue for the third Review Period.

Submissions are invited from interested parties on the proposed capital projects and the associated capital requirements indicated by the IMO to have been included in deriving the Forecast Capital Expenditure for the third Review Period and the five-year depreciation model it applied across all components of capital projects.

Submissions are invited from interested parties on System Management's building block approach to revenue determination, the inclusion of the return on investment based on estimated real post-tax weighted average cost, and key assumptions indicated by System Management to have been applied in deriving its proposed Allowable Revenue for the third Review Period.

Submissions are invited from interested parties on the proposed capital projects indicated by System Management to have been included in deriving the Forecast Capital Expenditure for the third Review Period and the economic lives it has assumed for the asset groups for depreciation purposes.

2 Requirements of the Market Rules

Clauses 2.22.3 and 2.23.3 of the Market Rules require the Authority to determine the Allowable Revenue and Forecast Capital Expenditure for the IMO and System Management for the services they provide under the Market Rules.

For the IMO, the services are defined in clause 2.22.1 of the Market Rules as:

- market operation services, including the IMO's operation of the Reserve Capacity Market, Short Term Electricity Market and balancing, and the IMO's settlement and information release functions;
- system planning services, including the IMO's performance of the long term "Projected Assessment of System Adequacy" and functions under Chapter 5 of the Market Rules; and
- market administration services, including the IMO's performance of the Market Rule change process, Market Procedure change process, the operation of the Market Advisory Committee and other consultation, monitoring, enforcement, audit, registration related functions and other functions under the Market Rules.

For System Management, the services are defined in clause 2.23.1 of the Market Rules as system operation services, including all of System Management's functions and obligations under the Market Rules.[5]

The requirements of the Market Rules for the Authority's determination of the Allowable Revenue and Forecast Capital Expenditure are the same for the IMO and System Management:

- the IMO and System Management must each submit a proposal for its Allowable Revenue and Forecast Capital Expenditure by 30 November prior to the start of the Review Period;[6]
- the Authority must undertake a public consultation process in approving the Allowable Revenue and Forecast Capital Expenditure, which must include publishing an Issues Paper and issuing an invitation for public submissions; and
- by 31 March of the year in which the Review Period commences, the Authority must determine the Allowable Revenue and approve the Forecast Capital Expenditure for the Review Period.[7]

Factors that the Authority must take into account in determining the Allowable Revenue and approving the Forecast Capital Expenditure are also the same for the IMO and System Management and are as follows.[8]

- The Allowable Revenue must be sufficient to cover the forward looking costs of providing the relevant services in accordance with the following principles:
    i. recurring expenditure requirements and payments are recovered in the year of expenditure;
    ii. capital expenditures are to be recovered through the depreciation and amortisation of the assets acquired by the capital expenditure in a manner that is consistent with good accounting principles;
    iii. costs incurred that are related to market establishment, as designated by the Minister, are to be recovered over a period determined by the Minister from "energy market commencement"; and
    iv. notwithstanding (i), (ii) and (iii), expenditure incurred and depreciation and amortisation charged, in relation to any "declared market project"[9] are to be recovered over the period determined for that declared market project.
- The Allowable Revenue and Forecast Capital Expenditure must include only costs that would be incurred by a prudent provider of the services, acting efficiently, seeking to achieve the lowest practically sustainable cost of delivering the services in accordance with the Market Rules, while effectively promoting the wholesale market objectives.

[5] Prior to 30 November 2009, clause 2.23.1 of the Market Rules also included as a service provided by System Management "System Management's functions and obligations under these Market Rules in relation to the provision of Ancillary Services". This function was removed by a change to the Market Rules effective as of 30 November 2009 (Market Rule Change Proposal 2009_23 System Management Review Period Budget Coverage Amendment).

[6] Clause 2.22.3 of the Market Rules refers to a "proposal for its allowable revenue" for the IMO whereas clause 2.23.3 refers to a "proposal for its costs" for System Management.

[7] Clauses 2.22.3 and 2.23.3 of the Market Rules.

[8] Clauses 2.22.12 and 2.23.12 of the Market Rules.

[9] A "declared market project" is a project declared as such by the IMO under clause 2.22.13 of the Market Rules.

- Where possible, the Authority should benchmark the Allowable Revenue and Forecast Capital Expenditure against the costs of providing similar services in other jurisdictions.

3 Process to be followed by the Authority

The process that the Authority intends to apply in its determination of Allowable Revenue for the IMO and System Management is to assess the proposals against benchmarks of the costs in the previous two Review Periods, with additional consideration of items of capital expenditures that underlie amounts of depreciation and amortisation in Allowable Revenue.

The assessment of the proposals against benchmarks of costs in the previous two Review Periods will apply to costs of a recurrent nature and will involve:

- establishing cost benchmarks from the actual costs incurred by each entity over the previous two Review Periods, corrected for any abnormal or non-recurring costs during the periods;
- identifying and assessing the changes in costs embodied in the Allowable Revenue proposals that are in the nature of “trend changes”, reflecting cost drivers such as an increasing scale of operations and inflation of unit costs; and
- identifying and assessing the changes in costs embodied in the Allowable Revenue proposals that are in the nature of “step changes”, reflecting changes in the nature of activities being undertaken (such as where new functions or activities are assumed), or changes in the manner in which activities are undertaken (such as transfers of certain activities from being undertaken in-house to being undertaken by contractors).

For approving the Forecast Capital Expenditure proposed by the IMO and System Management, the Authority will consider actual and Forecast Capital Expenditures over the three Review Periods. The Authority will seek further supporting information for capital projects to ensure information is sufficient to demonstrate the expenditures to be consistent with costs that would be incurred by a prudent provider of services, acting efficiently and seeking to achieve the lowest practicably sustainable cost of delivering these services. The Authority will also undertake an assessment of whether amounts of depreciation and amortisation included in the Allowable Revenue have been appropriately determined from capital expenditure.

The Authority does not intend to benchmark the costs of the IMO and System Management against the costs of providing similar services in other jurisdictions, as contemplated by sub-clauses 2.22.12(c) and 2.23.12(c) of the Market Rules. The Authority considers that it is not practical to undertake such a benchmarking study as there are no directly comparable entities to the IMO and System Management in other jurisdictions in terms of scale of operations, the structure of the businesses and the nature of activities.

Submissions are invited from interested parties on the process that the Authority intends to follow in making a determination on Allowable Revenue and in approving Forecast Capital Expenditure for the IMO and System Management.

4 Independent Market Operator Proposal

The IMO's proposed Allowable Revenue and Forecast Capital Expenditure for the third Review Period covering the triennium from 2013/14 to 2015/16 are set out in Table 1 below.

Table 1 IMO's proposed Allowable Revenue and Forecast Capital Expenditure for the Review Period 2013/14 to 2015/16 (nominal $'000)

Description	2013/14	2014/15	2015/16	Total
Allowable Revenue	15,825	16,265	16,686	48,776
Forecast Capital Expenditure	2,583	1,984	1,707	6,274

Allowable Revenue

In the proposal submitted to the Authority, the IMO has provided information on its proposed Allowable Revenue for the third Review Period from 2013/14 to 2015/16 in comparison to the actual and budget costs over the second Review Periods from 2010/11 to 2012/13 (Table 4). The IMO has noted that the cost categories used in its submission are consistent with the requirement by the Auditor General for the IMO's financial statements.

Table 2 IMO proposed Allowable Revenue for the third Review Period with comparison to the actual/budget costs of the second Review Period (nominal $'000)

	2nd Review Period	3rd Review Period	Increase/(Decrease)	
Description	2010/11 - 2012/13 Actuals / Budget ($'000)	2013/14 - 2015/16 Proposed ($'000)	($'000)	%
Employees Benefit Expense	15,137	17,521	2,384	16%
Accommodation Costs	897	2,251	1,354	151%
Supplies and Services	15,075	15,000	-75	0%
Borrowing Costs	1,302	1,277	-25	-2%
Depreciation	8,993	12,877	3,884	43%
Total Expenditure	**41,404**	**48,926**	**7,552**	**18%**
Less Interest Income	-498	-150	348	-70%
Net Expenditure (Allowable Revenue)	**40,906**	**48,776**	**7,870**	**19%**

In its submission, the IMO explained that the 19 per cent increase in the proposed Allowable Revenue for the third Review Period in comparison to the actual and budget costs for the second Review Period was caused by a number of abnormal increases and one-off factors. These increases and one-off factors include:

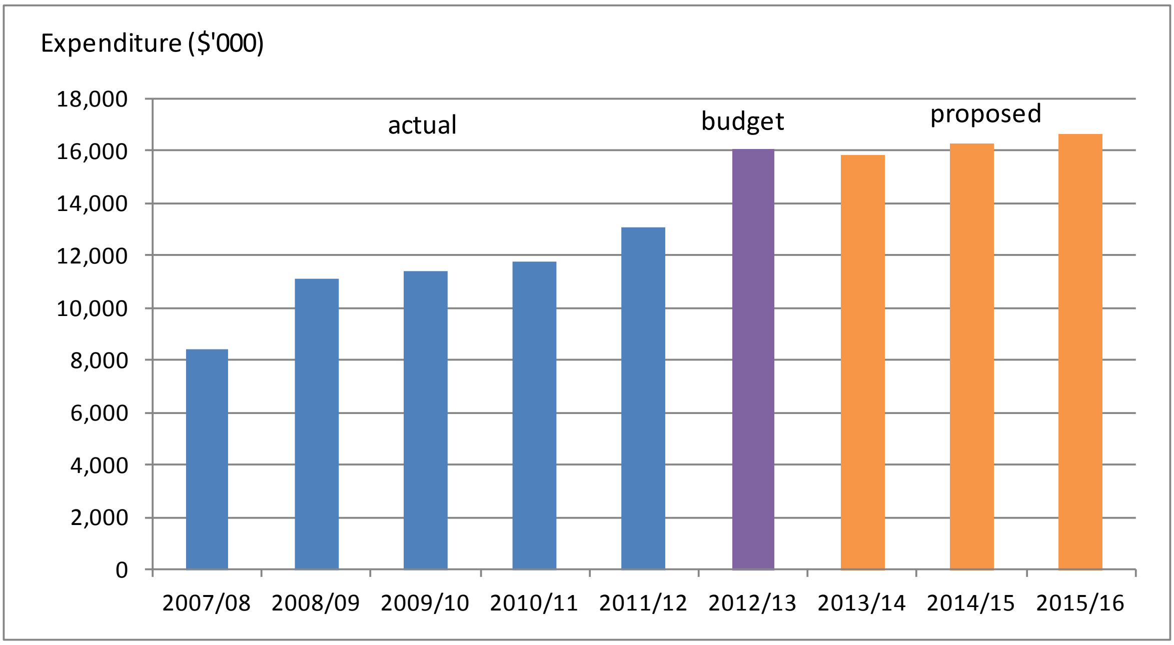
- considerable capital expenditure in the second Review Period on the Market Evolution Program resulting in higher depreciation and amortisation costs in the third Review Period;
- increased Employee Benefit Expense as a result of the addition of new positions and salary increases based on market benchmarks;
- significant increases in accommodation costs related to the leasing of the IMO's offices; and

- one-off items such as the recovery of GST incorrectly raised by the IMO on the ERA's component and full market audits for the IMO in 2014/15 and for System Management in 2015/16.

The IMO noted that after adjusting for the impact of abnormal increases and one-off items the increase in expenditure between the two Review Periods would be 3.2 per cent.

Figure 1 below shows the IMO's annual actual and forecast expenditure from 2007/08 to 2015/16. After the noticeable increase in the IMO's actual expenditure in 2011/12 (11 per cent) and budget expenditure in 2012/13 (23 per cent), total expenditure is forecast to be slightly lower in 2013/14 compared to 2012/13 (a reduction of 1 per cent). This will be followed by a moderate increase in 2014/15 and 2015/16 at an average rate of 3 per cent per annum in nominal terms.

Figure 1 IMO: actual and budget expenditure (2007/08 to 2012/13) and proposed Allowable Revenue for the third Review Period (2013/14 to 2015/16)



Clause 2.22.3 of the Market Rules requires the IMO to seek approval of its Allowable Revenue for each of the three services it provides as defined under clause 2.22.1 of the Market Rules. The IMO provided a breakdown of its proposed Allowable Revenue associated with each of the three services it provides, as presented in Table 3:

Table 3 Proposed Allowable Revenue associated with each of the three services provided by the IMO under the Market Rules (nominal $'000)

Description	2013/14	2014/15	2015/16
Market Operations	8,008	8,217	8,186
System Planning	2,721	2,912	3,050
Market Administration	5,096	5,136	5,450
Proposed Allowable Revenue	**15,825**	**16,265**	**16,686**

In its submission, the IMO noted that its proposed Allowable Revenue was prepared on the basis of business as usual and acknowledged that the business requirements of

Market Participants and stakeholders have a heavy influence on the IMO's work programs and subsequent expenditure.

The key assumptions indicated by the IMO to have been applied in derivation of its Allowable Revenue for the third Review Period are indicated in Table 2.

Table 4 Key assumptions indicated by the IMO to have been applied in derivation of forecasts of costs for the third Review Period

Cost or calculation parameter	Assumption of basis of cost forecast
Escalation rate for annual indexation costs	Rates applied as advised by the Department of Treasury of 1.75% across the Review Period from 2013/14 to 1015/16.
Employment benefit costs	The IMO currently has 39 approved positions, corresponding to 38.5 FTEs after adjusting for part-time positions. Five temporary positions (corresponding to 4.5 FTEs) were approved for 2012/13 for the Gas Implementation Services Project (GISP), with three of these positions planned to transition into permanent positions from 2013/14. The IMO has determined that two additional positions are required from 2013/14: a Junior Lawyer position and an additional Graduate position. Although five new positions are expected in 2013/14, the effect of the overhead costing methodology results in only 4.1 FTE of the five positions being allocated to electricity responsibilities. The electricity related FTE will reduce from 38 FTE in 2012/13 to 37.5 FTE in 2013/14. Increases in salary costs to meet market salary levels in accordance with advice from an independent remuneration consultant, with resultant remuneration increases of: • average increase of 5.5% per annum for 18 selected positions with a specialised aspect to them; and • general annual increase of 4% for the positions that were not specifically reviewed.
Accommodation costs	The IMO shifted into refurbished office premises on 3 September 2012. The rental rate for the new lease of $\$660m^2$ represented a significant increase on the previous rental rate of $\$396m^2$ (an increase of 67 per cent). Two abnormal factors have reduced the accommodation rental budget for 2012/13: • an incentive of $851,000 in the new lease, which can be used as a contribution towards the fit-out and/or to be taken as rent free. The IMO took $472,835 of the incentive as rent free in 2012/13, with the residual being used to subsidize the office fit-out; and • the new lease allowed the IMO to continue paying the previous (lower) monthly rental amount for the period from July to August 2012 due to the delays related to the vacating of the premises by the previous tenant. Forecast rental costs are based on an annual rental increase of 4 per cent from 2012/13 per the lease agreement.
Supplies and services	The IMO has a strong reliance on the outsourcing of specialist services. The single biggest contracted expenditure is under IT support and relates to the maintenance and development support of the market system (WEMS) ($784,000 per annum). The IMO indicated that it is currently concluding tender arrangement for this item for the next three years and did not expect that any significant shift in prices would occur. Forecast costs are based on escalation of current costs, with allowances for specific activities in particular years of the Review Period and one-off items such as the recovery of GST incorrectly passed to the ERA.
Borrowing costs	Projected borrowing costs across the Review Period are calculated based on existing funding facilities and projected capital expenditure, assuming debt financing of all capital expenditure and funding rates provided by the Western

Australian Treasury Corporation.

Submissions are invited from interested parties on the key assumptions indicated by the IMO to have been applied in deriving its proposed Allowable Revenue for the third Review Period.

Forecast Capital Expenditure

In its proposal submitted to the Authority, the IMO provided a copy of its IT Roadmap 2013 – 2016 that was submitted to the Minister for Energy for endorsement on 26 October 2012 for consideration as part of the State Capital budget for 2013/14 onwards.

The IMO noted that this is the third IT Roadmap that the IMO has produced. The IT Roadmap is the primary strategic planning tool used by the IMO to ensure that planning, delivery, management and use of the IT systems optimally support the IMO's business.

It is noted in the IMO's third IT Roadmap document that Forecast Capital Expenditure required to support the identified capital projects would require a reinvestment of 55 - 60 per cent of the IMO's current asset depreciation, with a lower capital requirement in each year of the third Review Period leading up to a potential system rebuild in 2016/17. A summary of the IMO's IT projects and the associated capital requirement for 2013/14 to 2015/16 is provided in Table 5 below.

Table 5 IMO's IT Projects and Forecast Capital Expenditure 2013/14 to 2015/16 (nominal $'000)[10]

Description	2013/14	2014/15	2015/16
Wholesale Electricity Market System (WEMS)	653.6	384.6	248.8
Settlement	367.8	69.7	35.0
Infrastructure Support (Market Systems)	971.8	999.7	824.0
Data / Information Provision	459.2	401.7	422.6
Corporate Support - Electricity	130.9	128.0	176.6
Forecast Capital Expenditure	**2,583.2**	**1,983.6**	**1,707.2**

The IMO has noted that a five-year depreciation model has been used across all components (hardware and software) when the Forecast Capital Expenditure is incorporated into the Allowable Revenue.

Submissions are invited from interested parties on the proposed capital projects and the associated capital requirements indicated by the IMO to have been included in deriving the Forecast Capital Expenditure for the third Review Period and the five-year depreciation model it applied across all components of capital projects.

[10] Numbers may not add up due to rounding.

5 System Management Proposal

A summary of System Management's proposed Allowable Revenue and Forecast Capital Expenditure for the third Review Period 2013/14 to 2015/16 is provided below in Table 6.

Table 6 System Management proposed Allowable Revenue and Forecast Capital Expenditure for the Review Period 2013/14 to 2015/16 ($'000 real as at 30 June 2013)

Description	2013/14	2014/15	2015/16	Total
Allowable Revenue (smoothed)	11,880.2	14,182.7	16,960.8	43,023.7
Forecast Capital Expenditure	2,426.9	1,768.9	1,074.8	5,270.6

Allowable Revenue

In the proposal submitted to the Authority, System Management has explained that the calculation of System Management's Allowable Revenue for the third Review Period has been undertaken in accordance with the 'building block methodology', as contained in its revenue model.

The approach taken by System Management in estimating its Allowable Revenue for this Review Period is markedly different to that used by System Management in the past. It is also markedly different to the approach taken by the Authority in coming to its own estimation of System Management's Allowable Revenue. It is not immediately apparent to the Authority why System Management has altered its methodology for the determination of its Allowable Revenue.

In past reviews, System Management, as a business unit within Western Power, has estimated the direct costs that are expected to be incurred in meeting the objectives set out in the Market Rules. These costs have included:

- labour costs;
- functional costs;
- legal costs;
- insurance costs; and
- other specific capital and operating expenses.

In past reviews, System Management has not sought to be compensated for tax equivalent payments or returns on capital. In determining System Management's Allowable Revenue, the Authority has, in past reviews, considered it appropriate for System Management to be compensated for the borrowing costs that it incurs. This has been done by estimating the costs of funds that could be accessed by the Western Australian Treasury Corporation. In its proposal for this review, System Management has included tax payments and returns on investment in its estimation of forward looking costs.

In its proposal as part of this review, System Management has estimated its Allowable Revenue by constructing a building block approach to revenue determination. As part of this methodology, System Management has estimated a capital base as at 30 June 2010 ($1.3 million). This capital base has been rolled forward for each year of the Review Period by adding Forecast Capital Expenditure and subtracting depreciation.

System Management has estimated a real post-tax weighted average cost of capital of 6.66 per cent and applied this to its capital base to estimate a return on investment. System Management's estimate of the weighted average cost of capital is markedly different to that used recently by the Authority in the Western Power Access Arrangement (3.60 per cent). It appears that the main difference between the two estimates is the nominal risk free rate, which System Management has estimated using average yields on 10-year Government bonds observed during the period 14 June 2011 to 11 July 2011. The key components of System Management's estimation of its Allowable Revenue over the third Review Period are provided in Table 7.

Table 7 System Management's Estimates of Forward Looking Costs and Allowable Revenue, 2013/14 to 2015/16 (real $'000 as at 30 June 2013)

Cost item	2013/14	2014/15	2015/16
Operating Expenditure	8,270	8,609	8,670
Plus Depreciation	3,766	4,125	4,387
Plus Return on Investment	814	725	568
Plus Tax Payable	0	544	1,674
Less Value of Imputation Credits	0	-136	-418
Estimated Total Costs	12,850	13,867	14,881
Plus Adjustments for AR1 and AR2	1,154	0	0
Allowable Revenue (unsmoothed)	**14,004**	**13,867**	**14,881**

Table 8 below provides a comparison between System Management's forecast operating expenditure for the third Review Period and its estimated operating expenditure over the second Review Period, based on actual and budget information.

Table 8 System Management's forecast operating expenditure for the third Review Period, with comparison to the actual/budget expenditure of the second Review Period ($'000 real as at 30 June 2013)

Description	2nd Review Period 2010/11 - 2012/13 Actuals / Budget ($'000)	3rd Review Period 2013/14 - 2015/16 Proposed ($'000)	Increase/(Decrease) ($'000)	%
Labour (permanent employees)	11,453	15,975	4,522	39%
Functional costs	3,165	2,778	-387	-12%
Legal costs	526	600	74	14%
Business support costs	916	1,760	844	92%
IT operating expenditure	4,022	3,276	-746	-19%
Insurance costs	0	1,158	1,158	
Total operating expenditure	**20,082**	**25,549**	**5,467**	**27%**

System Management noted that its required operating expenditure of $25.549 million (real as at 30 June 2013) for the third Review Period represented a 27 per cent increase on the estimated expenditure of $20.082 million at the end of the second Review Period (i.e. 30 June 2013) and is around 42 per cent higher than the Allowable Revenue proposed by System Management for the second Review Period. The operating costs included in the Allowable Revenue determined by the Authority for System Management for the second

Review Period was $15.927 million (nominal). System Management contributes the significant change in operating costs to the increased costs of operating the power system as a result of the implementation of the new Balancing and Load Following Ancillary Service market from 1 July 2012.[11]

System Management indicated that in forecasting operating expenditure it applied forecasting methods that reflect the different cost drivers for recurrent costs (including business support costs) and non-recurrent cots. System Management noted that it used actual 2011/12 costs as the efficient base year to develop the forecasts for the third Review Period from 2013/14 to 2015/16. Costs that were incurred in the base year (2011/12) that will not be incurred in the third Review Period will be adjusted out (negative step changes) and costs that are expected to be incurred in the third Review Period that were not incurred in the base year will be included as positive step changes to reflect known future changes in practices, functions, obligations and the operating environment.

In its own analysis of step changes in costs (measured by comparing costs incurred in 2011/12 with those expected to be incurred over the third Review Period) System Management has identified a total step change increase of about $1.6 million (real as at 30 June 2013) in annual costs.[12] System Management indicated that the dominant step change is in labour operating costs, amounting to $1.212 million (real as at 30 June 2013), followed by changes in IT Support cost ($0.682 million, real as at 30 June 2013) and Business Support cost ($0.589 million, real as at 30 June 2013). System Management has indicated that the additional labour operating costs are required for additional staff to support the market, extended hours of operations, and to support the System Management Automated Real-Time System (SMARTS) and ongoing maintenance of the Dispatcher Training Simulator (DTS), which were implemented during the second Review Period.

Table 9 below provides a breakdown of System Management's proposed recurrent operating expenditure for the third Review Period.

Table 9 System Management proposed operating expenditure by category ($'000 real as at 30 June 2013)

Cost item	2013/14	2014/15	2015/16	Total
Labour costs	5,240	5,366	5,369	**15,975**
Functional costs	791	984	1,003	**2,778**
Legal costs	200	200	200	**600**
Insurance costs	386	386	386	**1,158**
Business support	560	581	619	**1,760**
IT support	1,092	1,092	1,092	**3,276**
Total Operating Expenditure	**8,270**	**8,609**	**8,670**	**25,549**

System Management indicated that it applied expert labour forecast from Macromonitor, commissioned by Western Power, for its recent access arrangement submission to the Authority. These escalation factors were developed specifically for the Western Australian electricity, gas, water and waste sector, as follows (in real terms):

[11] The wholesale electricity market in Western Australia has gone through some significant changes recently with the implementation of the competitive Balancing and Load Following Ancillary Service markets, whereby independent power procedures can compete with the Government-owned generator, Verve Energy for providing these services. Prior to 1 July 2012, Verve Energy was the sole provider of Balancing and Load Following Ancillary Service in the market.

[12] System Management, Allowable Revenue Information for 1 July 2013 to 30 June 2016, Table 12, p.53.

2013/14 – 2.2%

2014/15 – 2.4%

2015/16 – 2.0%

System Management has noted that it has not applied escalation above inflation to material costs.

System Management has also noted that it has not identified any non-recurrent costs that need to be included in operating expenditure forecasts for the third Review Period, i.e. constant in real terms over the Review Period.

Submissions are invited from interested parties on System Management's building block approach to revenue determination, the inclusion of the return on investment based on estimated real post-tax weighted average costs, and key assumptions indicated by System Management to have been applied in deriving its proposed Allowable Revenue for the third Review Period.

Forecast Capital Expenditure

System Management proposed to invest $5.271 million (real as at 30 June 2013) in capital to deliver system operation services during the third Review Period 2013/14 to 2015/16. This capital investment will be made across three categories, as follows:

- consolidating support for the Market Evolution Program (MEP)
- improving internal processes and systems
- supporting market development

Table 10 below provides a breakdown of the individual capital projects and the associated costs within each category.

Table 10 System Management's proposed capital expenditure for the period 2013/14 to 2015/16 ($'000 real as at 30 June 2013)

Description	2013/14	2014/15	2015/16
Consolidating support for the MEP	**533**	**289**	**0**
SMARTS security assessment	149	0	0
SMARTS test environment	216	115	0
IMO outbound data	168	174	0
Improving internal processes and systems	**1,094**	**729**	**502**
Lodgement and approval commissioning	232	84	0
Customer portal user management phase 1	85	0	0
Customer portal user management phase 2	0	282	291
FTP replacement	251	206	50
Disaster recovery	376	0	0
Capitalised labour	151	156	161
Support market development	**800**	**752**	**572**
Outage management phase 1	469	274	0
Outage management phase 2	107	144	238

Improvements to balancing	46	47	0
30 minute gate closure	0	159	0
Emissions intensity index	63	0	0
Spinning reserve market	115	127	334
Forecast Capital Expenditure	**2,427**	**1,769**	**1,075**

System Management indicated that, for depreciation purposes, it assumed an economic life of four years for each of the IT and SMARTS asset group on a straight line basis.

Based on actual expenditure in 2010/11 and 2011/12 and forecast expenditure for 2012/13, System Management's capital expenditure over the second Review Period was around $15 million.

Submissions are invited from interested parties on the proposed capital projects indicated by System Management to have been included in deriving of the Forecast Capital Expenditure for the third Review Period and the economic life it assumed for the asset groups for depreciation purposes.