

# Economic Regulation Authority

## Assessment of Allowable Revenue - Independent Market Operator

Final

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Perth:  
216 St Georges Terrace  
Perth Western Australia  
6000  
GPO Box 2753 Perth  
Western Australia 6001  
Telephone (08) 9476  
3144  
Facsimile (08) 9322  
1022

Sydney:  
MLC Centre  
Martin Place Sydney  
New South Wales 2000  
Telephone (02) 9238 6881  
Facsimile (02) 9238  
7633

Melbourne:  
Level 2, 520 Collins Street  
Melbourne Victoria 3000  
Telephone (03) 8371  
5660  
Facsimile (03) 8371  
5650

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# 1

## Scope

Stamfords Advisors Consultants (“Stamfords”) has been engaged by the Economic Regulation Authority (“the Authority”) to provide an assessment of the application for allowable revenue for the Independent Market Operator (“IMO”) of the Wholesale Electricity Market (“the Market”).

This advice is in accordance with the Authority’s requirement, under the Wholesale Electricity Market Amending Rules (December 2006) (“Market Rules”), to determine the appropriate revenue to be recovered by the IMO (“Allowable Revenue”).

On 30 November 2006, the IMO submitted Allowable Revenue applications to the Authority for approval in accordance with clauses 2.22.3(c) of the Market Rules.

To assess the appropriateness of the Allowable Revenue application, Stamfords conducted an analysis of the IMO’s applications. Further, Stamfords has benchmarked the IMO against similar operatives in other jurisdiction in accordance with clause 2.22.12(c).

Stamfords has also considered public submissions made by Alinta Sales Pty Ltd (“Alinta”) and the Electricity Retail Corporation trading as Synergy (“Synergy”) in accordance with clause 2.22.3(b) of the Market Rules.

A summary of Stamfords proposed amendments and recommendations regarding the IMO’s Allowable Revenue application are provided in section 8 of this report.

# 2

## Background

### 2.1 Deregulation of the Western Australian Electricity Industry

The operation and regulation of the Western Australian electricity industry is governed by the Electricity Industry Act 2004 (“Act”).

Pursuant to section 122(1) of the Act, the *Electricity Industry (Wholesale Electricity Market) Regulations 2004* (“Regulations”) provide for the establishment of a wholesale electricity market in relation to the wholesale supply of electricity in the South West Interconnected System (“SWIS”).

Regulation 5 of the Regulations provides for the establishment of the Market Rules, relating to the operation of the SWIS.

The Market commenced on 21 September 2006, pursuant to regulation 6(3) of Regulations and clause 1.8.2 of the Market Rules.

The objectives of the Market, as stated in clause 1.2.1 of the Market Rules, are:

- to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the SWIS;
- to encourage competition among generators and retailers in the SWIS, including by facilitating efficient entry of new competitors;
- to avoid discrimination in the Market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- to minimise the long-term cost of electricity supplied to customers from the SWIS; and
- to encourage the taking of measures to manage the amount of electricity used and when it is used.

## 2.2 Establishment and Functions of Independent Market Operator

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

Under regulation 21(1) of the *Electricity Industry Regulations (Independent Market Operator) Regulations 2004*, the IMO has the functions conferred on it by these regulations (regulation 21(2)), the *Electricity Industry (Wholesale Electricity Market) Regulations 2004* (regulation 12), and the Market Rules (clause 2.1.2).

Section 2.1.2 of the Market Rules provides a detailed listing of the functions of the IMO, which are as follows:

- to administer the Market Rules;
- to operate the Reserve Capacity mechanism, the Short Term Energy Market (“STEM”) and the balancing process;
- 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 administer tender processes for Network Control Services where required by the Market Rules and to enter into Network Control Service Contracts;
- 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.

# 3

## Allowable Revenue Requirements

The revenue earned by the IMO is specifically outlined in the Market Rules to be revenue that can be recovered from Market Participants for the conduct of IMO services.

In accordance with clause 2.22.3 of the Market Rules, the IMO must seek the approval from the Authority of its Allowable Revenue for the 3 year period 2007/08 to 2009/10 ("Review Period"), for the following services:

- market operation services, including the IMO's operation of the Reserve Capacity market, STEM and Balancing and the IMO's settlement and information release functions;
- system planning services, including the IMO's performance of the Long Term PASA function and functions under Chapter 5; 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 these Market Rules (clause 2.22.1).

A key consideration of the Authority, in determining the Allowable Revenue of the IMO for the above period, is the requirement under the Market Rules (clause 2.22.12(b)) that:

"the Allowable Revenue must include only costs which would be incurred by a prudent provider of the services described [above] ..., acting efficiently, seeking to achieve the lowest practicably sustainable cost of delivering the services described [above] in accordance with these Market Rules, while effectively promoting the Wholesale Market Objectives."

Stamfords considers the above requirement to be a high threshold for cost-efficient service delivery in the performance of the IMO's prescribed services and functions. This threshold, and in particular the requirement that the Allowable Revenue only include costs incurred by a provider "seeking to achieve the lowest practicably sustainable cost of delivering the services", forms the basis for this analysis and the Allowable Revenue Determination.



Stamfords notes the difficulties associated with the forecasting of costs, and hence Allowable Revenue, in the first Review Period, given the limited historical cost information available due to the recent commencement of the Market. Such issues have been considered in the determination of Allowable Revenue. It is evident that the second Review Period will provide an opportunity for comparison with the first three years of Market operation and, accordingly, an enhanced capacity to assess the efficiency of the IMO's service provision.

The Allowable Revenue must be sufficient to cover the forward looking costs of providing the IMO's services and performing its functions and obligations under the Market Rules in accordance with the following principles (clause 2.22.12(a)):

- (a) recurring expenditure requirements and payments are recovered in the year of the 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 generally accepted accounting principles;
- (c) costs incurred by the IMO 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 paragraphs (a), (b) and (c), expenditure incurred, and depreciation and amortisation charged, in relation to any Declared Market Project are to be recovered over the period determined for that Declared Market Project.

This determination considers each of the above items (a to d) separately.

The Market Rules (clause 2.22.12(c)) also require that:

"...where possible, the Economic Regulation Authority should benchmark the Allowable Revenue against the costs of providing similar services in other jurisdictions."

# 4

## Determination Process

The determination process is set out in clause 2.22.3 of the Market Rules, as follows:

- the IMO must submit a proposal for its Allowable Revenue for the period 2007/08 to 2009/10 by 30 November 2006;
- the Authority must undertake a public consultation process in approving the Allowable Revenue for the IMO for the Review Period, which must include publishing an issues paper and issuing an invitation for public submissions; and
- the Authority must determine the Allowable Revenue of the IMO for the Review Period, for each of the services described in clause 2.22.1 of the Market Rules, by 31 March 2007.

The IMO submitted its proposal for Allowable Revenue on 28 November 2006.

### 4.1 Public Submissions

The Authority undertook a public consultation process as required, including publishing an issues paper and issuing an invitation for public submissions on 21 December 2007. Public submissions in respect of the determination of the IMO's Allowable Revenue were received from:

- Alinta; and
- Synergy.

Alinta's submission identified the following issues for consideration with respect to the IMO's application:

- Alinta considered that costs related to the substantial system development costs, noted in the IMO's application as a potential Declared Market project for 2009/10, not be included in the IMO's Allowable Revenue for the first Review Period. Stamford's viewed that amortisation related to system development costs for 2009/10, which have not been declared as a Declared Market Project, should not be included in the IMO's Allowable Revenue.

- Alinta proposed that the fee rate charged to customers (\$/MWh), as a proportion to the market price of electricity (0.5%), referred to in the IMO's application, is misleading. Alinta suggests that this proportion is rather 1%, in accordance with Alinta's calculations. While Stamfords has considered that different approaches have been adopted by the IMO and Alinta in the calculation of the fee rate as a proportion of the market price of electricity, it is noted that such will not alter this assessment of Allowable Revenue.
- Alinta recommended that the Authority consider an economic incentive scheme for the IMO to promote operational efficiency. While such is noted to be outside of the scope of this determination, Stamfords has taken this recommendation into consideration.

Synergy's submission noted the risks and uncertainty associated with the first Review Period and proposed no further recommendations to the Authority.

The issues identified in the above public submissions have been considered as a part of the Allowable Revenue determination process.

# 5

## Assessment of Forward Looking Costs

### 5.1 Summary of Application

The IMO's application, received 28 November 2006, outlined the forecast expenditure for the period 2007/08 – 2009/10, for which the IMO seeks to recover revenue. The IMO proposed the following Allowable Revenue Structure. The Allowable Revenue and costs relating to the IMO's application, listed in the following sections, refer to nominal values.

Amount	2007/08	2008/09	2009/10
Allowable Revenue	\$10,351,000	\$10,542,000	\$10,209,000

Pursuant to clause 2.22.12(a) of the Market Rules, the Allowable Revenue must be sufficient to cover the forward looking costs of providing market functions, as discussed in section 3 of this report.

In support of the Allowable Revenue desired, the IMO supplied a proposed expenditure statement for the period, as detailed in the table below.

Expenditure	2007/08	2008/09	2009/10
Employee Costs	\$3,133,000	\$3,370,000	\$3,505,000
Accommodation	\$265,000	\$273,000	\$282,000
Supplies and Services	\$3,589,000	\$3,470,000	\$3,661,000
Depreciation	\$2,964,000	\$3,124,000	\$2,559,000
Borrowing Costs	\$455,000	\$321,000	\$220,000
Total Expenses	\$10,366,000	\$10,558,000	\$10,227,000
Less Interest Income	(\$16,000)	(\$16,000)	(\$18,000)
<b>Allowable Revenue</b>	<b>\$10,351,000</b>	<b>\$10,542,000</b>	<b>\$10,209,000</b>

An assessment of the appropriateness of forward looking costs are discussed and detailed below.

## 5.2 Services and Functions

Clause 2.22.12(a) of the Market Rules states that Allowable Revenue must be sufficient to cover the forward looking costs of services described in clause 2.22.1.

The following table illustrates the relationship between these services, the IMO functions as defined by Market Rules, clause 2.1.2, and the cost centre structure included in the IMO's application.

Services (Clause 2.22.1)	Functions (Clause 2.1.2)	Relevant Cost Centres
Market Operation Services	Settle such transactions as required under the Market Rules	Market Operation Services
	Release/publish information as required by the Market Rules	
	Operate the Short Term Energy Market and the balancing process	
System Planning Services	Carry out a Long Term PASA study and publish the Statement of Opportunities Report	System Capacity
	Administer tender processes for Network Control Services where required by the Market Rules and enter into Network Control Service Contracts	
	Operate the Reserve Capacity mechanism	
Market Administration Services	Administer the Market Rules	Market Administration Services
	Process applications for participation, and for the registration, deregistration and transfer of facilities	
	Develop amendments to, and replacements for the Market Rules	
	Develop Market Procedures, and amendments/replacements, where required by the Market Rules	
	Make available copies of the Market Rules and Market Procedures	
	Monitor other Rule Participants' compliance with the Market Rules, to investigate potential breaches of the Market Rules, and initiate enforcement action	
	Support the Authority in its market surveillance role, including providing any market related information required by the Authority	
	Support the Authority in monitoring market effectiveness, including providing any market related information required by the Authority	
Other	Carry out any other functions conferred, and perform any obligations imposed, on it under the Market Rules	Allocated across cost centres

An assessment has been conducted of the cost structures within the IMO. Specifically, relevant cost centres including their associated resource components have been assessed and mapped to the services and functions provided in the Market Rules. This occurred through consultation and examination with the IMO.

The analysis determined that the expenditure desired to be covered by Allowable Revenue is within the scope of the IMO functions and services as defined in the Market Rules. As such, all forecast expenses included in the IMO's application are related to the Market operation and administration.

### 5.3 Recurrent Costs

Clause 2.22.12(a)(i) of the Market Rules requires that any recurring expenditure requirements are to be recovered in the year of the expenditure. This means that all expenses are to be matched to the revenue for the period.

The table below depicts the total recurrent costs forecast for each year of the Review Period.

Expenditure	2007/08	2008/09	2009/10
Total Expenditure	\$10,366,000	\$10,558,000	\$10,227,000
Interest Revenue	(\$16,000)	(\$16,000)	(\$18,000)
Total Expenditure Net of Interest Revenue	\$10,351,000	\$10,542,000	\$10,209,000
<b>Allowable Revenue</b>	<b>\$10,351,000</b>	<b>\$10,542,000</b>	<b>\$10,209,000</b>

As shown in the table above, forecast costs (net of interest revenue received) for each year of the review period corresponds to the Allowable Revenue proposed for the respective year. This is consistent with the requirement in clause 2.22.12(a)(i) as detailed above.

Individual recurrent cost items were examined in detail to ensure expenses are recorded in the appropriate period. This analysis is detailed throughout the remainder of this report.

### 5.4 Capital Expenditure

Clause 2.22.12(a)(ii) of the Market Rules provides for the allowance of capital expenses relating to the depreciation and amortisation of assets acquired by the IMO. The depreciation and amortisation of assets acquired must occur in a manner consistent with generally accepted accounting principles.

The Market Rules provide no definition of “generally accepted accounting principles”. This assessment has relied upon the pronouncements and standards of the Australian Accounting Standards Board (“AASB”) as prescribed by section 334 of the *Corporations Act 2001 (Cth)* as the relevant accepted accounting principles applicable to the determination.

Specifically, the following relevant Australian Equivalent International Reporting Standards have been utilised for the purposes of assessing the appropriateness of the depreciation and amortisation of assets claimed:

- AASB 116: Property, Plant and Equipment;
- AASB 136: Impairment of Assets; and
- AASB 138: Intangible Assets.

As evidenced in the expenditure statement summarised in paragraph 30, the IMO is seeking Allowable Revenue for the following amounts of depreciation:

Expenditure	2007/08	2008/09	2009/10
Depreciation	\$2,924,000	\$3,124,000	\$2,559,000

An assessment of the depreciation claimed has identified that the depreciation largely relates to applications and systems development costs required for the provision of relevant services prescribed under the Market Rules.

The systems are understood to have been developed and not purchased as external software.

The recognition of the systems development costs as an asset (intangible asset) is consistent with AASB 138. As it is likely that future economic benefits will flow to the organisation via Allowable Revenue, and that the cost of the asset can be measured reliably due to the historic cost accounting, Stamford is of the view that the assets have been appropriately recognised for Allowable Revenue purposes.

As such, the IMO has proposed to depreciate the capitalised cost of applications development. The IMO has made an assessment that the systems development costs have a finite life, and thus the capitalised development costs should be amortised over the useful life of the asset recognised. The assessment of the useful life and method of amortisation is prescribed in the relevant standard as an accounting policy decision for the IMO.

This analysis has assessed that generally accepted accounting principles have been applied, however, the assessment is not reviewing the appropriateness of accounting policy decisions within the relevant standards prescribed. Notwithstanding this, the IMO has sought depreciation (correctly classified as amortisation) based on a useful life of applications development cost of three years. Whilst Stamford's does not believe that such a policy decision is within the scope of the determination, the IMO should consider the appropriateness of the useful life estimation based on the pronouncements in the relevant standards and the expectations for future systems needs.

Part of the forecast depreciation costs include depreciation (amortisation) of costs relating to new system development in 2009/10. These 2009/10 system development costs are forecast to be \$8.6 million. Depreciation (amortisation) of these costs in the IMO's application is \$1.433 million in 2009/10.

Based on the IMO's application, Stamford's does not believe these 2009/10 system development costs to be sufficiently certain to be allowable under the Allowable Revenue determination. The IMO's application (page 11) states that such system development costs:

"...would need to be subject to a thorough cost benefit analysis prior to any decision to proceed. The IMO may also determine that a major project is a Declared Market Project as described in the Market Rules 2.22.13."

The Market Rules make provision for obtaining an increase in the Allowable Revenue in the case of such projects. If the IMO decided to proceed with the project, clause 2.22.13 enables the IMO to declare it a Declared Market Project. However, the IMO must obtain approval from the Authority for an increase in the Allowable Revenue relevant to the project before commencement of the project (clause 2.22.14).

In addition, while the IMO's application amortises these 2009/10 system development costs over a three year useful life, clause 2.22.14 requires that, should the project be declared a Declared Market project, the Authority determine the period over which the incremental Allowable Revenue will apply.

The forecast 2009/10 system development has not been declared as a Declared Market Project and approval has not been given for an increase in Allowable Revenue under clause 2.22.14 of the Market Rules.

Hence, Stamford's considers that the depreciation (amortisation) allowable under the Allowable Revenue determination does include depreciation (amortisation) of the 2009/10 system development costs.

Stamford's has reviewed the remaining items of depreciation (amortisation) contained in the IMO's application. Notwithstanding the need for IMO to consider the appropriateness of the useful life estimation for future applications development costs, Stamford's considers the remaining depreciation to be allowable in accordance with clause 2.22.12(a)(ii).



The following table sets out the costs, as amended, for which Allowable Revenue is permitted.

Expenditure	2007/08	2008/09	2009/10
Depreciation (Application)	\$2,924,000	\$3,124,000	\$2,559,000
Less Non-Allowable Depreciation	-	-	\$1,433,000
Depreciation (Allowable)	\$2,924,000	\$3,124,000	\$1,125,000

## 5.5 Market Establishment Costs

Under clause 2.22.12(a)(iii) of the Market Rules any costs incurred by the IMO related to the market establishment are to be approved by the Minister. The Minister is responsible for determining an appropriate period for the recoupment of the market establishment costs.

Stamfords is not aware of any market establishment costs the Minister has approved. As such, there is no allowable revenue designated to the recoup of establishment costs.

Further, Stamfords has not been made aware of any IMO application seeking the approval of the recoup of market establishment cost.

## 5.6 Declared Market Project

A Declared Market Project that has been approved by the Authority and satisfies clause 2.22.13. Expenditure incurred and depreciation and amortisation charged in relation to a Declared Market Project can be recovered in the IMO's Allowable Revenue under clause 2.22.12(a)(iv) of the Market Rules.

Stamfords has reviewed the IMO's application and has identified a potential declared market project proposed in 2009/10 relating to substantial system development costs (hence satisfying clause 2.22.13(a)(ii)).

The IMO has not formally identified this cost as a declared market project under 2.22.13. The IMO states in their application the declared market project requires further cost-benefit analysis to determine the viability of the project. Further, there has been no approval sought from the Minister relating to the declared market project (2.22.14).

As the IMO has made no formal declaration of the project and the Minister has not issued approval, it is in Stamfords opinion that any recoup related to the declared market project in 2009/10 should not be included in the IMO's Allowable Revenue.

Further, the provisions in the Market Rules relating to declared market projects specifically allow for amendments to a previously determined Allowable Revenue structure. Therefore, it is advised that the potential market project be disallowed and reviewed at a time when more information in relation to the project and its associated certainty of proceeding is developed. At this time, the IMO should make a request for the declared market project to be incorporated as an amendment to the Allowable Revenue.

# 6

## Analysis of Cost Structure

Stamfords has conducted a detailed analysis of the proposed expenditure for the Review Period, as set out in section 5.1.

Submitted costs have been analysed in accordance with clause 2.23.12(b) of the Market Rules, to ensure that the Allowable Revenue reflects the prudent provision of services, in an efficient manner with the lowest practicably sustainable cost.

The IMO's cost structure is made up of approximately one-third Employee and Accommodation expenses, one-third Supplies and Services and one-third capital costs.

Employee costs include salaries, superannuation and other on-costs. Supplies and services expenses include corporate services such as accounting, human resources and insurance, consultant expenditure and outsourced IT costs.

It is noted that the IMO receives interest revenue outside of the normal course of business. This interest revenue is deducted from the expenses incurred by the IMO to give Allowable Revenue excluding interest income. Interest on Participants security deposits is not included as receipts given that they are equally offset by payments to Rule Participants.

The IMO Allowable Revenue proposal has been further defined into costs centres. These cost centres have been developed by the IMO to reflect the different services that the IMO is expected to perform under Market Rules, as depicted in section 5.2. The IMO's outputs according to cost centre are:

- market administration, responsible for the consultation, monitoring, auditing, registration related functions and other functions identified in the Market Rules.
- market operations, responsible for the IMO's operation of the Short Term Energy Market ("STEM") and Balancing. It also is responsible for the IMO's settlement and information release functions.
- system capacity, responsible for the IMO's performance of the Long Term PASA function and functions under Chapter 5 of the Market Rules and operating the Reserve Capacity Market.

## 6.1 Employee Expenses

The IMO application provides for the following employee costs over the period.

Expenditure	2007/08	2008/09	2009/10
Employee Costs	\$3,133,000	\$3,370,000	\$3,505,000
Board Members	4	4	4
Forecast FTEs	19	20	20
Board Fees	\$77,000	\$81,000	\$84,000

The IMO forecasts that 19 FTEs are required in 2007/08 as well as 4 Board Members, as detailed in additional information provided by the IMO. At present, there are 16 FTEs who exclusively operate the Market and 3 Board Members. Salaries have been escalated by 4%.

The IMO provided information relating to the actual employee expense incurred for the 1 October 2006 to 30 January 2007.

Stamfords conducted benchmarking analysis in respect to the appropriateness of employment costs per FTE. This analysis included an assessment of employment costs for relevant industries, including engineering, information and communications technology and other professional services.

The analysis demonstrated that the forecast employment expenses are within the mid to high range present in the market place. This appears consistent with the requirement in the Market Rules (clause 2.22.12(b)) that cost structures be within the lowest practicably sustainable costs of delivering the services.

Notwithstanding this, Stamfords notes that the establishment of the IMO's workforce was required and the IMO sought to employ highly specialised personnel. This is compounded by the availability of such personnel in the Western Australian market. Stamfords recommends that whilst such costs are currently acceptable, future determinations will examine this area closely to ensure that the IMO's workforce remuneration structure is consistently aligned with the requirements of the Allowable Revenue framework.

The IMO has proposed a 4% increase as an appropriate increase in salaries. The Australian Labour Price Index<sup>1</sup> for December 2006 was 4%. Thus, the utilisation of the historic rate as a index for future employment cost increases is seen as a valid measure of the increase in employee costs over the 2007/08 to 2009/10 period.

The workforce information provided in the IMO application and the further analysis conducted, has outlined that forecast employment costs appear reasonable and in line with industry standards. However, Stamfords notes the aforementioned, current availability of specialised personnel, in forecasting employment cost amounts.

## 6.2 Accommodation Expenses

The IMO has provided a break down of expenses relating to accommodation. These costs are represented below as a portion of total accommodation costs.

Expenditure	2007/08	% of Accommodation Costs
Rental	\$125,000	47%
Utilities	\$30,000	11%
Venue Hire	\$60,000	22%
Parking	\$31,000	12%
Maintenance	\$20,000	8%
<b>Total Accommodation Costs</b>	<b>\$266,000</b>	<b>100%</b>

The accommodation costs increase by 3% per annum. This appears to be a fair increase in forecast accommodation costs given current market conditions.

Based on the number of FTEs and utilising the industry guidelines, an assessment has been made on the appropriateness of the accommodation costs. Again, the amount forecast is in the mid to upper range for accommodation. Thus, the IMO should consider when next appropriate a revision of its space and locational requirements.

Stamfords considers the rental expenses to be appropriate given the current and forecasted number of FTEs and the CBD location.

<sup>1</sup> ABS Cat No. 6345.0 Labour Price Index December 2006

## 6.3 Supplies and Services

The IMO's submitted supplies and services costs for the Review Period, and actual annualised costs for 2006/07 and 2007/08 estimates in the 2006 Operational Plan, are shown in the table below.

Expenditure	Operational Plan 2007/08	2007/08	2008/09	2009/10
Corporate	\$690,000	\$662,000	\$679,000	\$719,000
IT Support	\$77,000	\$688,000	\$683,000	\$704,000
Market Operations Services	\$550,000	\$820,000	\$721,000	\$621,000
Market Administration Services	\$775,000	\$1,120,000	\$1,131,000	\$1,252,000
System Capacity Services	\$139,000	\$299,000	\$256,000	\$365,000
<b>Total Supplies and Services</b>	<b>\$2,231,000</b>	<b>\$3,589,000</b>	<b>\$3,470,000</b>	<b>\$3,661,000</b>

As shown above, forecast total supplies and services costs fluctuate over the review period, decreasing in 2008/09 and increasing in 2009/10.

System Capacity Services are notably forecast to decrease from 2007/08 to 2008/09, and then to increase from 2008/09 to 2009/10. This increase is attributable to the review of processes and criteria, however no justification for increased costs in 2009/10 has been submitted.

Stamfords notes the IMO's comment that the increase in IT support costs in 2007/08 over the original Operational Plan forecasts represents an improved understanding of expected IT support expenditure required to support the IMO's market functions.

## 6.4 Uncertain Cost Estimates

An assessment has been made of the component items contained within each expenditure group. Investigation of these items has identified that the IMO has estimated expenditure in a number of areas. The significant amounts for the 2007/08 year are:

- travel;
- strategic development and training;
- rules and procedures;
- review of processes and criteria; and
- dispute management.

The above amounts are indexed for the years 2008/09 and 2009/10 based on the 2007/08 estimates.

The estimates for such expenditure items is a valid management decision and provides for the development of the organisation to provide its market functions.

However, such amounts are large relative to the total organisation size, and are forecast to be \$1.788 million (or 17%) in 2007/08. If actual expenditure on these items does not amount to the amount forecast, or they do not recur, an impact on Allowable Revenue should be evidenced.

Clause 2.22.7 of the Market Rules states that any underspending from Allowable Revenue will be carried over to the following year. Correspondingly, the Minister has the obligation to approve the relevant budget for the IMO in accordance with clause 2.22.9.

Therefore, Stamfords is of the opinion that the Authority recommend that, in the Minister's approval of the relevant IMO budgets, an assessment be made of the utilisation of the estimated amounts stated above. If, in the approval process for the 2008/09 and 2009/10 budgets, the analysis determines that the estimated amounts are not being fully utilised, the Authority should recommend to the Minister that the total budget be reduced by the estimated amounts not utilised, and the Allowable Revenue be adjusted accordingly in accordance with clause 2.22.7.

This recommendation is due to the newness of the operating environment created by the market commencing operation on 21 September 2006 and the lack of historic information being present to enable historic performance to be recognised. Future determinations will have the benefit of historic financial performance to utilise in the assessment process.

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## 6.5 Borrowing Costs

The IMO has included borrowing costs relating to financing facilities from the Western Australian Treasury Corporation (“WATC”). The borrowing costs, interest and fees relating to finance facilities, are forward looking costs that relate to the original financing of the IMO. The facilities were utilised to establish the IMO and its associated systems and other assets.

Stamfords has reviewed the repayment schedule for the WATC facilities and determined that the borrowing costs forecast correspond to the expenditure statement.



# 7

## Benchmarking

Under clause 2.22.12(c) the Authority is required to benchmark the IMO's Allowable Revenue, where possible, against the costs of providing similar services in other jurisdictions.

The benchmarking process involved identifying entities that exist in other jurisdictions performing similar services of the IMO, as identified in clause 2.22.1 of the Market Rules.

The Market currently has a capacity of 16TWh and the IMO at present employs 19 FTEs.

Three entities were identified as performing similar functions to the IMO in other jurisdictions. While the entities performed market operating services, there were noted differences in the functions each entity performed. These have been identified within the analysis of each.

### 7.1 National Electricity Market Management Company

The National Electricity Market Management Company ("NEMMCO") is both the market operator of the National Electricity Market ("NEM") and operator of the power system that underpins NEM operation, within Australia.

The National Electricity Law defines the responsibilities of NEMMCO in fulfilling these roles, and statutory National Electricity Rules set down the regulatory and prudential framework within which the NEM must be operated.

NEMMCO is regulated by the Australian Energy Regulator and the Australian Energy Market Commission is the rule maker for the NEM.

NEMMCO's 2005/06 Annual Report stated that current market capacity is approximately 180TWh. NEMMCO operates a real-time market with a dispatch price issued every 5 minutes.

NEMMCO had 245 FTEs over the 2005/06 period and is expected to maintain this level over the 2006/07 year (2006/07 Statement of Corporate Intent). Forecast operating expenses are expected to be \$59.51 million for 2006/07.

The expected fee charged (equivalent to the expected cost for the period is \$0.35/MWh for 2006/07 increasing from \$0.34/MWh in 2005/06.

Escalating NEMMCO's cost per MWh at a rate equivalent to CPI (4%) gives the forecast 2007/08 cost of \$0.36/MWh.

## 7.2 Electricity Market Company

The Electricity Market Company (“EMC”) operates the National Electricity Market Singapore (“NEMS”). The EMC was established in 2001 and began market operations on 1 January 2003. The EMC is involved in three areas of the governance process:

- rule making;
- dispute resolution; and
- compliance.

The EMC is a joint venture between the Energy Market Authority and the M-co (Marketplace Company) Pty Ltd and was established in 2005. The EMC receives a regulated return, with costs recovered on a fee for service basis. The Power System Operator (“PSO”) is a separate entity to the EMC.

The EMC issued a Proposed Budget and Fees for 2007/08. The expected market capacity was 72.5TWh for 2006/07 and 75.6TWh for 2007/08. The EMC operates a Day-ahead market.

EMC expects to maintain 59 FTEs over the period. The expected operating costs are S\$23.3 million (A\$17.8 million).

According to the 2007/08 Budget and Fees Proposal the EMC expects to charge S\$0.37/MWh (A\$0.28/MWh) in 2006/07 and S\$0.38/MWh (A\$0.29/MWh) in 2007/08.

## 7.3 Independent Electricity System Operator

Established through the Electricity Act of Ontario to operate the wholesale electricity market, the Independent Electricity System Operator (“IESO”) also operates and maintains the reliability of the IESO-controlled grid, within Canada. The IESO oversees the development of the rules that govern the market and support the participants in their interactions in the market.

The IESO incorporates market operation and system operator roles. The IESO is responsible for the short term forecasts and assessments of electricity supply and demand, and operates a hybrid market that is regulated by the Ontario Electricity Board (“OEB”). The Ontario Power Authority is responsible for the medium and long term planning and ensuring an adequate supply of electricity in Ontario

The IESO is expected to maintain a market capacity of 163.3TWh in 2007. The IESO operates a real-time energy market and operating reserves market (incorporating 10 minute spinning reserve, 10 minute non-spinning reserve and 30 minute non-spinning reserve market). The IESO also operates the capacity reserve market and the energy forward market.

The IESO currently has 244 FTEs which is expected to remain stable over the next two years. Operating expenses are expected to be approximately C\$140 million (A\$143 million).

IESO's forecast cost per MWh is C\$0.86 (A\$0.88). The IESO's 2007-2009 Business Plan proposed a usage fee of C\$0.82/MWh in 2007 (A\$0.84/MWh).

Through the benchmarking process it is evident that no other market is identical to the WA Market. It is therefore extremely difficult to draw accurate comparisons between the Market and other jurisdictions. However, such benchmarking provides an understanding of the comparable services offered in other jurisdictions and a high level rough measure as to the efficiency of the services provided by the IMO under the Market Rules.

The EMC appears to be the most comparable market operator as it performs services that are similar to the IMO.

## 7.4 Benchmarking Results

The table below shows the comparison of costs per MWh for each of the identified benchmarks and the IMO for the 2007/08 financial year.

Item	IMO	NEMMCO	EMC	IESO
Market Capacity	16TWh	180TWh	75.6TWh	163.3TWh
FTEs	19	245	59	244
FTEs per TWh	1.19	1.44	1.29	1.49
Cost per MWh	\$0.32	\$0.36	\$0.29	\$0.88

Stamfords recognises the inherent deficiencies in benchmarking entities in other jurisdictions. These primarily are:

- the services provided by the market operators differ across jurisdictions;
- the larger markets are able to create efficiencies through economies of scale; and
- the IESO and NEMMCO cost per MWh and FTE per TWh include system operation services, which are covered by System Management.

When comparing the number of FTEs per TWh among the entities, the IMO appears to be providing the required services in a relatively efficient manner, as required in 2.22.12(b).

It is evident from the benchmarking process that the IMO is comparable to entities providing similar services in other jurisdictions. While there are risks associated with the benchmarking process, Stamford is able to draw an overarching comparison between the IMO and entities in other jurisdictions.

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The benchmarking process provides sufficient confirmation that the IMO's Allowable Revenue is consistent with clause 2.22.12(b) of the Market Rules, the performance of its services in an efficient manner, seeking to provide the lowest practicable cost of service delivery.

# 8

## Proposed Amendments and Recommendations

Stamford's assessment of the IMO's Allowable Revenue application included the following recommendations and proposed amendments to Allowable Revenue which are summarised below. Such advice is provided to the Authority in order to assist in their determination of the IMO's Allowable Revenue for the Review Period, in accordance with Market Rules requirements.

### 8.1 2009/10 Amortisation Expenditure

Part of the IMO's proposed forecast depreciation costs include costs relating to a new system development in 2009/10 (section 5.4). Based on the IMO's application, Stamfords does not believe these 2009/10 system development costs to be sufficiently certain to be allowable under the Allowable Revenue determination.

The IMO's application (page 11) states that such system development costs:

"...would need to be subject to a thorough cost benefit analysis prior to any decision to proceed. The IMO may also determine that a major project is a Declared Market Project as described in the Market Rules 2.22.13."

The Market Rules make provision for obtaining an increase in the Allowable Revenue in the case of such projects. If the IMO decided to proceed with the project, clause 2.22.13 enables the IMO to declare it a Declared Market Project. However, the IMO must obtain approval from the Authority for an increase in the Allowable Revenue relevant to the project before commencement of the project (clause 2.22.14).

Therefore, Stamfords recommends that:

- Allowable Revenue for the 2009/10 year should be decreased by \$1.433 million in accordance with the amendment required to the allowable depreciation in the IMO's application.
- Should the system development project become more certain the IMO may consider it a Declared Market project and incorporate it into the Allowable Revenue for that period.

## 8.2 Uncertain Cost Estimates

Estimates have been made for certain costs that are not readily forecastable (section 6.4). These have been estimated for each year, and amount to approximately \$1.8 million.

Clause 2.22.7 of the Market Rules states that any underspending from Allowable Revenue will be carried over to the following year. Correspondingly, the Minister has the obligation to approve the relevant budget for the IMO in accordance with clause 2.22.9.

Therefore, Stamfords recommends that:

- The Authority recommend to the Minister that, in the Minister's approval of the relevant IMO budgets, an assessment be made of the utilisation of the estimated amounts.
- If, in the approval process for the 2008/09 and 2009/10 budgets, the analysis determines that the estimated amounts are not being fully utilised, the Authority should recommend to the Minister that the total budget be reduced by the estimated amounts not utilised, and the Allowable Revenue be adjusted accordingly in accordance with clause 2.22.7.