Determination: Allowable Revenue and Forecast Capital Expenditure for the Independent Market Operator

2013/14 to 2015/16

March 2013

Economic Regulation Authority
WESTERN AUSTRALIA

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Determination

1. On 30 November 2012, the Independent Market Operator (**IMO**) submitted to the Economic Regulation Authority (**Authority**) a proposal for the IMO's Allowable Revenue and Forecast Capital Expenditure (**proposal**) for the period 2013/14 to 2015/16 (third review period).[1] The proposal was submitted in accordance with the requirements of clause 2.22.3 of the *Wholesale Electricity Market Rules* (**Market Rules**) under which the Authority is required to periodically determine the Allowable Revenue and Forecast Capital Expenditure of the IMO for periods of three years duration.

2. The IMO's proposal is available on the Authority's website.[2]

3. On 20 December 2012, the Authority issued a notice inviting submissions on the proposed Allowable Revenue and Forecast Capital Expenditure and an issues paper to assist interested parties in understanding and making submissions on the proposal. Six submissions were received and are available on the Authority's website.[3]

4. In making its determination, the Authority has taken into account the matters set out in clause 2.22.12 of the Market Rules.

5. The Authority has determined that the IMO's Allowable Revenue and Forecast Capital Expenditure for the review period should be the amount proposed by the IMO. The values of Allowable Revenue and Forecast Capital Expenditure proposed by the IMO and the values determined by the Authority are shown in Table 1 below.

Table 1 IMO's Allowable Revenue and Forecast Capital Expenditure – 2013/14 to 2015/16 (nominal $'000)

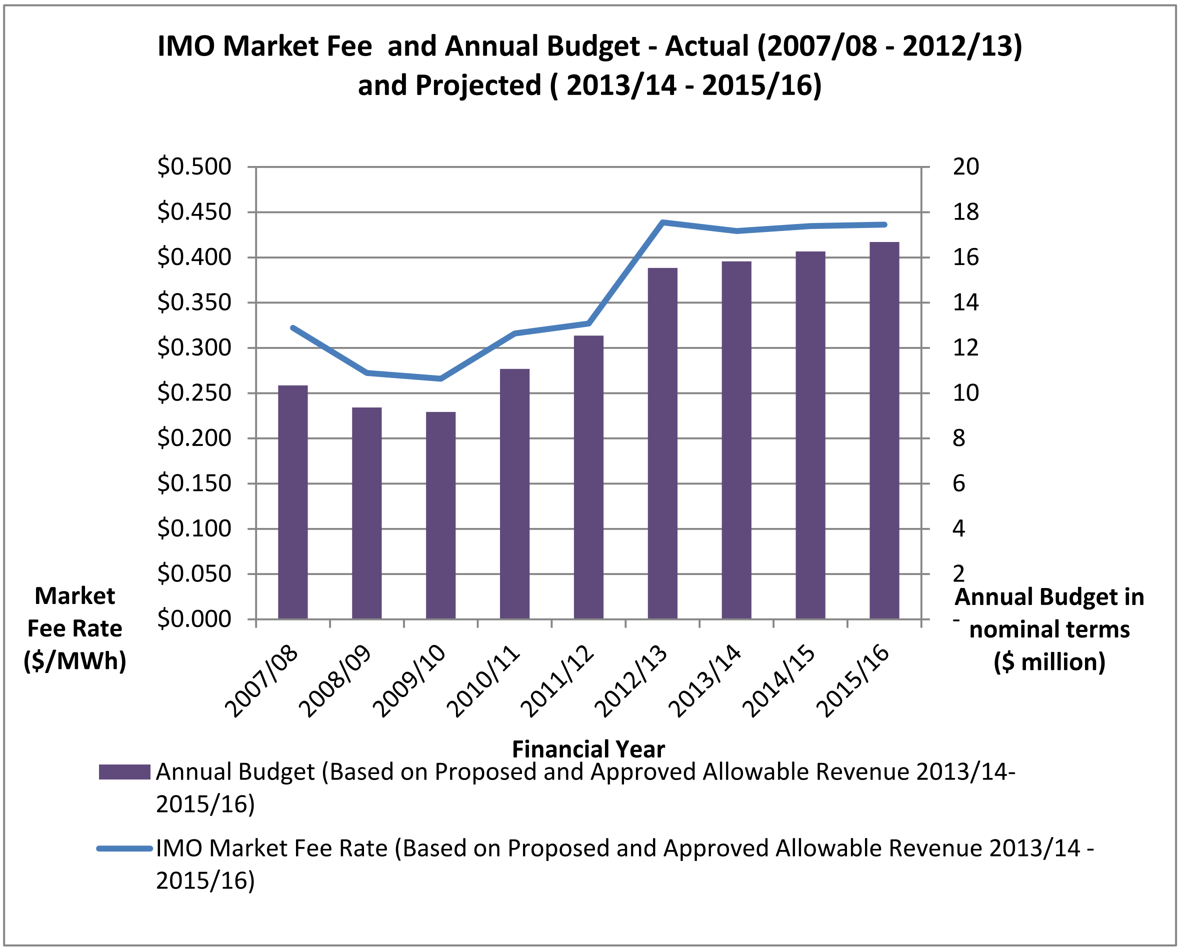
Description	2013/14	2014/15	2015/16	Total
IMO proposal:				
Allowable Revenue	15,825	16,265	16,686	48,776
Forecast Capital Expenditure	2,583	1,984	1,707	6,274
Authority's determination:				
Allowable Revenue	15,825	16,265	16,686	48,776
Forecast Capital Expenditure	2,583	1,984	1,707	6,274

1 Independent Market Operator, 30 November 2012, ERA Submission Proposal for Allowable Revenue and Forecast Capital Expenditure 1 July 2013 to 30 June 2016. The "first review period" was the three year period 2007/08 to 2009/10 and was the subject of determination of Allowable Revenue by the Authority in March 2007 (Economic Regulation Authority, 30 March 2007, Allowable Revenue Determination - Independent Market Operator) and the "second review period" was the three year period 2010/11 to 2012/13 and was the subject of determination of Allowable Revenue by the Authority in March 2010 (Economic Regulation Authority, 30 March 2010, Allowable Revenue Determination - Independent Market Operator).

2 ERA website, Independent Market Operator – ERA Submission Proposal for Allowable Revenue and Forecast Capital Expenditure 1 July 2013 to 30 June 2016, http://www.erawa.com.au/markets/electricity-markets/determination-of-the-imo-and-system-management-allowable-revenue-and-ancillary-service-parameters/

3 http://www.erawa.com.au/markets/electricity-markets/determination-of-the-imo-and-system-management-allowable-revenue-and-ancillary-service-parameters/

6. Forecast Market Fees based on the forecast market supply and demand load set out in the IMO's 2012 Statement of Opportunities are shown in the chart below together with actual charges for earlier years. In this decision, the Authority only approves Allowable Revenue. Market Fees are set annually and may vary from those shown below due to changes in forecast loads.



7. The reasons for this determination are set out below.

Reasons for the Determination

Legislative Requirements

8. The IMO was established under regulation 4(1) of the *Electricity Industry (Independent Market Operator) Regulations 2004*.

9. The IMO has functions conferred on it by the *Electricity Industry (Independent Market Operator) Regulations 2004*, the *Electricity Industry (Wholesale Electricity Market) Regulations 2004*, and the Market Rules.

10. Clause 2.1.2 of the Market Rules lists the following functions of the IMO:

- to administer the Market Rules;
- to operate the Reserve Capacity Mechanism, the Short Term Energy Market (STEM), the LFAS Market, and the Balancing Market;

- to settle such transactions as is required under the Market Rules;
- to carry out a long term projected assessment of system adequacy (PASA) study and to publish the Statement of Opportunities Report;
- to do anything that the IMO determines to be conducive or incidental to the performance of the functions set out in clause 2.1.2;
- to process applications for participation, and for the registration, de-registration and transfer of facilities;
- to release information required to be released by the Market Rules;
- to publish information required to be published by the Market Rules;
- to develop amendments to the Market Rules and replacements for them;
- to develop Market Procedures, and amendments and replacements for them, where required by the Market Rules;
- to make available copies of the Market Rules and Market Procedures, as are in force at the relevant time;
- to monitor other Rule Participants' compliance with the Market Rules, to investigate potential breaches of the Market Rules, and if thought appropriate, initiate enforcement action under the Regulations and the Market Rules;
- to support the Authority in its market surveillance role, including providing any market related information required by the Authority;
- to support the Authority in its role of monitoring market effectiveness, including providing any market related information required by the Authority; and
- to carry out any other functions conferred, and perform any obligations imposed, on it under the Market Rules.

11. Clause 2.22 of the Market Rules requires the Authority to determine amounts of Allowable Revenue and Forecast Capital Expenditure for the IMO to provide services defined in clause 2.22.1 of the Market Rules, being:

    - 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.

12. Clause 2.22.3 of the Market Rules establishes the requirements for the Authority's determination of Allowable Revenue and Forecast Capital Expenditure:

    - 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;[4]

[4] 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.

- 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.[5]

13. Clause 2.22.12 of the Market Rules sets out the following factors that the Authority must take into account in determining amounts of Allowable Revenue for the IMO:

    - The Allowable Revenue must be sufficient to cover the forward looking costs of providing the relevant services in accordance with the following principles:

        a) recurring expenditure requirements and payments are recovered in the year of expenditure;

        b) 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;

        c) 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

        d) notwithstanding (a), (b) and (c), expenditure incurred and depreciation and amortisation charged, in relation to any “declared market project”[6] 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.
    - Where possible, the Authority should benchmark the Allowable Revenue and Forecast Capital Expenditure against the costs of providing similar services in other jurisdictions.

14. The Authority’s determination of Allowable Revenue is one of two external oversight mechanisms provided for in the Market Rules. The Market Rules also require the IMO to prepare an annual budget for the coming financial year and submit it to the Minister for Energy for approval by 30 April each year. The budget proposal must be consistent with the Allowable Revenue determined by the Authority for the relevant Review Period.

15. Clause 2.22.7 of the Market Rules requires that where the revenue received via Market Fees in the previous financial year is greater than or less than the IMO’s expenditure for that financial year, the current year’s budget must take it into account by decreasing the budgeted revenue by the amount of the surplus or adding to the budgeted revenue the amount of any shortfall, as the case may be. This ensures the IMO is able to recover its actual costs incurred and does not retain any revenue in excess of that amount.

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

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

16. The IMO is only required to apply to the Authority to reassess its Allowable Revenue if its budget proposal, after taking into account any adjustments under clause 2.23.7, is likely to result in revenue recovery over the relevant Review Period, more than 15 per cent greater than the Allowable Revenue determined by the Authority. As a consequence, an annual budget may vary from the amount forecast in Allowable Revenue by greater than 15 per cent providing the total expenditure over a review period only varies by up to 15 per cent.[7]

17. The Minister must make a decision on the budget proposal within 30 business days and notify the IMO of the decision. If necessary, the Minister may refer the budget proposal back to the IMO for re-consideration in accordance with any directions or recommendations of the Minister. The IMO must publish the approved budget within five business days of it being approved by the Minister.

Proposed Allowable Revenue and Forecast Capital Expenditure

18. The IMO's proposed Allowable Revenue and Forecast Capital Expenditure are shown in Table 2.

Table 2 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

19. In its submission to the Authority, the IMO presented its proposed Allowable Revenue as a sum of cost line items, together with details of actual and projected costs for the second review period of 2010/11 to 2012/13 as set out in Table 3.

7 The IMO is also required to apply to the Authority to reassess Forecast Capital Expenditure if it changes by more than 10 per cent.

Table 3 IMO proposal for the third review period compared with actual costs for the second review period (nominal $'000)

Description	Second Review Period			Third Review Period		
	2010/11 (actual)	2011/12 (actual)	2012/13 (f/cast)	2013/14 (f/cast)	2014/15 (f/cast)	2015/16 (f/cast)
Employee Costs $'000	4,650	5,093	5,394	5,568	5,851	6,102
Accommodation Costs $'000	336	358	204	715	753	784
Supplies and Services $'000	5,368	5,235	4,470	5,065	4,952	4,984
Total before borrowing and depreciation $'000	**10,354**	**10,686**	**10,068**	**11,348**	**11,556**	**11,870**
Borrowing Costs $'000	178	532	592	582	391	304
Depreciation $'000	1,424	2,004	5,565	3,945	4,369	4,563
Total Expenditure	**11,956**	**13,223**	**16,225**	**15,875**	**16,315**	**16,736**
Less Interest Income	(153)	(175)	(170)	(50)	(50)	(50)
Net Expenditure	**11,803**	**13,048**	**16,055**	**15,825**	**16,265**	**16,686**

Approach to Assessment

20. The purpose of the Authority's determination on the Allowable Revenue for the IMO 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.

21. The process that the Authority has followed in its determination of Allowable Revenue for the IMO is to assess the proposals against 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.

22. The assessment of the proposals against costs in previous review periods has been applied to costs of a recurrent nature and involved:

    - establishing base costs 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).

23. For approving the Forecast Capital Expenditure proposed by the IMO and System Management, the Authority considered actual and forecast capital expenditures. The Authority sought 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 also undertook an assessment of whether amounts of depreciation and amortisation included in the Allowable Revenue have been appropriately determined from capital expenditure.

24. The Authority engaged Geoff Brown and Associates (**GBA**) to provide technical advice and assistance to the Authority in assessing the efficiency and appropriateness of the IMO's proposed operating and capital expenditure.[8]

Benchmarking

25. Sub-clause 2.23.12(c) of the Market Rules requires the Authority, where possible, to benchmark the Allowable Revenue of the IMO against the costs of providing similar services in other jurisdictions.

26. Two submissions made to the Authority commented on the use of benchmarking:

- Griffin Power believes the performance of the IMO and System Management, relative to the cost of providing their services, should be benchmarked to evaluate if the direction the IMO and System Management propose to proceed will result in more efficient and sustainable outcomes and that the net result of projects already implemented has in fact been successful. It considers the Authority could possibly engage consultants in the energy field to identify a similar service for benchmarking or to support an independent finding that none exist.
- The WA Independent Power Association considers that it is important to understand the market cost of electricity traded in WA on a comparable basis with other jurisdictions. It believes such an exercise could be done on a tracking basis at least to see how WA compares from year to year, going back to the start of the market, rather than just as a one-off review.

27. Due to the unique nature of the Western Australian energy market, the Authority notes 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.

28. In the first Allowable Revenue review period (2007/08 to 2009/10), the Authority, with the assistance of Stamfords Consultants, sought to undertake a benchmarking study pursuant to the requirements of the Market Rules. However, due to the incompatibility between the services provided by the IMO and System Management, and the service providers in other jurisdictions, no useful conclusion was deduced from the benchmarking study in the first review period.

29. In the second Allowable Review period (2010/11 to 2012/13), the Authority conducted preliminary analysis of the Australian Energy Market Operator's (**AEMO**) costs for providing services as the National Electricity Market's (**NEM**) market and system operator, and also the combined costs of the IMO and System Management as the Wholesale Electricity Market's (**WEM's**) market operator and system operator, respectively.

30. Although the AEMO is not a directly comparable entity to the IMO and System Management, the Authority considers it is useful to compare the AEMO's costs over the period 2007/08 to 2012/13 with the combined costs of the IMO and System

[8] Geoff Brown and Associates Ltd, Technical Review of Allowable Revenue for Independent Market Operator for 1 July 2013 to 30 June 2016, 26 March 2013.

Management. As there are differences in the manner in which these costs have been recovered from market participants, it is not possible to directly compare market fees between the WEM and the NEM. Table 4 below provides a comparison of unit costs based on customer load.

Table 4 Comparison of Costs with the AEMO

Financial year	Annual Costs		Market customer load forecast		Cost/Customer Load	
	NEM[9] $ million	WEM[10] $ million	NEM GWh	WEM[11] GWh	NEM $/MWh	WEM $/MWh
2007/08	69.25	14.73	190,561	16,052	0.36	0.92
2008/09	70.05	14.11	195,514	17,200	0.36	0.82
2009/10	73.71	13.52	189,232	17,239	0.39	0.78
2010/11	76.08	17.94	193,083	17,517	0.39	1.02
2011/12	74.14	20.03	190,639	19,185	0.39	1.04
2012/13	72.03	25.30	181,107	17,706	0.40	1.43

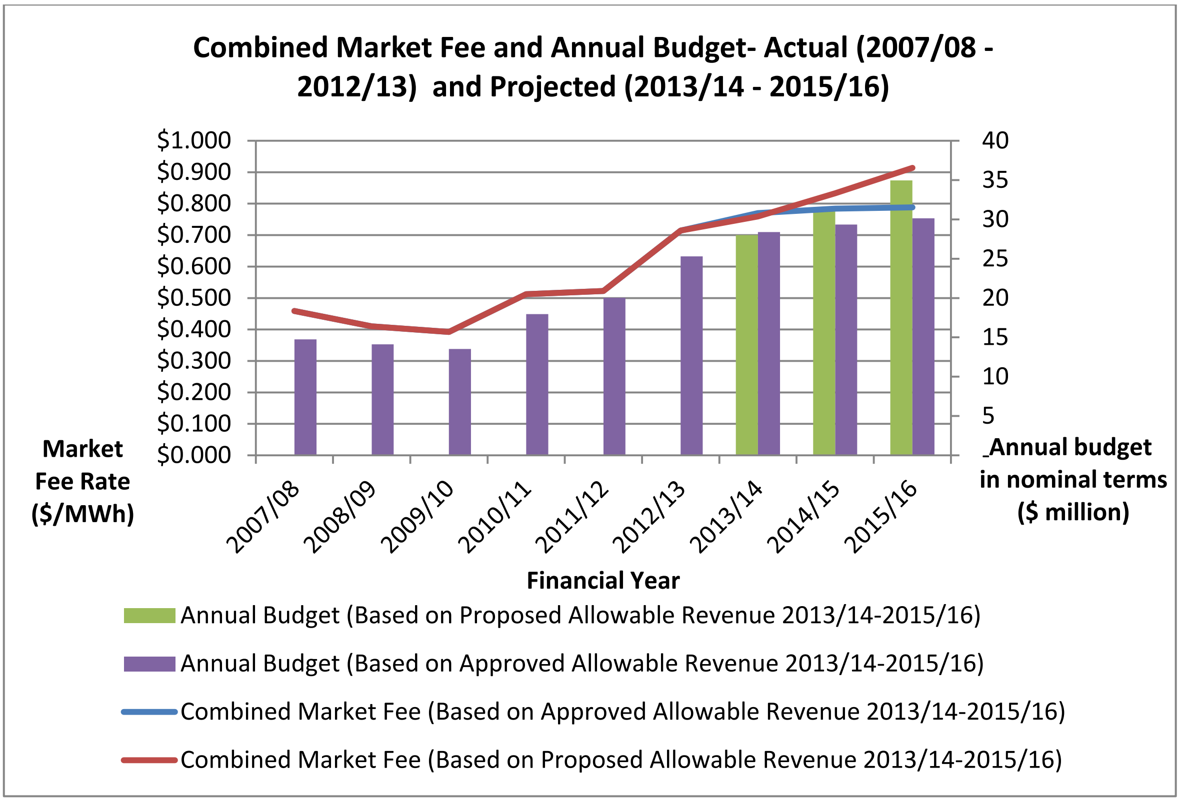
31. As can be seen in Table 4 above, the annual costs of the WEM are considerably less than those in the NEM. However, the unit cost comparison shows the WEM as more expensive than the NEM. It is also noted that the unit rate in relation to the NEM has only increased slightly over the period whilst the unit rate in the WEM has increased substantially. The increase in the WEM unit rate is primarily driven by the substantial changes to the operation of the WEM during this period.

32. The Authority has also calculated projected market fee rates for the review period (2013/14 – 2015/16) using projected market supply and demand load set out in the IMO's 2012 Statement of Opportunities, and the sum of the IMO's and System Management's Allowable Revenue. The results are shown in the chart below. The Market Rules require the fees to be based on spreading the total required revenue over both the total generation and the total consumption of electricity in the market, consequently the Market Fees shown in the chart below are half the unit costs shown in Table 4 above.

[9] Includes general fees and allocated fees as set out in the AEMO's annual budgets.

[10] Includes the IMO and System Management

[11] Based on half the IMO reported forecast of generation and consumption of energy to approximate customer load.



33. The chart illustrates the historical market fee rates for 2007/08 to 2012/13 and projected market fee rates for 2013/14 to 2015/16 proposed by the IMO and System Management. The chart also shows the combined Allowable Revenue for the period 2007/08 to 2015/16.

34. As shown in the chart, there is a substantial uplift in market fee rates from the first review period (2007/08 to 2009/10) to the current review period (2013/14 to 2015/16). This uplift is mainly attributable to costs arising from implementation of the Market Evolution Plan (**MEP**) during the Second Review Period.

35. It should also be noted that forecast energy dropped substantially from 2011/12 to 2012/13 which is a further significant reason for the increase in market fees from 2012/13. Reasons for this included:

- The impact of photovoltaics' load forecast was taken into account in 2012/13 for the first time and was estimated to reduce load by 327 GWh.
- The impact of block loads was forecast to reduce load by 594 GWh, primarily due to revised demand requirements from the Karara and Simcoa sites. Additionally, the Boddington site's demand has not increased in line with previous forecasts.

36. Given that there are no directly comparable entities to the IMO and System Management in other jurisdictions and the substantial changes to the WEM over the last few years make comparisons with earlier years difficult, the Authority does not consider benchmarking can be used at this point in time to assess the efficiency of the IMO's or System Management's costs. However, the analysis above demonstrates that the WEM is becoming increasing costly, both in relation to its own historical costs and to the NEM. The Authority considers this makes it imperative that a robust cost benefit analysis is conducted before committing to any further developments of the WEM. The Authority intends to give further consideration to this matter in its next triennial report to the Minister on the

effectiveness of the WEM pursuant to section 128 of the *Electricity Industry Act 2004*.

Public Submissions

37. In accordance with clause 2.22.3(b) of the Market Rules, the Authority undertook public consultation on the IMO's proposed Allowable Revenue, including publishing an issues paper on 20 December 2012 and issuing an invitation for public submissions. The closing date for public submissions was 8 February 2013.

38. Submissions were received from:

- Alinta Energy;
- Community Electricity;
- Griffin Power;
- Synergy;
- System Management; and
- WA Independent Power Association.

39. Matters raised in the submissions are discussed in the relevant sections.

Costs of the First and Second Review Period

40. A key issue for the Authority to consider is the extent to which cost for previous review periods can be used as a base for determining Allowable Revenue and Forecast Capital Expenditure for the third review period.

41. Annual figures for Allowable Revenue and actual expenditure are shown in Table 5 and Table 6, respectively. The variances between approved Allowable Revenue and actual costs for the first and second review periods are set out in Table 7.

Table 5 Approved Allowable Revenue for the first and second review periods (nominal $'000)

Description	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Employees Benefit Expense	3,133	3,370	3,505	4,013	4,269	4,545
Accommodation Costs	265	273	282	325	396	445
Supplies and Services	3,589	3,470	3,661	4,684	4,373	4,456
Borrowing Costs	455	321	220	188	242	262
Depreciation	2,924	3,124	1,125	1,712	2,089	2,046
Total Expenditure	**10,366**	**10,558**	**8,793**	**10,922**	**11,369**	**11,754**
Less Interest Income	(16)	(16)	(18)	(34)	(34)	(34)
Net Expenditure	**10,351**	**10,542**	**8,775**	**10,888**	**11,335**	**11,720**

Table 6 Actual costs for the first and second review periods (nominal $'000)[12]

Description	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13 Budget
Employees Benefit Expense	2,772	3,516	3,799	4,650	5,093	5,394
Accommodation Costs	268	290	313	336	358	204
Supplies and Services	2,339	4,014	4,899	5,368	5,235	4,470
Borrowing Costs	388	331	65	178	532	592
Depreciation	2,960	3,305	2,423	1,424	2,004	5,565
Total Expenditure	**8,727**	**11,456**	**11,499**	**11,956**	**13,223**	**16,225**
Less Interest Income	(295)	(331)	(70)	(153)	(175)	(170)
Net Expenditure	**8,432**	**11,125**	**11,429**	**11,803**	**13,048**	**16,055**

Table 7 Variance between approved allowable revenue and actual costs for the first and second review periods (nominal $'000)

Description	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Employees Benefit Expense	(361)	146	294	637	824	849
Accommodation Costs	3	17	31	11	(38)	(241)
Supplies and Services	(1,250)	544	1,238	684	862	14
Borrowing Costs	(67)	10	(155)	10	290	330
Depreciation	36	181	1,298	(288)	(85)	3,519
Total Expenditure	**(1,639)**	**898**	**2,706**	**1,054**	**1,854**	**4,471**
Less Interest Income	(279)	(315)	(52)	(119)	(141)	(136)
Net Expenditure **% variation**	**(1,919)** **(18.5%)**	**583** **5.5%**	**2,654** **30.2%**	**915** **8.4%**	**1,713** **15.1%**	**4,335** **37%**
Cumulative variance from approved allowable revenue **% variation**	**(1,919)** **(18.5%)**	**(1,336)** **(6.3%)**	**1,318** **4.4%**	**2,233** **5.5%**	**3,946** **7.6%**	**8,281** **13%**

42. As can be seen in Table 7 above, with the exception of 2007/08, the actual expenditure incurred by the IMO exceeded the amounts approved by the Authority. As outlined in paragraphs 14 to 17 above, the Market Rules require the IMO to submit an annual budget, including the proposed Market Fee, to the Minister for approval each year. Providing the total forecast expenditure for the review period (taking into account any over or under expenditure in the previous year) is no more than 15 per cent higher than the amount approved by the Authority for the review period, the IMO is not required to apply to the Authority to reassess Allowable Revenue.

43. As the budget proposal for each year must be submitted to the Minister by 30 April of the preceding year, the results for the preceding year will not have been finalised. Consequently, adjustments in relation to over or under expenditure will take effect over a period of time. As a result, a comparison against approved revenue in any one year may show a difference of greater than 15 per cent.

44. The majority of the variance relates to higher depreciation charges than forecast and, to a lesser extent, an increase in employee benefits costs. The higher

[12] Extracted from annual audited financial statements.

depreciation charges reflect increased capital expenditure (around $10 million) required to implement the MEP and the increased employee benefits costs reflect four additional staff required to support the MEP. These increases in funding were subject to review by the Economic and Expenditure Reform Committee (**EERC**) and Ministerial approval.

45. Implementation of the MEP commenced in 2010 following the 2009 Market Participant endorsed Market Rules Evolution Plan and the Government commissioned Verve Energy Review. Both initiatives highlighted areas for market improvement and identified issues around the lack of competition in aspects of the WEM. As a result the new Balancing Market was introduced on 1 July 2012 so that all Market Participants compete to provide Balancing and have the opportunity of competing to provide Load Following Ancillary Services (**LFAS**). As a result, the WEM system is required to operate at high availability and is supported on a 24 hour a day basis by both IT and Market Operations personnel.

46. The costs of the MEP were not included in Approved Allowable Revenue for the Second Review Period. The MEP budget and funding arrangements were approved by the Treasurer on 15 December 2010. As the impact on annual budgets for the second Review Period was less than 15 per cent higher than the amounts determined by the Authority, the IMO was not required to apply to the Authority to approve an adjustment to Allowable Revenue.

47. The Authority notes that the IMO is required to publish its Operational Plan each year which sets out comprehensive details of the IMO's planned activities for the coming year, including the budget, and a review of the previous year's performance. The Operational Plan is approved by the Minister of Energy each year. The Authority also notes that the IMO is required to publish its audited financial statements each year which provide details of actual expenditure incurred and revenue received.

48. Although the annual budgeting process is not a matter that it is required to consider, the Authority is of the view that transparency would be increased by the IMO summarising significant changes to the expenditure approved by the Authority and including this with the information published with the annual Market Fee. In addition, a summary of previous years' unders and overs, together with details of forecast energy, would enable Market Participants to better understand how the annual Market Fee has been arrived at. The Authority notes that such information is included in the annual Operational Plan and financial statements but considers a summary provided together with the published Market Fee would be more accessible to Market Participants. The Authority also considers it would be beneficial if the IMO retained previous years' summaries on its website so Market Participants could monitor trends over time.

49. Although the increased expenditure requirements in relation to the MEP underwent extensive approval processes, it does not appear there was any formal involvement of Market Participants in evaluating the expenditure proposals. Rule Change RC_2011_02 has expanded the Authority's determination of Allowable Revenue for the Third Review Period to include Forecast Capital Expenditure. Any change to Forecast Capital Expenditure greater than 10 per cent must also be approved by the Authority. This should provide greater opportunity for Market Participants to comment on any significant changes to expenditure proposals prior to them being approved.

Costs of the Third Review Period

Governance

50. The Authority requested GBA to undertake a review of the IMO's governance framework. GBA reviewed the policies that the IMO uses to:

- set expenditure budgets and develop annual operating plans;
- formulate new projects and programs and approve them for implementation;
- control the actual cost of approved projects and programs; and
- forecast its capital and operating expenditure requirements for the third review period.

51. GBA examined key projects and programs, taken from those implemented during the second review period and those proposed for the third review period to evaluate how well governance principles have been applied in practice. GBA gave particular consideration to:

- the alignment of the policies, procedures and processes for the management of expenditure with the IMO's overall business objectives;
- the extent to which the IMO's policies and procedures are consistent with good practice; and
- the extent to which the IMO's policies and procedures are implemented in practice.

52. The review by GBA also took account of the requirements set out in the Market Rules and IMO Regulations in relation to expenditure approvals, budget processes and reporting requirements and reviewed the following internal documents:

- Internal procedure: Determination of IMO Budget (August 2007)
- Board Manual
- Internal Procedure on Fees (March 2012)
- Accounting Policies and Procedures Manual

53. GBA noted that the IMO's annual financial statements are required to be audited by the State Auditor General and must be submitted to the Minister who is required to table the reports in the State Parliament. In addition, the IMO is subject to market audits which cover compliance by the IMO with the Market Rules. The IMO is also required to attend budget estimate hearings arranged by the State Parliament which scrutinise proposed budgets for coming years as well as prior year financial performance.

54. Based on its review of processes and procedures combined with sample reports provided by the IMO, GBA concluded that the IMO Regulations, the Market Rules and the IMO's internal procedures combine to provide a strong governance framework in respect of the IMO's budgetary formulation and that it has sound procedures, processes and practices in place to manage its budget expenditure.

55. GBA also undertook a review of project approvals and management. GBA noted that, while the IMO carries out its IT operations in a reasonably well structured manner, significant improvements could be made by documenting overarching IT

project governance guidelines and incorporating post implementation reviews as part of its standard IT project implementation process.

56. GBA examined the process surrounding the awarding and management of the major IT contract to maintain and support WEMS. As the contract is about to be renewed, GBA considered both the award of the original contract and the processes surrounding the current tender process. The contract was particularly significant as much of the work related to capital improvements to the WEMS system. GBA did not identify any anomalies in governance or process in relation to either the original contract or the current tender process.

Recurrent Costs

57. The annual costs proposed by the IMO for the third review period are set out in Table 8 below with a comparison against expenditure during the second review period.

Table 8 IMO proposal for the Third Review Period compared with actual costs for the Second Review Period (nominal $'000)

	Second Review Period			Third Review Period		
Description	**2010/11 (actual)**	**2011/12 (actual)**	**2012/13 (f/cast)**	**2013/14 (f/cast)**	**2014/15 (f/cast)**	**2015/16 (f/cast)**
Employee Costs $'000	4,650	5,093	5,394	5,568	5,851	6,102
Accommodation Costs $'000	336	358	204	715	753	784
Supplies and Services $'000	5,368	5,235	4,470	5,065	4,952	4,984
Total before borrowing and depreciation $'000	**10,354**	**10,686**	**10,068**	**11,348**	**11,556**	**11,170**
% change		**3.2%**	**-5.8%**	**12.7%**	**1.8%**	**-3.3%**
Borrowing Costs $'000	178	532	592	582	391	304
Depreciation $'000	1,424	2,004	5,565	3,945	4,369	4,563
Total Expenditure	**11,956**	**13,223**	**16,225**	**15,875**	**16,315**	**16,736**
Less Interest Income	(153)	(175)	(170)	(50)	(50)	(50)
Net Expenditure	**11,803**	**13,048**	**16,055**	**15,825**	**16,265**	**16,686**
Overall % change		***10.5%***	***23%***	***(1.4%)***	***2.8%***	***2.6%***

58. The total annual costs proposed by the IMO for the Third Review Period are broadly similar in comparison to total budgeted expenditure in the 2012/13 budget. The following points are noted:

- Actual and forecast employee costs have increased steadily over the second and third review period reflecting both increases in staffing levels and salary increases.
- Forecast accommodation costs show a step change for the third review period reflecting a move to new premises.
- Supplies and services costs are broadly steady over the second and third review period.
- Depreciation increases significantly in 2012/13 followed by a reduction in 2013/14 before rising again in 2014/15 and 2015/16.

59. A number of submissions commented on forecast expenditure. Griffin Power, Alinta Energy and the WA Independent Power Association consider that more work needs to be done in terms of cost benefit analysis and justification of further developments:

- Griffin Power has concerns that the improvements made by the IMO and System Management are not being adequately evaluated to determine the success in delivering net benefits to the market and compared against any forecast cost-benefit analysis to determine their effectiveness. It considers that this needs to be done before commencing further development and to support any further claims for related costs.
- Alinta Energy notes that further market design developments planned to occur during the next three years are likely to lead to further increases in fees. Alinta Energy considers that only those costs which are outweighed by a significant benefit to the market should be incurred and that an overarching review of the WEM should be undertaken to ensure an effective market design that does not result in unnecessary costs and provides appropriate investment signals. Alinta Energy also supports post-project implementation review to be conducted to ensure that the anticipated benefits have been realised for industry following the commencement of initiatives such as the balancing market.
- The WA Independent Power Association notes the assumptions underlying the IMO's proposed increases are outlined in its submission, but there is no analysis of whether they are justified on the basis of the operator "acting efficiently" or how the expenditure contributes to the performance of the IMO in delivering the services efficiently at the "lowest practically sustainable cost".

60. Whilst the Authority notes these are valid issues, cost benefit analysis of the design of the wholesale market is not a matter for this decision. For the purposes of this decision, the Authority is required to determine whether the IMO's forecast costs for delivering the services it is required to provide are efficient. The Authority intends to give further consideration to the efficiency of the design of the energy market in its next triennial report to the Minister on the effectiveness of the WEM pursuant to section 128 of the *Electricity Industry Act 2004*.

61. Griffin Power and Synergy consider that the investment in new systems should eventually lead to lower costs going forward:

- Griffin Power considers that the bulk of project development in the WEM has been done and that the maintenance of existing systems, development of a competitive Spinning Reserve market, and the move to a closer-to-real time market should not be as expansive, or expensive, as the MEP. Griffin Power considers the logical result going forward from such major investment in new systems should lead to more automation with a lower requirement for staff going forward but notes the IMO's staffing levels are forecast to remain relatively stable over the Review Period. Griffin Power queries whether the market improvement projects are actually resulting in a lower cost to supply energy to end users.
- Synergy notes that a significant portion of the increases in Allowable Revenues for the IMO partly reflects costs resulting from the implementation of the Gas Information Services (**GIS**)[13] However, as the depreciation charges for the new systems pass through the cost base, Synergy expects minimal real increases in costs or even a reduction in subsequent review periods.

[13] This appears to be a misunderstanding on Synergy's part as the cost for GIS is provided separately as explained in the IMO's submission.

62. Community Electricity considers that when assessing Allowable Revenue it should be born in mind that the "respective costs are an infinitesimal proportion of the total cost of supply to an end-user, and a very small proportion of the net reductions achieved via the two new markets". Community Electricity considers it is important that the costs of the new responsibilities should be properly funded with an emphasis on encouraging fit-for-purpose innovation, rather than impeding it through "penny pinching".

63. GBA undertook a review of the operating cost forecast preparation together with an assessment of whether the forecasts include 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. In its opinion the operating and capital expenditure forecasts have been developed using sound forecasting principles, taking the 2012/13 budget year as a base year and adding/removing incremental expenditure items. GBA notes:

- Costs appear to have been allocated between gas[14] and electricity operations in a consistent and transparent manner based on a sound methodology.
- Costs have been allocated between the three service categories that the IMO is required to provide in a consistent and transparent manner based on a sound methodology.
- Recurring costs have been escalated in a reasonable manner taking into account general cost and labour price inflation factors.
- The recurring costs included in the forecast are reasonable and show some productivity improvements due to the integration of gas and electricity operations within the business.
- The step change in accommodation costs associated with the lease of the IMO offices may have been reduced if a location outside of the central Perth CBD area had been selected. GBA acknowledges that there may be qualitative advantages in locating the offices in the CBD including convenience for other market participants and attractiveness for the retention of staff but considers, from a pure cost efficiency basis, the additional lease costs have not been fully justified.

64. Each of the specific expenditure lines is considered in more detail below.

[14] In accordance with a Government decision announced in May 2011, the IMO is now responsible for the provision of gas information services and is preparing to launch a gas bulletin board in August 2013. This work is not funded through the allowable revenue approved by the Authority so any costs in relation to it have been excluded from the Allowable Revenue proposal.

Employee Benefit Costs

Table 9 IMO proposal for the third review period compared with actual costs for the second review period

Description	Second Review Period			Third Review Period		
	2010/11 (actual)	2011/12 (actual)	2012/13 (budget)	2013/14 (f/cast)	2014/15 (f/cast)	2015/16 (f/cast)
Employee Benefit Costs (nominal $'000)	4,650	5,093	5,394	5,568	5,851	6,102
% change		9.5%	5.9%	3.2%	5.1%	4.3%
Employee Benefit Costs (real 2012/13 $'000)	5,064	5,337	5,394	5,303	5,307	5,271
% change		5.4%	1.1%	(1.7%)	0%	(0.7%)
FTE's	28.7	36.5	38.0	37.5	37.5	37.5

65. The IMO's proposal includes two new positions:

- An additional position for a junior lawyer required as a result of the MEP changes and the associated increase in market compliance monitoring activities, additional rule drafting and commercial legal responsibilities. The IMO considers the role will also assist in reducing the current level of key person dependency risk.
- An additional graduate position to assist in alleviating the difficulty in recruiting suitably qualified and experienced analysts and market operators and retaining them in a competitive market.

66. However the proposed FTE numbers reduce from 38.0 in 2012/13 to 37.5 for the Third Review Period due to a number of positions being allocated to the provision of gas information services.

67. In its report to the Authority, GBA states that it considers the two additional resources requested represent efficient use of additional resource practices given:

- The scope/scale increase in compliance required with the introduction of new balancing and LFAS markets; and
- The employee turnover statistics provided by the IMO at GBA's request, which demonstrates a risk of loss of key personnel at senior levels and noting that appointees to all previous graduate positions have remained with the IMO and taken up roles vacated as a result of staff turnovers.

68. GBA also notes that the expansion of IMO activities into gas has allowed staff efficiencies to be achieved across both markets with the result being that there is only an estimated 0.55 per cent real increase in average employee benefit costs across the Third Review Period compared with the Second Review Period, even with the additional scope of operations under the new balancing and LFAS markets.

69. The IMO has applied annual salary increases based on escalation rates developed as a result of a specialist remuneration consultant report commissioned by the Board and provided as part of the IMO's submission.[15]

[15] *Work Value & Remuneration Policy Review – Key Positions Independent Market Operator*, Mercer Consulting, 4 October 2012.

70. In its report to the Authority, GBA notes that the key economic forecasts included in the Western Australian State Budget 2012-13 Overview Paper incorporate Wage Price Index (WPI) increases of 4.5 per cent over each year of the Third Review Period. This is slightly lower than the weighted average salary increase proposed by the IMO (approximately 4.7 per cent). GBA notes that the IMO Board approved the forecast salary increases on the basis that the skill level of the IMO is likely to be on the higher end of the labour cost spectrum within an area where there are competing demands and that the turnover of staff in key positions is reflective of this.

71. The Authority notes the information provided by the IMO and the advice provided by GBA and considers the proposed employee benefits costs to be reasonable.

Accommodation Costs

72. Accommodation costs relate to the costs of leasing the IMO offices in Perth together with cleaning, electricity, maintenance and car parking associated with those offices.

Table 10 IMO proposal for the Third Review Period compared with actual costs for the Second Review period

Description	Second Review Period			Third Review Period		
	2010/11 (actual)	2011/12 (actual)	2012/13 (f/cast)	2013/14 (f/cast)	2014/15 (f/cast)	2015/16 (f/cast)
Accommodation Costs (nominal $'000)	336	358	204	715	753	784
% change		6.5%	(43%)	250%	5.3%	4.1%
Accommodation Costs[16] (real 2012/13 $'000)	352	365	372	688	688	688
% change		3.6%	1.9%	185%	0%	0%

73. The IMO has forecast a significant increase in accommodation costs associated with the IMO's office relocation, brought about by the expiry of its previous lease. GBA noted that the IMO's proposal and supporting documentation requested by it, detailed significant difficulties in securing office accommodation in Perth to meet the IMO's specific requirements. The final outcome resulted in:

- A leased area increase to 860m^2, compared to an area of 477 m^2 under the previous lease. The IMO considers the increase in space is necessary to properly accommodate the IMO staffing needs and enable a more client friendly design layout incorporating a conference room capable of hosting market participant events and training activities.
- A rental for the new lease of $660 per m^2 compared to the previous rental rate of $396 per m^2 (an increase of 67 per cent). The previous lease rental rates were "locked in" when the lease for Governor Stirling Tower was negotiated by the Government in 2002. The IMO benefitted from a lower rental rate when it moved into Level 3 of Governor Stirling Tower in April 2008 that was substantially discounted to the prevailing market rate.

[16] For comparison purposes the accommodation cost in 2012/13 has been aligned with those in earlier years of the Second Review Period.

74. The new lease took effect from 1 July 2012 but, due to the combination of a lease incentive in the form of a contribution towards fit-out costs and a delay in vacating the premises by the previous tenant, the full increase in costs will not come into effect until the first year of the third Review Period.

75. The forecast increase in relation to accommodation is net of costs allocated to gas information services. The sharing of costs with GIS results in the forecast annual accommodation costs included in the IMO's proposal for Allowable Revenue being approximately $100,000 less than they otherwise would be.

76. In its report to the Authority, GBA notes that whilst the IMO carried out extensive property searches and was left with few choices for accommodation matching its search criteria, less restrictive criteria could have resulted in a lower cost outcome. Whilst the IMO outlined qualitative reasons for the choice of a prime CBD location, this may not have been the most efficient choice given that fringe CBD real estate area rates are substantially less than those in the main Perth CBD area. Nevertheless, the IMO is now contractually committed to incurring the lease costs and has made an investment in fitting out the accommodation.

77. The Authority notes the advice of GBA that restricting the search criteria to a prime CBD location may not have led to the most efficient choice by the IMO. However, the IMO is now committed to the lease and the forecast cost is based on that lease. The Authority notes that although the percentage increase is high, the increase in value per annum is around $300,000, which will not, in itself, significantly affect the overall level of Market Fees.

78. The Authority expects that future decisions of this nature should consider a range of cost options together with a cost benefit analysis to support the option selected.

Supplies and Services

79. The IMO's forecast of supplies and services costs incorporates information technology expenditure, accounting, auditing, human resources, administrative costs, insurance, travel, training and consultant expenditure in support of service delivery.

Table 11 IMO proposal for the third Review Period compared with actual costs for the second Review Period

Description	Second Review Period			Third Review Period		
	2010/11 (actual)	2011/12 (actual)	2012/13 (f/cast)	2013/14 (f/cast)	2014/15 (f/cast)	2015/16 (f/cast)
Supplies and Services (nominal $'000)	5,368	5,235	4,470	5,064	4,952	4,984
% change		(2.5%)	(14.6%)	13.3%	(2.2%)	0.6%
Supplies and Services (excluding GST adjustment of $543,000 in 2013/14) (real 2012/13 $'000)	5,622	5,334	4,470	4,434	4,783	4,731
% change		(5.1%)	(16.2%)	(0.8%)	7.9%	(1.1%)

80. After adjusting for a one-off item in 2013/14 in relation to GST, forecast costs in real terms are fairly constant. The IMO provided supporting documentation to the

Authority which details forecast costs of supplies and services at a highly disaggregated level. These costs are summarised in Table 12 and compared with the amounts approved for the Second Review Period in 2012/13.

Table 12 IMO proposal for the Third Review Period compared with budgeted costs for 2012/13 (nominal $'000)

Description	2012/13 (budget) $'000	2013/14 (f/cast) $'000	2014/15 (f/cast) $'000	2015/16 (f/cast) $'000
IT Support $'000 *% change*	2,146	2,181 *1.6%*	2,261 *3.7%*	2,269 *0.3%*
Corporate Support $'000 *% change*	957	1,108 *15.8%*	1,132 *2.2%*	1,196 *5.6%*
Legal and Compliance $'000 *% change*	288	295 *2.4%*	778 *263%*	481 *(38%)*
Market Operations $'000 *% change*	59	85 *44%*	86 *1.2%*	88 *2.3%*
Market Administration $'000 *% change*	759	597 *(21.3%)*	387 *(35%)*	573 *48%*
System Planning $'000 *% change*	260	255 *(1.9%)*	308 *20.7%*	377 *22.4%*
ERA GST Recovery $'000 *% change*	-	543	-	-
Total	**4,470**	**5,064**	**4,952**	**4,984**

81. The IMO has escalated forecast costs by 1.75 per cent per annum except where there are contract specific escalation provisions. The indexation factor was provided by State Treasury as a general indexation factor for non-salary costs, across each of the three years of the Third Review Period. The Authority notes this is below current CPI forecasts so results in decreases in costs in real terms.

82. IT support is the largest line item and incorporates:

- Wholesale Electricity Market System (WEMS) - relates to the support of the WEMS system as a cost of approximately $784,000 per annum;
- Settlements maintenance and support;
- Data centre hosting by specialist service providers;
- High speed fibre links between head office, production and backup data centres;
- Specialist database support;
- IT desktop and infrastructure support; and
- Telecommunications and internet access costs.

83. Over the Third Review Period, annual IT support costs are forecast to increase in line with the non salary cost escalation factor of 1.75 per cent. The 2014/15 forecast costs include a one-off increase of $40,000 in relation to tender management costs. The IMO outsources dedicated resources to ensure that all aspects of contract management are professionally managed and due process followed. The IT Infrastructure Maintenance and IT Security Audit contracts are

due for review in 2014/15 which will lead to higher tender management costs in that year.

84. Corporate support costs are forecast to increase by above the general rate of escalation in 2013/14 and 2015/16 due to:

- An increase in staff training costs of approximately $50,000 per annum compared with the 2012/13 budget. The IMO has based its forecast on technical advice from the Australian Institute of Management which supports a training budget of approximately three per cent of payroll. The Authority notes that the annual budgeted amounts for the Third Review Period are in line with actual expenditure in 2011/12.
- An increase in temporary staff costs of approximately $45,000 per annum compared with the 2012/13 budget. The IMO notes that the 2012/13 budget is based on the Second Review Period proposal which has been found to be inadequate in 2010/11 and 2011/12. Consequently the forecast for the Third Review Period has been increased, though the Authority notes it is still about $50,000 less than the amount actually incurred in 2011/12.
- The 2015/16 forecast includes an increase of $55,000 in relation to accounting services to assist with formulation of the next three year ERA funding submission.

85. Legal and compliance costs incorporate a one-off full operational compliance audit planned for the IMO in 2014/15 ($600,000) and System Management in 2015/16 ($300,000). A full operational audit was recommended by PA Consulting in its 2012 market audit report.

86. Market administration costs and system planning costs are budgeted to fluctuate over the Third Review Period in line with planned cyclical reviews required by the Market Rules including an outage planning review, a review of ancillary services, a review of the capacity credit allocation methodology to intermittent generators, a review of the Maximum Reserve Capacity Price (**MRCP**) methodology, and a review of the weighted average cost of capital calculation of the MRCP.

87. The Authority considers the analysis provided by the IMO to support its forecast supplies and services expenditure to be detailed and reasonable. Despite a number of new costs and escalation in prices, budgeted expenditure declines in nominal terms during the Second and Third Review periods reducing from $5,368 million in 2010/11 to $4,984 million in 2015/16.

GST Adjustment

88. The 2013/14 forecast includes an amount of $543,000 in relation to a GST payment owed by the IMO to the Australian Taxation Office (**ATO**). Due to a misunderstanding, from market start to June 2012, GST was incorrectly applied to the Regulator Fees by the IMO when collecting it from Market Participants on behalf of the Authority. A ruling from the ATO has confirmed that the Regulator Fee should have been exempt from GST from market start and the IMO is required to repay input credits previously claimed by it. The ATO has agreed to repayment arrangements for the GST recovery amount over the course of the first year of the Third Review Period. The amount owing includes interest of approximately $44,000.

89. The additional funds resulting from GST being added to the costs advised by the Authority were taken into account when adjusting the annual Regulator Fee for

unders and overs as required by Market Rule 2.24.5A. Consequently, the Regulator Fees collected from Market Participants during the First and Second Review Period were 10 per cent less than the actual costs.

90. The IMO has provided legal advice which states that, although the GST recovery amount relates to a tax issue from previous financial years, the repayment arrangement with the ATO relates to the current and future financial years so, on that basis, can be treated as forming part of the IMO's forward looking costs.

91. The Authority notes the legal advice provided by the IMO and agrees that it is appropriate for this item to be included in costs for the Third Review Period. As outlined above, Regulator Fees collected from Market Participants were 10 per cent less than they should have been, so this adjustment corrects previous undercharging. The inclusion of interest payable to the ATO is also appropriate as Market Participants have had the benefit of deferred payment in relation to prior year costs.

Capital Costs

92. Depreciation and borrowing costs in the IMO's proposed allowable revenue for the second review period include:

- Amounts arising from capital projects planned for the third review period; and
- Amounts arising from actual and planned capital expenditures in the First and Second Review Period that are carried over into the Third Review Period according to depreciation schedules.

Capital Projects for the Third Review Period

93. The Authority has assessed the IMO's proposed depreciation and borrowing costs by first considering whether the capital projects planned for the Third Review Period represent expenditures that are consistent with the IMO acting efficiently, seeking to achieve the lowest practically sustainable cost of delivering services, and secondly verifying the calculation of amounts of depreciation and borrowing costs.

94. All of the capital expenditure proposed by the IMO for the Third Review Period relates to IT expenditure. The expenditure forecasts are derived from the IMO's key strategic IT planning document, the IT Roadmap, which was developed in late 2012.

95. GBA has reviewed the IT Roadmap and notes that the IMO states it is the primary strategic planning tool that it uses to ensure that the planning, delivery, management and use of IT systems optimally supports its business. The document was submitted to the Minister for Energy for endorsement in October 2012, for consideration as part of the State capital budget for 2013/14 onwards.

96. A functional summary of the capital expenditure proposed for the third Review Period together with the expected capital expenditure for 2012/13 is summarised in Table 13 below.

Table 13 IMO Proposed Capital Expenditure (nominal $'000)

Description	2012/13 (budget) $'000	2013/14 (f/cast) $'000	2014/15 (f/cast) $'000	2015/16 (f/cast) $'000
Corporate Support (Non-Market Systems)	170	131	128	177
Wholesale Electricity Market (**WEM**) Systems	911	654	385	249
Settlements	316	368	70	35
Infrastructure Support (Market Systems)	849	972	1,000	824
Data/Information Provision	685	459	402	423
MEP Transitional Support	750	0	0	0
Total	**3,681**	**2,583**	**1,984**	**1,707**

97. The roadmap highlights that the change to WEM operations has had a significant impact on the core WEMS ABB System as they were not designed for such a dynamic market. The roadmap considers whether to:

- Initiate a project to redevelop the ABB components of WEMS;
- Replace WEMS entirely with a suitable replacement product (or project); or
- Work within limitations of the current system, implementing changes to reduce areas of technical risk until the next major investment point.

98. The decision was to proceed with the third option as representing the best compromise given the high level of capital investment required to implement either of the first two options.

99. The roadmap proposes to replace the current core market systems in 2016/17 (or in the event of a major change to the WEM design) and as a result the capital expenditure budget reflects a declining investment in core WEM systems. The IMO has not incorporated any major capital expenditure items in its proposal. Most of the projects are of a smaller incremental nature with the largest having a value of around $250,000 per year and relates to the replacement of IT infrastructure. The focus of the forecast capital expenditure is to:

- continue to maintain existing systems to ensure they remain current and supported by their vendors;
- extend applications to support market participants that have a varying degree of technical sophistication;
- maintain the strategic objective of enhancing market transparency; and
- develop and implement integrated compliance and monitoring tools in the WEM systems.

100. The IMO notes that the forecast has been prepared on a business as usual basis but that it is possible during the Third Review Period that Market Participants will request the IMO to undertake activity that was not budgeted for. Any change to expenditure will need to be authorised by the Minister during the annual budgeting process. If an IMO budget proposal is likely to result in capital expenditure (over the Review Period) being ten per cent greater than the capital expenditure

approved by the Authority, the IMO is required to apply to the Authority to approve the adjusted Forecast Capital Expenditure.

101. In its report to the Authority, GBA states that, as a whole, it found the IT roadmap to be a well formulated document and the approaches and capital expenditure items incorporated within it to be both reasonable from both a strategic and tactical perspective.

102. GBA's report notes that the IMO has included $65,000 in relation to possible changes in the reserve capacity auction process and in the operation of the STEM market. GBA suggests that as these items are speculative in nature in terms of both the timing and scope of the requirement, the expenditure should be removed. The Authority agrees that speculative expenditure should not be included but, as the amount in question is less than $100,000, has not adjusted Forecast Capital Expenditure.

103. Taking account of the information provided by the IMO and advice from GBA, the Authority considers the approach taken by the IMO to be reasonable and an efficient solution, but notes improvements could be made by documenting overarching IT project governance guidelines and incorporating post implementation reviews as part of the standard IT project implementation process.

Depreciation Allowances

104. The Authority has reviewed the IMO's proposed depreciation costs over the Third Review Period by:

- establishing the accounting procedures applied by the IMO to different asset classes to derive depreciation allowances and considering whether these procedures accord with generally accepted accounting principles; and
- performing a check on the IMO's calculation of depreciation amounts.

105. Two submissions made specific comments in relation to depreciation:

- Griffin Power has concerns regarding the relationship between the assets being depreciated and the resultant claim for depreciation, particularly the appropriateness of the depreciable assets attributable to Market Participants. Griffin Power is also concerned as to whether labour has been capitalised or not and, if so, that it has been treated properly in depreciation.
- Synergy notes that the IMO and System Management have adopted different asset lives and suggests that, given the similar nature of the assets, a common write-off period should be adopted reflecting useful asset life.

106. The IMO's forecast depreciation, capital expenditure and asset written down value for the Third Review Period together with actual amounts during the second review period are shown in Table 14 below.

Table 14 IMO Depreciation for the second and third review periods (nominal $'000)

Description	Second Review Period			Third Review Period		
	2010/11 (actual)	2011/12 (actual)	2012/13 (budget)	2013/14 (forecast)	2014/15 (forecast)	2015/16 (forecast)
Depreciation:						
Office Equipment	12	11	6	-	-	-
Computer Equipment	167	216	244	386	577	725
Office Fit-out	157	154	122	104	105	105
Furniture and Fittings	3	3	3	9	9	7
Computer Software[17]	1,085	1,620	5,189	3,444	3,677	3,725
Total Depreciation	1,424	2,004	5,565	3,945	4,369	4,563
Capital Expenditure	5,903	8,745	3,681	2,586	1,984	1,707
Asset Written Down Value of Plant and Equipment and Intangible Assets (including Work in Progress)	6,890	13,631	11,748	10,386	8,001	5,145

107. Depreciation has increased significantly in 2012/13 as a result of capital expenditure during the Second Review Period in relation to the MEP. The 2012/13 budget on which the 2012/13 Market Fees were based assumed an asset life of three years. Subsequently, the IMO has decided to adopt an asset life of five years in relation to the MEP software resulting in lower annual deprecation forecasts for computer software. Consequently the actual depreciation for 2012/13 will be lower than forecast and an adjustment will be required to the 2013/14 Market Fee.

108. In its report to the Authority, GBA considers that the depreciation provided for in the allowable revenue submission is reasonable compared to the historical capital expenditure incurred. GBA considers the proposed extension of the IT asset lives to five years is sound and aligned with strategic objectives set out in the IT roadmap for the core market systems IT assets.

109. However, GBA states it is unable to form an opinion within the timeframe available and with the information available to it, as to the efficiency of the capital expenditure during the Second Review Period. GBA notes a $1.5 million overrun in the capital expenditure costs of the MEP project compared with the amount originally approved by the Minister of $8.9 million. Although the IMO indicates this was driven by delays in market implementation as a result of System Management delays, in GBA's view, the timeframe for the implementation of the required IT systems was very optimistic and a more considered overall planning process may have resulted in lower cost outcomes and a similar delivery timeframe.

110. GBA also undertook a review of IT Project Governance. Based on its review, GBA notes that, whilst many aspects of IT governance appear to be approached in the correct manner, there is a lack of coherent, well documented, overarching IT project governance guidelines within the IMO. Given the difficulties experienced with the MEP implementation, GBA notes it would have expected that a post implementation review would be carried out both from an internal IMO perspective and a combined System Management/IMO perspective. GBA considers post implementation reviews are a key element of the governance of major IT projects.

[17] Includes MEP.

111. The Authority notes a cost benefit analysis was undertaken by the Sapere Research Group (**Sapere**), at the commencement of the MEP program, designed to quantify the costs and benefits that would flow to the market from the proposed new Balancing Market. As part of its submission for Allowable Revenue, the IMO commissioned Sapere to review market outcomes, and quantify the benefits to the market, based on the first four months of competitive Balancing Market operation.

112. Sapere was only able to evaluate two of the four benefits highlighted in the original cost benefit analysis due to the limited data available. The Sapere report estimates that the benefits already delivered are in the order of $5.1 million and has suggested that the benefits that would accrue from the two benefits able to be assessed will be approximately $15.3 million in the first full year of operation. The original cost benefit analysis indicated benefits of between $7.8 million and $9.6 million. The report does not take account of the increased costs to implement the MEP.

113. The Authority notes that the Sapere report supports the view that the benefits of the MEP are at, or above, the levels originally forecast. However, it is concerning that the IMO does not intend to carry out a post implementation review of the MEP implementation. The Authority considers a full project review should be carried out together with a full cost benefit analysis (taking account of costs incurred by all parties) to give Market Participants confidence in developments to date.

114. For the purposes of this decision, the Authority is only required to determine forecast depreciation charges. Taking account of actual expenditure incurred and depreciation rates used, the Authority is satisfied that the proposed depreciation forecasts are reasonable.

Borrowing Costs and Interest Income

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

116. Projected borrowing costs over the third review period were calculated on existing funding facilities provided by the WATC, projected capital expenditure and advice on funding rates provided to the IMO by the WATC. The projected new loans assume that 100 per cent of capital expenditure is financed by debt and that the loans are repaid over five years. The interest rate on new loans is projected to be 4.75 per cent (which includes 0.75 per cent for the State Government Guarantee Fee). Interest rates on existing loans vary between 3.08 per cent to 5.67 per cent.

117. The IMO has deducted from forecast costs an amount of forecast revenue from interest on cash deposits. The forecast interest income of $50,000 in each year of the Third Review Period is based on the cash balance in September 2012 of about $1.3 million and interest rates applying at that time of about 3.25 per cent.

118. A summary of the IMO's proposed borrowing costs and interest income is shown in Table 15 below.

Table 15 IMO Borrowing Costs and Interest Income (nominal $'000)

Description	Second Review Period 2010/11 (actual)	2011/12 (actual)	2012/13 (budget)	Third Review Period 2013/14 (f/cast)	2014/15 (f/cast)	2015/16 (f/cast)
Borrowing Costs	178	532	592	582	391	304
Interest Income	(153)	(175)	(170)	(50)	(50)	(50)
Net Interest Costs	25	357	422	532	341	254

119. The Authority notes the Market Rules require that, for the purposes of determining allowable revenue, recurring expenditure requirements and payments are recovered in the year of expenditure and 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.

120. Consequently, the only forecast expenditure which is not funded when incurred relates to any undepreciated amounts of capital expenditure. As described above, the borrowing costs proposed by the IMO assume 100 per cent of capital expenditure is financed by borrowing and that the loans are repaid over five years. This is not precisely the same as calculating borrowing costs in relation to undepreciated capital expenditure. However, given that the loan repayment periods are generally 5 years, which is similar to the average rate of depreciation, it is likely to produce a similar answer.

121. The Authority also notes that, if the Allowable Revenue forecasts prove to be accurate, then income received from Market Fees will match expenditure and there should be little, if any, cash balances. Arguably, on that basis, there is no need to include forecast interest received in the Allowable Revenue projections. However, the Authority recognises that there have been overs and unders in the past and are likely to be more in the future.

122. To test the reasonableness of the IMO's forecast net interest costs the Authority has calculated the implied interest rate based on the undepreciated value of capital expenditure each year. The results are set out in Table 16 below.

Table 16 Implied Interest Rates

Description	Second Review Period 2010/11 (actual)	2011/12 (actual)	2012/13 (budget)	Third Review Period 2013/14 (f/cast)	2014/15 (f/cast)	2015/16 (f/cast)
Net Interest Costs (nominal $'000)	25	357	422	532	341	254
Undepreciated Capital Expenditure at Beginning of Year (nominal $'000)	2,411	6,890	13,631	11,748	10,386	8,001
Implied Interest Rate	1%	5.2%	3.1%	4.5%	3.3%	3.2%

123. Taking account of the implied interest rate values compared with the rates advised by WATC to the IMO, the Authority considers the IMO's proposed borrowing costs and interest income to be reasonable.