INDEPENDENT MARKET OPERATOR

Statement of Opportunities South West Interconnected System

July 2005

DISCLAIMER

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PREFACE

The electricity market in Western Australia is undergoing significant changes that are both exciting and challenging.

The design of the initial Wholesale Electricity Market was completed in mid-2004. The rules that govern the operation of the market have been developed with substantial input from industry and Government. Development of the Information Technology systems that support the market has commenced and processes are well underway for energy trading to commence as scheduled mid-next year.

A critical component of the new market is the Reserve Capacity Mechanism (RCM). This is a series of processes through which the Independent Market Operator (IMO) ensures that sufficient generation and demand side management capacity is provided to enable reliable electricity supplies for all customers.

The Statement of Opportunities Report is fundamental to this, detailing the forecast demand for electricity, outlining details of existing and planned generation capacity and identifying opportunities for investors to enter the market.

The production of these reports is a practice adopted in other jurisdictions. The National Electricity Market Management Company prepares an annual report which has become a reference tool for the electricity supply industry and is a key input into investment decisions crucial to the long term reliability of electricity supply.

This is the first such report to be published by the IMO. It concentrates on outlining the opportunities for investment in new capacity to meet demand during 2007/08 (the year in which the first plant being sought through the RCM will enter service). As the first report it provides a brief outline of the overall market structure, how it works and its major participants.

I believe that this report provides valuable information to market participants, potential investors and interested stakeholders.

The IMO is keen to see the market implemented successfully and continue to develop to meet the needs of all stakeholders. If you would like further information please contact the IMO through its website at www.imowa.com.au.

ANNE NOLAN
CHAIR

July 2005

EXECUTIVE SUMMARY

The Wholesale Electricity Market arrangements that are currently being implemented within the south west of Western Australia explicitly ensure that sufficient capacity will be provided to maintain supply reliability. The Reserve Capacity Mechanism, which is the responsibility of the Independent Market Operator (IMO), is a process through which:

- the total system capacity requirement is determined annually;
- existing, committed and planned generation capacity is identified;
- any potential capacity shortfalls are identified; and
- procedures are implemented to facilitate the introduction of any required new capacity.

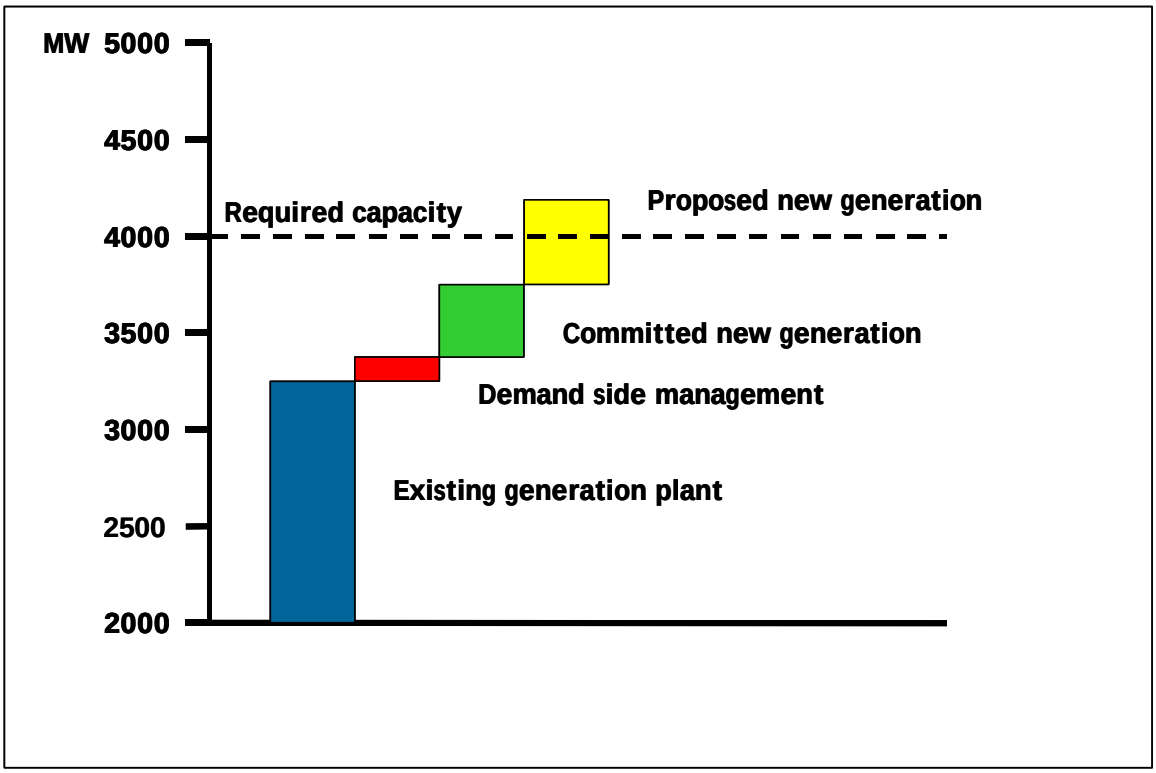
This Statement of Opportunity Report outlines the results of the first three steps listed above. It contains forecasts of energy and maximum demand through to 2014/15 and describes the existing and proposed generation and demand side management (DSM) capacity. It also identifies the potential for new capacity to be provided for in 2007/08 and beyond. This analysis has been undertaken in accordance with the Market Rules, a copy of which can be found on the IMO website at www.imowa.com.au.

This report takes the place of the Generation Status Review (GSR) which has been published by Western Power during the past two years. The forecasts for both this report and the GSR were prepared by an external consultant, the National Institute for Economic and Industry Research. Further modelling work to support this report was undertaken by McLennan Magasanik Associates.

This report is primarily intended as a guide to people considering investing in new generation and DSM capacity. However, as the first major report on the Reserve Capacity Mechanism published by the IMO, a general description of the market is also provided. The IMO website provides more extensive information.

The maximum demand figures presented in this report are some 120 megawatts (MW) higher than the corresponding figures in last year's GSR. The major reason for this appears to be that sales of air-conditioning systems have been considerably higher than in previous years, possibly as a result of consumers responding to the very high temperatures in 2003/04 and manufacturers' strong advertising campaigns. In addition, the buoyant economic conditions in Western Australia have led to higher than expected economic growth.

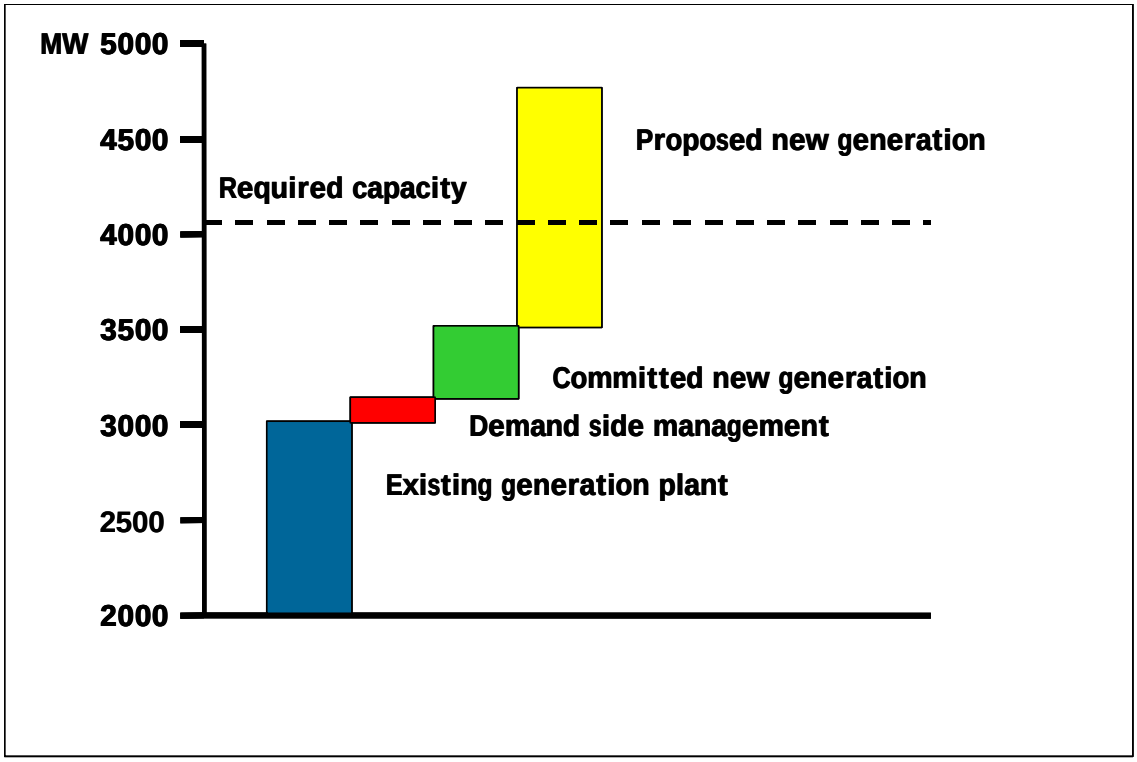
KEY RESULTS FOR 2007/08



As the chart above shows, in 2007/08:

- To meet the reliability criteria which have been established, 4000 MW of generation and demand side management must be available for service.
- It is anticipated that 3731 MW of this capacity is already in service or is committed to be built.
- The opportunity exists for proponents to offer the outstanding 269 MW required to the IMO through either commitments to sell through bi-lateral contracts or through participation in a Reserve Capacity Auction.
- The IMO has been advised of 750 MW of possible new capacity that could meet the 269 MW requirement.
- The opportunity remains for other proponents to offer this additional capacity.

KEY RESULTS FOR 2008/09



The chart above shows the key results for 2008/09, indicating:

- A forecast rise in the capacity requirement to 4124 MW in 2008/09.
- This requirement is 124 MW above that required for 2007/08. Taking into account the scheduled closure of Kwinana B Power Station, the requirement is 313 MW above that for 2007/08.
- Several companies are actively pursuing proposals for new capacity to meet this demand both through the Power Procurement Process and independently.
- With further load growth, and scheduled plant closures, there is a requirement for 335 MW of additional new capacity in 2009/10.
- This provides a significant opportunity for new investment by companies who are already targeting 2008/09 or for other developers.

Developers of new capacity are required to advise the IMO of their plans in mid-August. They must advise the IMO of the quantity of capacity they plan to bi-laterally trade to customers and how much they will offer into a Reserve Capacity Auction. Once these capacity nominations have been made, the IMO will determine whether an auction is to be held. The IMO will advise the market of this determination by 16 September 2005.

In 2008/09, the total supply requirement will rise to 4124 MW. New capacity will be required to cover this increase as well as cover the proposed closure of Kwinana Stage B power station. Several new projects, with a total capacity of around 1190 MW, have been proposed to meet this requirement.

Western Power remains responsible for ensuring supply is adequate in 2005/2006 and 2006/2007. IMO has reviewed the demand and supply forecasts for this period and determined that existing plant plus committed plant is sufficient to meet demand.

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INTRODUCTION

Substantial changes are currently being made to the manner in which wholesale electricity is bought and sold in Western Australia. Following the report of the Electricity Reform Task Force in October 2002, the WA State Government commenced a process to establish a market for trading wholesale electricity. This market will operate within the South West Interconnected System (SWIS) which covers the area bounded generally by Geraldton, Kalgoorlie and Albany.

The Independent Market Operator (IMO) was established under statute in December 2004 to support and administer the market. One of its responsibilities is to ensure that adequate electricity generation and demand side management (DSM) capacity will be available to meet demand. This responsibility does not pass to the IMO until October 2007. However, because of the lead-time required to develop and build new capacity, implementation of the processes has already commenced.

One of the key steps in this process is preparation and publication of a Statement of Opportunities Report (SOO). This report is intended to provide information for market participants and others who may be considering the development of new generation capacity.

The major components within the SOO are:

- forecasts of electricity maximum demand and energy consumption;
- information as to existing and proposed supply capacity;
- analysis of the balance between forecast demand and anticipated supplies; and
- an indication of the potential opportunities for new facility investment.

This report is the first SOO to be published by the IMO and replaces the Generation Status Review that was published by Western Power Networks Business Unit for the past two years.

Whilst it considers the requirements for additional generation over the coming ten years, the emphasis of the IMO is on the 2007/08 capacity year. This covers the requirement for generation and DSM capacity that will be operational between October 2007 and September 2008 which is the first year of operation of capacity being sought through the first Reserve Capacity Cycle.

The main purpose of this report is to provide a guide to market participants and others who may be

considering investment in generation and DSM capacity. It is published to meet the IMO's obligations under Chapter 4 of the Wholesale Electricity Market Rules.

To provide a background for potential market participants, and as this is the first major report issued by the IMO, it contains a brief general description of the market, and the major participating entities,. Further information on the market, and the operation of the IMO, can be found on the IMO website at www.imowa.com.au.

This report has been structured as follows:

- Chapter 2 provides a general outline of the electricity market structure.
- Chapter 3 describes the Reserve Capacity Mechanism.
- Chapter 4 describes the forecasting process and forecast demand for 2007/08 onwards.
- Chapter 5 outlines the anticipated generation and DSM capacity.
- Chapter 6 evaluates the balance between supply and demand and identifies the potential opportunity for new investment.
- Chapters 7 & 8 outline the next stages in the Reserve Capacity process.

2. ELECTRICITY MARKET STRUCTURE OVERVIEW

2.1 Electricity Market Reform

The Government established the Electricity Reform Task Force (ERTF) in October 2001 to investigate options for competitive electricity reform and this presented its final report in October 2002. The Office of Energy was charged with the implementation of the reform agenda and the Electricity Reform Implementation Unit (ERIU) was formed within the Office to facilitate this. One aspect of the reform agenda has been to establish a wholesale electricity trading market within the SWIS.

The market design that has been developed comprises a wholesale electricity trading component and a capacity component which are described in more detail below. Because of the lead time required to develop and build new generation capacity, some of the capacity processes have already commenced. The electricity trading component is scheduled to commence in July 2006.

The structure and processes that constitute the market are established through the Market Rules. These have been developed by the Office of Energy with substantial support from a number of Expert Teams comprising representatives from industry, Government and the Government-owned utility, Western Power. The rules are being implemented in stages through to the scheduled full market start-up date of 1 July 2006. A full set of the market rules can be downloaded at the ERIU website at www.eriu.energy.wa.gov.au.

A major recommendation of the ERTF was that Western Power be disaggregated to establish separate generation, retail and network businesses. Legislation to undertake this has been introduced into Parliament and, if passed, it is anticipated that disaggregation will be completed during the first half of 2006. It should be noted, however, that the introduction of the market is not dependent on this legislation.

2.2 Institutional Arrangements

The market is being established to provide an efficient and convenient forum for buyers and sellers to trade wholesale electricity. It needs to be flexible to ensure that participants can establish trades that meet their individual objectives in respect to their preferred contract arrangements and risk profile. The market must also provide certainty of supply while being able to accommodate every-day variations arising from factors such as changing weather conditions and plant break-downs.

To assist in understanding, this section describes the main market participants.

Independent Market Operator (IMO)

The IMO fulfils a number of distinct roles within the market.

As the market administrator it:

- registers participants and their capacity;
- develops and maintains market rules and procedures;
- conducts market settlement; and
- publishes market information.

In its role as market operator, the IMO:

- receives information from participants in respect to their bi-lateral contracts and the planned output from their generating capacity;
- operates the Short Term Energy Market (STEM); and
- operates the Reserve Capacity Mechanism (described in more detail below).

The IMO also has responsibility for monitoring and surveillance of the market to identify any rule breaches by participants.

More information on the IMO is available at its website at www.imowa.com.au

System Management

System Management is the entity that operates the power system, instructing generating plant to increase or decrease output so as meet demand on a moment-by-moment basis. It currently exists as the System Operations Branch within the Networks Business Unit of Western Power. Work is underway to establish System Management as a ring-fenced entity within the Networks Business Unit and it will become part of the new Networks entity upon the disaggregation of Western Power.

System Management's real-time function is to dispatch the power system, taking whatever steps may be necessary to ensure system security, safety and reliability. It also conducts short and medium term system planning, including the co-ordination of scheduled outages of generators and other major capacity. It also schedules Western Power's generation capacity to meet their contractual requirements while facilitating transactions scheduled by Independent Power Producers (IPPs).

Economic Regulation Authority (ERA)

The ERA has a substantial involvement within the electricity sector through its licensing and network access responsibilities. In respect to the market, its key role is market surveillance and the monitoring and reporting to Government on the efficiency and effectiveness of the market.

The ERA also has several other approval functions within the market including:

- approving the maximum prices for the reserve capacity mechanism;
- approving the maximum and minimum energy prices; and
- approving the efficient costs for the operation of both the IMO and System Management.

More information about the ERA can be found at its website at www.era.wa.gov.au.

Network Operator

A network operator is an entity that operates or intends to operate a registered transmission or distribution system within the SWIS. As well as the Networks Business Unit of Western Power, it is anticipated that a number of private transmission systems may also register.

Network operators also have responsibility for metering of electricity usage by end-use customers. This responsibility includes:

- the provision of customer meters;
- gathering and processing data from these meters; and
- providing metering data to the IMO for billing and settlement for energy traded in the wholesale market.

Independent network operators have the option of ceding their metering responsibilities to Western Power's Network Business Unit.

Market Generator

A market generator is an entity that operates a generating facility to provide energy to the market. Subject to some exemptions in the rules, it is expected that all generating capacity with a capacity in excess of 10 MW will be required to register.

The largest generator in the market is Western Power but there are already Several IPPs operating and a number of others are seeking registration.

Market Customer

A market customer is an entity that purchases power from the market either for its own consumption or for retail sale. End use customers, such as domestic customers, who purchase electricity from a retailer, are not a part of the market. The experience in other markets is that very few, if any, end-use customers will buy wholesale power from the market.

2.3 Electricity Trading

The main mechanism for trading within the market is expected to be bi-lateral contracts between generators and customers. These customers, at the wholesale level, will mostly be retailers who will on-sell electricity to end use customers. It is expected that about 80% of electricity will be traded through contracts. By locking in a substantial amount of their purchases or sales through contracts, participants can minimise their exposure to potential price changes. The market has no role in the structure, duration or pricing of these contracts though market participants must advise the IMO of their trading levels on a day-ahead basis.

The role of the market participants is shown in Figure 1 (over the page).

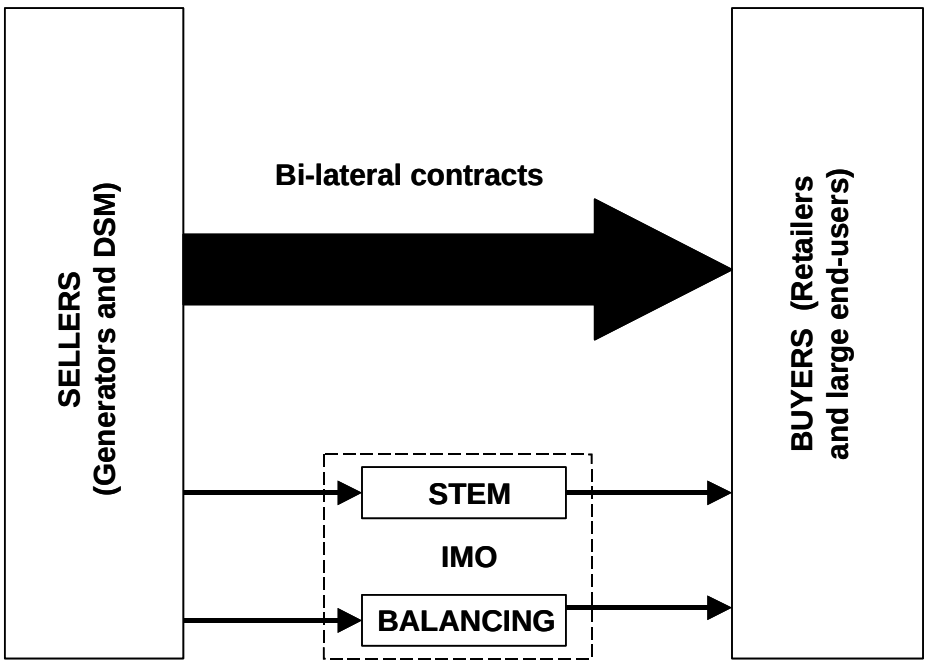


Fig 1. Energy Trading in the Wholesale Electricity Market

One of the features of electricity is that demand, values and hence price vary across time. An electricity supplier will generally have access to supplies from a variety of different generating plants, each of which will have different operating costs depending on its efficiency and the type of fuel it uses. The supplier will seek to maximise output from the lowest cost plant but, as demand increases, it will be necessary to put more expensive plant into service. This means that the overall production cost increases as the total demand increases.

Production costs will also change as a result of changes in fuel prices or reductions in output from generators due to, for example, higher ambient temperatures. To be effective, the market must accommodate prices that vary from day-to-day and within each day. This is achieved by dividing each day into half-hour trading intervals and a single price is struck for each interval depending on participants' offers to buy or sell.

Participants still need some flexibility to be able to respond to fluctuations in demand resulting from less predictable factors such as the weather. This is provided through a day-ahead short term energy market (STEM). Each day, participants will make bids to buy and offers to sell various quantities of electricity in

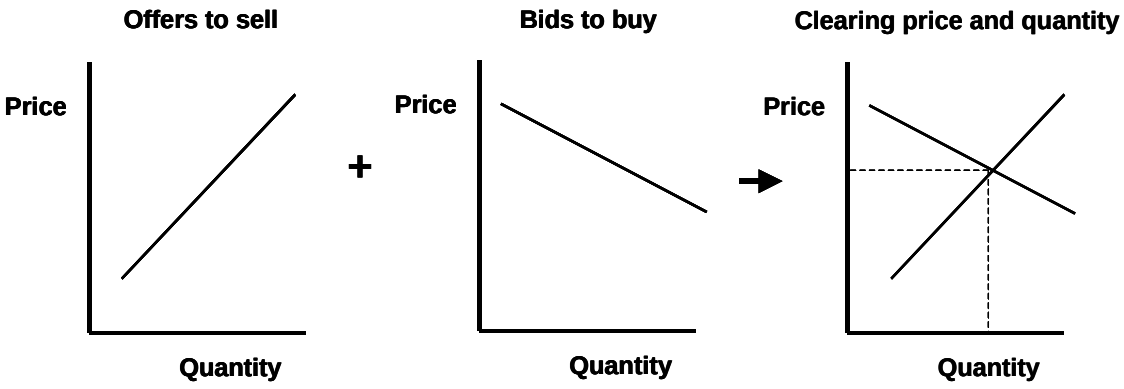


Fig. 2 Determining the Clearing Price and Quantity in the STEM

each trading interval on the following day. These will be in the form of price curves where, for example, a generator will offer to supply increasing quantities into the market as the price rises. A buyer would provide a demand curve that would show it offering to purchase increasing quantities as the price moves lower.

The IMO will take these supply and demand price curves from all market participants and will determine the clearing price and quantity at which the offers and bids exactly match for each half-hour trading interval on the following day. All participants, other than Western Power, are then required to manage their operations in each trading interval so as to produce or consume the quantities determined by their bi-lateral contracts plus any quantities traded in the STEM.

The bi-lateral contract and STEM processes determine the quantity of electricity that will be provided by Independent Power Producers (IPPs) in each trading interval. The Government-owned generator, Western Power, has responsibility to supply all remaining demand from its fleet of generating plant. Western Power generators will also be required to balance the inevitable short-term variations in IPP generation and customer demand. In the event that Western Power plant is unable to fully cover any system imbalance, IPPs can be called upon to either increase or reduce generation from their plants.

2.4 Market Design Summary

A much more detailed description of the market is available in the document, entitled "Wholesale Electricity Market Design Summary" which is available on the IMO website at www.imowa.com.au.

3. THE RESERVE CAPACITY MECHANISM

3.1 Introduction

A key feature of the market in Western Australia, and one that distinguishes it from the National Electricity Market (NEM) operating in the Eastern States, is the provision of a separate capacity element. In many markets, including the NEM, economic forces determine the requirement for capacity with new generators being encouraged to enter the market by high energy prices. A more conservative approach has been adopted in the SWIS due to the small system size and, in particular, the inability to draw supplies from neighbouring power systems.

The approach adopted in the SWIS is called the Reserve Capacity Mechanism. This comprises a set of processes to centrally determine the capacity requirement and facilitate this onto the system. The IMO has the central role in this process through:

- the preparation of forecasts for the full SWIS;
- identifying the requirements for additional capacity;
- ensuring that proposed generation capacity will actually be built; and
- monitoring the performance of generation capacity once in service.

Key to this process is the payment of generators and DSM for the provision of capacity. This payment is solely for making capacity available and is in addition to any payment that the generator may receive for electricity sales. The IMO is therefore able to encourage participants to build capacity that could be funded solely through this payment mechanism. This ensures that sufficient capacity can be built to meet system requirements.

Because companies receive a separate payment for providing capacity, they need only recover a portion of their fixed costs through energy sales. Some plant may not need to recover any fixed costs through energy sales. This removes the need for high and volatile energy prices that are common in energy-only markets such as the NEM. Consequently, energy prices within the market can be capped at a much lower level. At present, this cap is $150 per megawatt-hour (MWh) for non-liquid fuelled plant and $385 per MWh for liquid fuelled plant.

This SOO report is a key component of the reserve capacity mechanism as it provides a projection of the electricity demand within the SWIS and the opportunity for investment in new capacity, both generation and DSM capacity.

3.2 Capacity Obligations and Credits

To ensure that sufficient capacity is installed in the SWIS, the market rules include the concept of capacity credits. A capacity credit is a notional unit of capacity that can be traded between market participants. Generators can earn credits by providing capacity into the SWIS. Market customers are assigned capacity credit obligations that are based on their expected maximum demand plus an allowance to provide a reserve margin.

For example, a participant that commits to build a new power station that will provide 100 MW of generation onto the system throughout 2007/08 can be assigned 100 capacity credits for that year. A customer, that draws power at a maximum rate of 50 MW during 2007/08 will incur a capacity credit obligation of around 55 MW based on their demand plus a reserve margin.

For each future year, the IMO will first prepare forecasts of the quantity of electricity that will be used by consumers within the SWIS. Based on these figures, the IMO will determine how much generation capacity is required to meet this demand and provide an adequate reserve margin to cover plant outages or other contingencies.

The reserve margin comprises three components. The largest portion is required to cover for failure of a generating unit and is set equal to the largest unit on the system. Currently this is the Collie Power Station which has a capacity of 304 MW. The second component, currently set at 30 MW, is provided to ensure that the power system frequency can be properly controlled at times of system peak. The third component, currently 11 MW, provides stand-by for embedded generators.

Considering 2007/08 as an example of this process, the maximum demand on a hot day is forecast to be 3655 MW. When the reserve margin is added to this, it can be seen that a total of 4000 MW of capacity must be provided.

The IMO needs to ensure that 4000 MW of capacity is available on the SWIS for this year. To do this, the IMO will assign 4000 capacity credits to existing capacity, and to new generators and DSM capacity that are planned to be built and which commit to be available from December 2007 through to July 2008.

The IMO must also ensure that this capacity is funded by customers, so, at the same time, 4000 capacity credit obligations will be placed on customers. Customers can estimate the level of obligations that they are likely to incur based on their forecasts of their peak demand. Their actual obligations will be determined at the end of each month of operation.

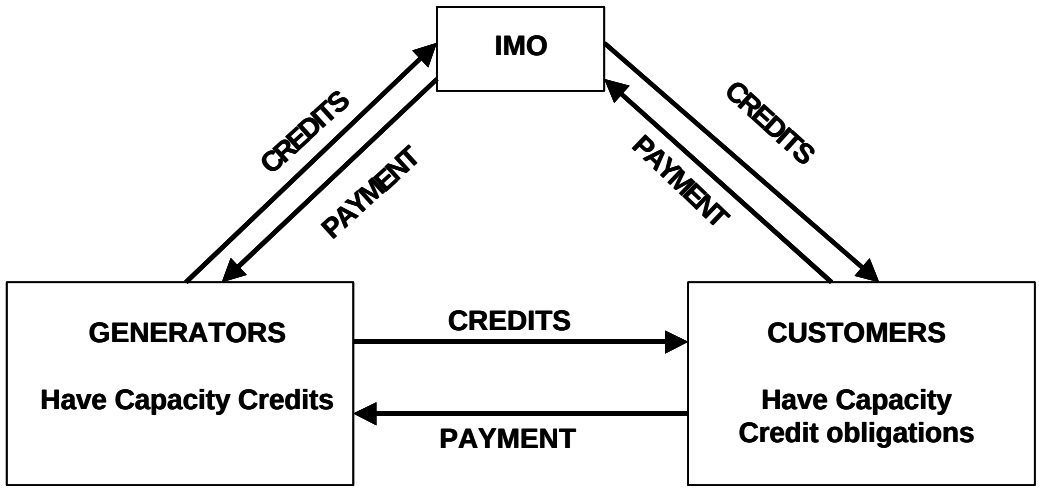


Fig. 3 Trading of Capacity Credits bi-laterally or through the IMO

Generators can follow one of two processes to be assigned capacity credits. The first option is for the generator to advise the IMO that it is trading its credits bi-laterally with a customer or customers. This allows the customer to cover its obligations at an assured price. The alternative is for the generator to offer its capacity into the Reserve Capacity Auction that the IMO will call if insufficient credits have been assigned through bi-lateral trades. In the auction, the IMO will purchase the number of credits it requires and will on-sell these to customers.

Capacity credits are valid for a year and are allocated to a specific generating plant or DSM facility. Market participants cannot hoard capacity credits so the amount of credits that the IMO purchases from generators should exactly match the quantity that customers need to purchase each year.

Generating plant does not need to have capacity credits to be able to sell electricity within the market.

3.3 Timeframes

The dates for each of the steps within the Reserve Capacity Mechanism are set out in chapter 4 of the Market Rules.

This SOO report forms part of the first Reserve Capacity Cycle. The key steps going forward are:

- July 2005 - the IMO issues the SOO report identifying the requirements for new generating capacity over the next 10 years.
- 15 July 2005 – the IMO will publish the Reserve Capacity Information Pack.

- 19 August 2005 – applications for Certification of Reserve Capacity close.

- 2 September 2005 – the IMO advises all applicants of the quantity of Certified Reserve Capacity that has been assigned.

- 9 September 2005 – participants must notify the IMO of how much Certified Reserve Capacity will be traded bi-laterally and how much offered into a Reserve Capacity Auction.

- 16 September 2005 – the IMO will advise whether a Reserve Capacity Auction is to be held; and, if so

- 20 – 29 September 2005 – the IMO will hold a Reserve Capacity Auction.

Generation and DSM capacity which participate within this first reserve capacity cycle will be providing capacity into the SWIS for the period of October 2007 through to September 2008.

3.4 Reliability Criteria

There must be enough generation capacity available to meet the system demand at all times. In the SWIS, the highest demands occur in summer and, although very high demands may only occur infrequently, it is essential that there be sufficient capacity available to meet them. However, even though demand is less at other times, there can still be high demands placed on the system when major generating plants are taken out of service for maintenance. For this reason, the Market Rules define two criteria to be used in planning the quantity of generation that should be provide in the SWIS.

The first criterion considers the peak summer demand to determine whether there is sufficient capacity to meet this demand with some margin. There must be sufficient capacity installed in the SWIS to meet the forecast peak demand plus provide a margin to cover possible plant breakdowns and to provide a reserve to cover operational requirements. This is currently set at 345 MW.

In determining the level of peak demand that is used as the reliability target, it is necessary to consider the cost of meeting the target and the likely frequency of it occurring. If a high figure is chosen it will be necessary to provide extra generation capacity and this will impose additional costs on customers. On the other hand, if too low a figure is selected, too little plant will be installed and there will be an unacceptable number of power shortages. The forecast peak demand stipulated in the rules is one that has a probability of occurring in no more than one year out of ten. This is a commonly used industry standard.

The second criterion addresses the need to have sufficient capacity to meet demand throughout all of the year. Generating plant needs to be taken off-line for scheduled maintenance or unscheduled outages and it is not economically practical to

install enough plant to entirely eliminate supply shortfalls.

Instead, planning on the SWIS seeks to ensure that sufficient capacity is available to limit expected energy shortfalls to 0.002% of annual energy consumption. This is estimated through computer simulation of the power system using a model that takes account of estimated half-hourly demand, generator performance (including scheduled and forced outages) and demand management.

These two criteria give very similar results in terms of generation requirements though the first criterion, based on meeting the demand plus reserve, is slightly more demanding.

4 FORECASTS

4.1 Background to the Forecasts

Forecasts are prepared for two measures of electricity usage within the SWIS. These are the amount of electricity actually produced or consumed within a given period, usually a year, and the maximum electricity demand measured at any instant.

The amount of electricity sold, which is usually referred to as "energy" or "sent-out", has increased steadily over past years and is closely related to the level of economic activity both generally within Australia and more particularly within the state. The term "sent-out" refers to the amount of electricity sent out from the various power stations on the system. It includes energy that is sold to customers as well as energy losses within the transmission and distribution systems.

Energy growth is driven by factors such as new industries, increases in population and construction of new housing. It is also influenced by consumer confidence as this translates through to the purchase and usage of different electrical appliances. Growth rates are also influenced by changes in the intensity of energy usage. More efficient appliances, better home insulation and substitution between different fuel sources also affect the amount of energy used.

In general, these factors change slowly so energy usage forecasts are relatively stable. There is a measure of uncertainty in the forecasts of future economic activity so forecasts are prepared for low and high growth cases as well as for the expected case. The level of capacity to be acquired by the IMO is based on the expected forecast but the high and low cases provide an indication of the possible risk of under- or over-provision.

The second measure of electricity usage is the maximum demand, which is the amount of electricity that is being consumed at any given time. This demand, which in the SWIS is measured over each half hour, is strongly influenced by shorter term drivers, in particular, the weather and the use of space cooling equipment in summer.

Given the inherent uncertainty in demand levels, the forecasts are prepared on the basis of defined probability standards. Conceptually, the underlying probabilities relate to levels of electricity demand and they would be determined by the joint probability of all the variables influencing demand.

These include:

- the daily average temperature;

- the humidity;
- weather conditions on the previous day or two; and
- overall summer average temperature.

Other factors that will affect demand, particularly outside of the CBD, are general economic conditions and similar factors. However, in practice, the probabilities have been linked to the single most important determinant of demand which is the daily average temperature.

Analysis of daily average temperatures since the 1950's reveals the following PoE levels for the hottest summer day and coldest winter day. The peak electricity demand forecasts reflect expected demand on a non-holiday period business day under these temperature conditions

Forecasts are prepared on the basis of three defined probability standards:

- A 10% probability of exceedance (PoE) forecast is one that is not expected to be exceeded more than once in every ten years;
- A 50% PoE forecast which is not expected to be exceeded more than once in every two years; and
- A 90% PoE forecast which is not expected to be exceeded more than nine in every ten years.

In general, 10% PoE peak demand events are infrequent and typically have a very short duration. A 10% summer maximum demand forecast implies there is a one in ten chance of this level of demand being exceeded for perhaps an hour or two on one business day outside of the Christmas holiday period during a given summer.

A 10% PoE peak would occur on a day where the average temperature over the day is around 34.5 degrees Celsius. By comparison, a day where the average temperature is around 31.5 degrees Celsius would have a peak demand equal to the 50% PoE.

Even if a 10% PoE event occurs during a year, typical demand levels will be much lower, and generation reserve levels correspondingly higher, throughout most of the summer.

The market rules require three forecasts to be prepared in respect to energy namely low, expected and high. Six forecasts are prepared of peak demand covering all combinations of low, expected and high growth combined with the 50% PoE and the 10% PoE, the latter representing one in ten year weather conditions.

Forecasts are prepared for the 90% PoE peak demand for each summer type, however these forecasts are not required by the market rules currently. This is because planning to the 50% PoE and 10% PoE criteria will ensure that there is sufficient capacity to meet the 90% PoE criterion.

4.2 Preparation of Forecasts

4.2.1 Electricity Sent-out

The IMO retained the National Institute for Economic and Industry Research (NIEIR) to prepare the forecasts for this report. NIEIR has

prepared forecasts for a range of utilities over many years as well as those used in the most recent Generation Status Reviews provided by Western Power.

NIEIR has a national macroeconomic model for the whole Australian economy and this is used to develop three growth scenarios. A state economic model is then used to forecast the Gross State Product and other indicators and a regional model allocates this growth to the various regions within the SWIS.

Forecasts of SWIS electricity sales are developed on an industry basis using regression models that relate consumption to the change in output for that industry and the change in real electricity prices for that industry. The output and price elasticities used in the models are adjusted at the regional level to reflect differences in the electrical intensity between industries and regions.

Residential electricity sales forecasts are determined from a regression model based on average electricity sales. Average sales per customer are determined from a regression model incorporating real household disposable income per capita, real residential electricity prices and a weather adjustment variable. The relevant income and price elasticities of demand for the regional sector are taken from NIEIR's Western Australian electricity model.

Residential customer number forecasts are linked to NIEIR's forecast of the dwelling stock. NIEIR's regional economic models include projections of population, household formation, dwelling construction activity and the dwelling stock for each sub-region.

4.2.2 Summer Maximum Demand

Forecasts of summer maximum demands are developed using an approach that takes account of four major factors:

Non-temperature sensitive load – this is residential, industrial and commercial load that does not change as a result of differences in the daily temperature. The growth in demand from these loads will be closely related to the level of economic activity within the SWIS. The number of new homes, and sales by retail businesses, will be strong drivers.

Much of the economic activity in Western Australia is occurring outside of the SWIS, particularly in the Pilbara and the Goldfields. While this does not directly affect SWIS demand there is still a significant flow through via the increased demand for Perth-based support industries and population growth in the Metropolitan area.

Temperature sensitive load – for the summer maximum demand, this comprises mainly space cooling appliances such as refrigerative and evaporative air-conditioning as well as ventilation equipment. Determining the demand from these loads is the most complex element of the forecast because it is being driven by the rate of purchase and usage of new appliances. NIEIR's approach reconciles appliance sales data to half hourly electricity demand data combined with regression analysis

equations based on the temperature for the given day and the previous day.

Major industrial loads – which covers all of the larger customers in the SWIS. This portion of the demand is assessed by consideration of known major development plans and an analysis of the flow through of general economic growth.

Embedded generation – which is generation that is co-located with major industrial loads. There are several major power stations in the SWIS, in particular those associated with the production of alumina, which are co-located with their loads. These power stations may draw stand-by supplies from the SWIS and may also have some export capability. Only these net energy transfers are included within the SWIS forecasts.

4.2.3 Stand-by Generation Requirements

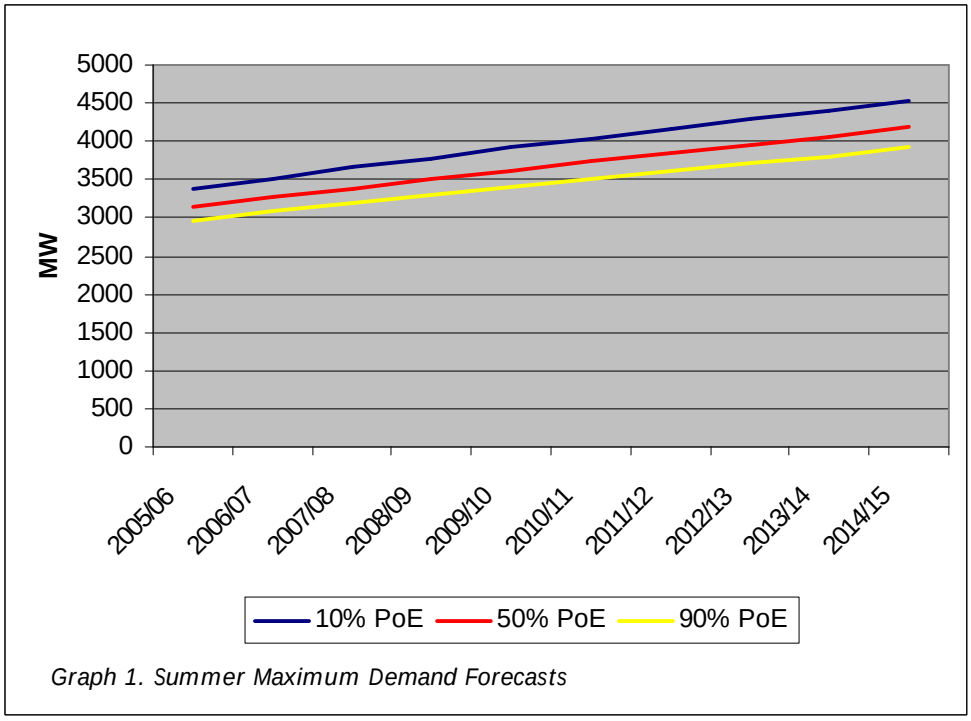
A number of major industries within the SWIS are supplied with electricity from on-site generating plant.

Some of these so-called embedded generators have arrangements to draw stand-by energy from the SWIS during periods when plant is out of service for maintenance. This demand is not captured within the forecasts prepared by NIEIR and must be estimated separately.

These customers will have a capacity obligation that reflects their maximum demand from the SWIS and their diversity in likely demand. Based on data provided to the IMO, the requirement to provide coverage for outages to embedded generators will add 11 MW to the amount of capacity required to cover the summer peak demand.

4.3 Forecasts of Maximum Demand

Forecasts of maximum demand have been prepared for nine load cases though the 90% PoE forecasts are not used to determine plant requirements.



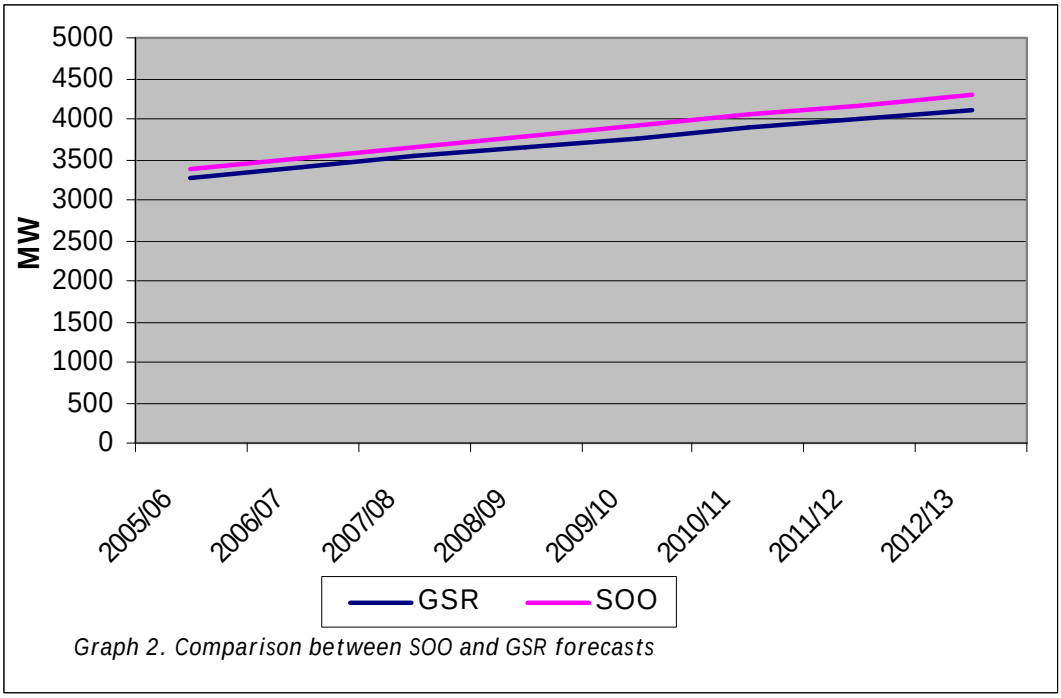
Graph 1. Summer Maximum Demand Forecasts

Separate series of forecasts have been prepared for maximum demands for the SWIS assuming that the underlying load growth follows the expected rate, the high rate and the low rate, respectively. For each growth rate, maximum demand forecasts are provided corresponding to 10%, 50% and 90% PoE weather conditions. Appendix 2 provides the full series of forecasts in tabular form while *Graph 1* below, shows the forecast assuming that the underlying growth rate follows the expected rate.

The upper line in *Graph 1* shows the forecast maximum demand for the 10% PoE summer weather conditions assuming underlying load growth follows the expected scenario. This is the scenario that is used to determine the amount of generation capacity that must be available in the SWIS. Under this scenario, maximum demand is forecast to be 3655MW in 2007/08 and this will rise to 4539 MW during the summer of 2014/15. This corresponds to an average growth rate of 3.1% per annum. If demand follows the high scenario, the annual growth rate will average 3.6% while it will be 2.6% if growth follows the low forecast scenario.

The graph indicates the potential variation in demand due to weather conditions. If the maximum temperature in 2007/08 is no more than the 50% PoE level, that is, there are no extremely hot days, the maximum demand is forecast to be 3388 MW. However, if some extreme temperatures occur which match the 10% PoE forecast, maximum demand is forecast to be around 270 MW higher. This difference is close to 8% of the demand level and is the equivalent to the largest generating unit on the system. If the summer were to be cool, then the demand is forecast to only reach 3196 MW, which is almost 200 MW less than the median weather figure.

The potential for changes in demand driven by underlying load growth is substantially less than the temperature impact. If the economy were to follow the high growth rate, rather than the expected level, the difference in peak demand in 2007/08 would be 80 MW. The actual risk is also partially reduced by the fact that an acceleration of state growth would be signalled by a range of factors such as new house starts which will provide some advanced notice to the



Graph 2. Comparison between SOO and GSR forecasts

NIEIR prepared the forecasts that were used in last year's GSR published by Western Power. Since those forecasts were prepared, NIEIR have determined that purchases of air-conditioning units through to 2004/05 appear to be higher than had previously been forecast and this increased rate of purchases is expected to continue. In addition, the underlying growth rate within the Western Australian economy has been higher than previously forecast due to ongoing resources growth.

The difference between last year's GSR report and this SOO report, which can be seen in Graph 2, results in the maximum demand increasing by about 120 MW by 2007/08.

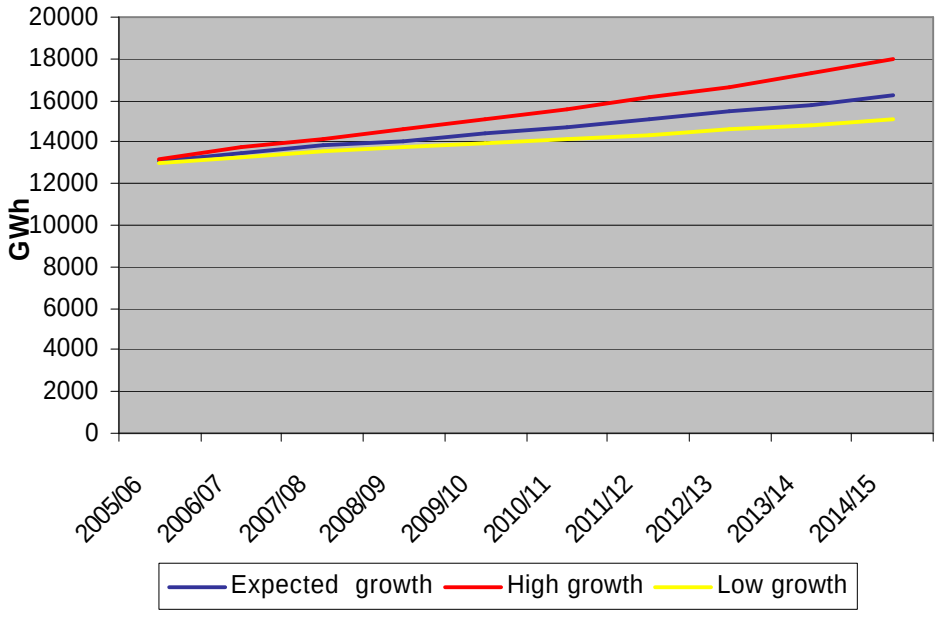
To determine the actual demand from new air-conditioning installations it is necessary to forecast both how many units will be installed and how much they will be used. While there is an underlying trend, both of these factors will vary considerably depending on the weather conditions in the year in question and the impact of what happened in the previous year.

For example, if the weather in a year is particularly hot, more people will purchase air-conditioning units than if it was a cooler year. Having installed them, people will then tend to run them in the following years, even though the temperatures may not be particularly high. This means that the demand in a median year that follows a hot year is likely to be higher than the demand in a median year that follows a cool year. Similarly, people who buy reverse cycle air-conditioning for heating will most likely use them extensively for summer cooling as well.

4.4 Energy

Graph 3 below shows the forecast energy sent-out from power stations for the three growth rates. These figures are provided in tabular form in Appendix 3. This data includes the energy used by customers as well as the losses within the transmission and distribution systems.

Although the maximum demand may vary considerably as a result of temperatures, the amount of energy



Graph 3. Forecast sent out energy in the SWIS

sold to customers over a year is relatively stable. Different forecasts are therefore only provided to reflect the different underlying growth trends.

Energy sent out is forecast to grow at an annual rate of 2.5% in the expected growth rate scenario and at 3.5% and 1.7% in the high and low cases respectively. These figures are less than the growth rates for annual peak demand and indicate that the system peaks are becoming more significant over time. This is consistent with the increasing proportion of maximum demand being driven by air-conditioning loads.

4.5 Availability Curve

One of the key objectives of the market is to encourage measures that manage the amount of electricity used and when it is used. One mechanism to achieve this is to adopt various DSM strategies that release capacity into the system by end users reducing their demand. This may be by users either changing their operations or by running stand-by generating capacity.

There is a limit as to how often users would want to reduce their demand in this manner. This means that DSM capacity will only offer their capacity for a limited time each year. In turn, this means that while DSM can provide capacity to the SWIS, it can only provide limited quantities of energy.

As the relative quantity of DSM on the system is increased, there will be a proportionate decrease in the quantity of generating plant. However, this generating plant will still be providing almost all of the energy so the average output of each generating unit will increase. This may lead to the situation where, even though the peak demand can be met, there is insufficient generating plant to provide the energy required over the year.

The market rules address this situation by requiring the IMO to develop the Availability Curve which describes the forecast capacities that are required for more than 24, 48, 72 and 96 hours per year and the minimum capacity required to be provided by generation plant if power system security and reliability are to be maintained. This curve, which is provided in Section 6, will define the maximum quantities of DSM, and any other energy limited capacity, that can be accommodated within the SWIS.

4.6 Major New Loads

In developing these forecasts, the IMO has sought information on major new electricity loads that may be developed. It appears unlikely that any projects will be developed which will impose a substantial net increase in demand during the next 2-3 years.

5. SUPPLY SIDE

5.1 Existing Generation

All generators that want to participate in the reserve capacity mechanism are required to have their capacity certified by the IMO. This process is currently underway for IPPs.

For the first reserve capacity cycle the market rules have defined a certified capacity for Western Power. This is set at 3224 MW, which includes the 260 MW power station being constructed by Transfield, and assumes the closure of Muja AB Power Station. This figure covers several categories of generators:

- plant owned and operated by Western Power;
- plant owned by Western Power but operated by third parties; and
- plant owned by IPPs and selling electricity to Western Power under contracts.

Western Power is able to review this and submit a revised figure to the IMO in late August 2005.

5.2 Changes in Generation

Fourteen companies responded to the request for Expressions of Interest that was called in October 2004 for the provision of new generation capacity. Not all of these companies have progressed projects, however, a number of development proposals are being actively pursued by IPPs.

The IMO has categorised these projects as either "committed", which means that the projects have secured financial close, or "proposed", which means that the project is being actively pursued but may not proceed.

5.2.3 Committed New Generation

Alinta Power Services has committed to the development of two cogeneration plants to be sited at Pinjarra. The first of these is expected to enter service in July 2005 and the second in December 2006. Each will have a capacity of 140 MW.

Alinta Power Services and Renewable Power Ventures are constructing a windfarm near Geraldton and this is scheduled for completion in November 2005. This windfarm is planned to have an installed capacity of 89.1 MW.

Griffin Energy plans to construct a wind farm at Emu Downs with an installed capacity of 80 MW. This is planned to enter service in October 2006.

While it has no commitments to build new plant, Western Power is to undertake modifications to its Muja D generating units which is expected to increase output by 52 MW. (This is not included in the 3224 MW certified capacity figure.)

5.2.4 Proposed New Generation

Alinta Power Services has announced plans for two more 140 MW cogeneration plants to be built for the summer of 2007/08. A further plant is planned for 2008/09 with one additional plant proposed for each year from 2010 through to 2014.

Western Power is currently undertaking the second stage of its Power Procurement Process. This is for the provision of 300 MW (nominal) of base load capacity into the SWIS for the summer of 2008/09. Western Power's tendering process includes the option for the gas-fired proposal, if this is the selected proponent, to be brought into service in 2007/08.

Perth Energy has announced plans for a gas-fired combined cycle power station to be built in the Kwinana area. This is expected to have a capacity of 120 MW and is scheduled to enter service in 2006/07.

Griffin Energy proposes to build three 200 MW coal fired power plants at Bluewaters, near Collie. The first of these is planned to enter service in September 2008 with the second and third plants in 2010 and 2012.

Eneabba Gas Limited has announced that it plans to construct a 100 MW power station near Dongara to be fuelled by coal seam methane. The nominal service date for this plant is 2008 but this will depend on required upgrades to the local transmission system.

In addition to the committed upgrade of Muja D, Western Power is considering a further 30 MW of upgrades to other coal fired plant.

Another plant developer is also considering a 20 MW upgrade to its generating plant.

5.2.5 Plant Closures

Western Power has announced that Muja AB Power Station will be closed during 2006/07. The capacity of this station is not included within Western Power's 2007/08 certified capacity of 3224 MW. Western Power has also announced that it plans to close Kwinana Stage B Power Stations in 2007/08 and Stage A in the following year.

5.3 Demand Side Management

Western Power has indicated that it intends to seek certification for 60 MW of curtailable load following its successful Demand Saver Program during 2004/05.

In addition, approximately 60 MW of load is contracted to be interruptible to support Western Power's requirements for spinning reserve. This will be eligible to apply for certification.

Other electricity retailers have indicated that they will not be seeking certification for DSM capacity but instead plan to use any such capacity to reduce their monthly capacity obligations. This, in effect, provides a small buffer to the system.

5.4 Summary

Appendix 4 summarises the committed and proposed changes to generation and DSM capacities within the SWIS.

6. SUPPLY - DEMAND BALANCE

6.1 Assessment of Reserve Margin Criterion

The quantity of capacity required to be made available for the SWIS is calculated through two separate processes as outlined in 3.4 above. The first criterion is based on maintaining an adequate reserve margin at times of system peak. The required capacity is the sum of:

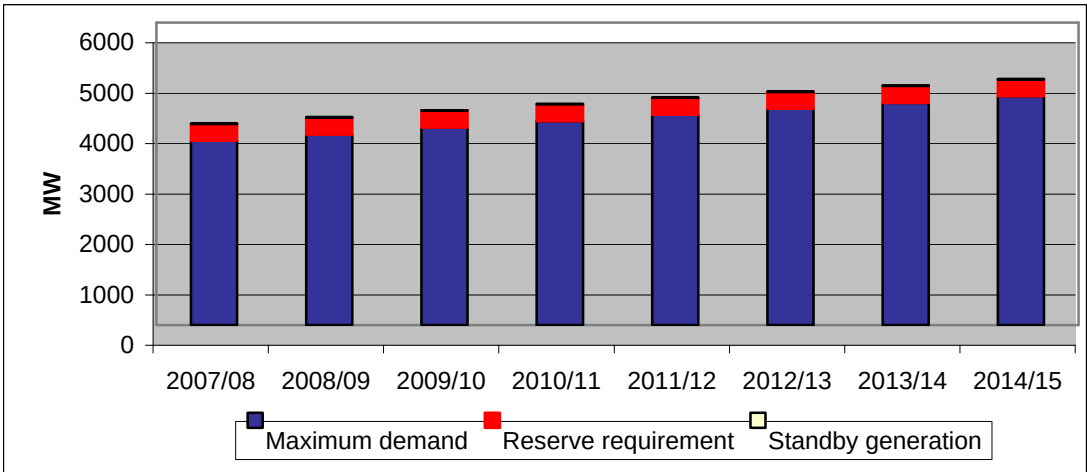
- the system peak demand; plus
- a reserve margin to cover plant outages; plus
- a reserve margin to provide standby to embedded generation.

Graph 4 below summarises these requirements.

6.2 Assessment of Expected Unserved Energy criterion

The second criterion is that there be sufficient plant to ensure that the expected level of energy not served does not exceed 0.002% in any year. This has been undertaken by McLennan Magasanik Associates (MMA) on behalf of the IMO using a proprietary modelling package called Strategist.

MMA have prepared a data set that includes information on the capacity and reliability of existing and proposed generating plant. Strategist uses this data to model the electricity demand on the SWIS and identify any occasions when full demand cannot be met due to insufficient generating units being available for service.



Graph 4. Generation Requirements (Reserve Capacity Criterion)

Strategist estimates the probability that not all demand can be supplied during these shortages and sums this over each year to provide the value of Expected Unserved Energy (EUE). From this, MMA have determined the amount of generation capacity required to ensure that expected energy shortfalls are limited to 0.002% of annual consumption.

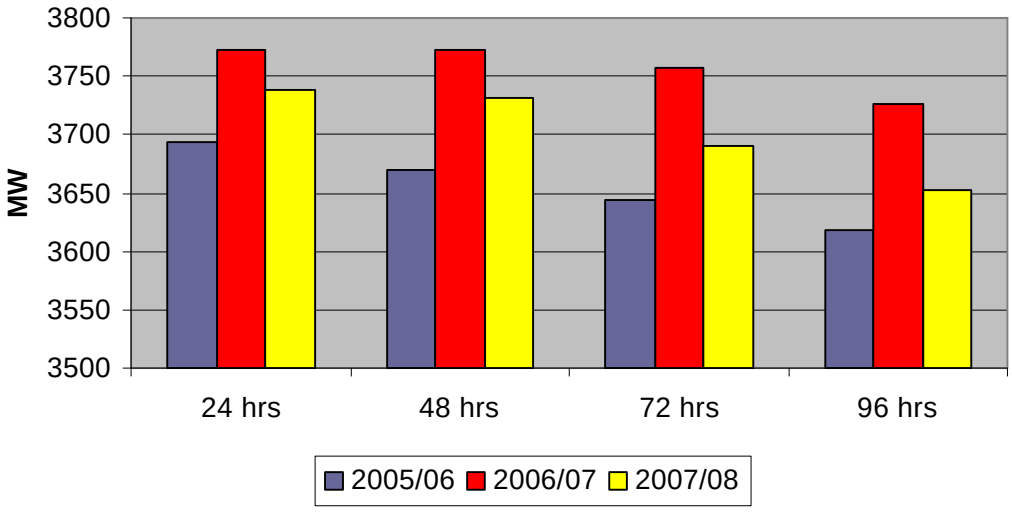
MMA's analysis indicates that no additional capacity is required to meet the EUE criteria until 2009/10 in the expected growth case. This is substantially later than when the analysis is undertaken using the peak demand criterion where new capacity is required in 2007/08. The analysis shows that the plant requirements under the EUE criterion are approximately 500 MW less than those determined by the maximum demand criterion. This is a feature of the influence of short duration, high peak demands on the SWIS during summer.

As a result of the MMA analysis, all determination of capacity requirements has been based on the maximum demand criterion rather than the EUE criterion. The EUE criterion, however, has been used as the basis for the development of the availability curve as outlined below.

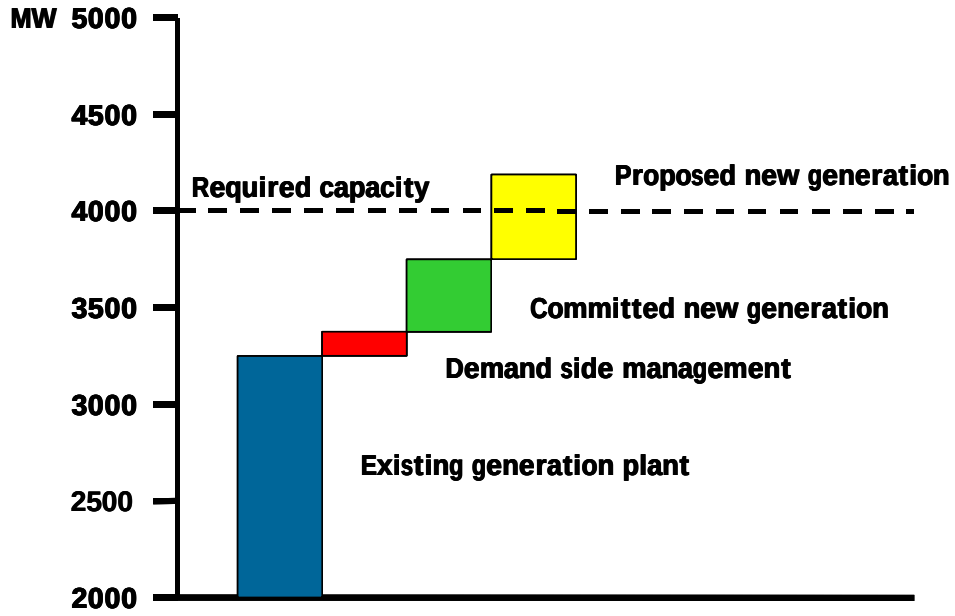
6.3 Availability Curve

MMA have also used the Strategist model to assess the amount of capacity that can be provided by plant, mainly DSM, which is only available to operate for a few hours each year. This allows retailers, and other major customers, to tailor their DSM arrangements to the needs of the power system.

Graph 5 shows the minimum amount that must be provided by capacity that is able to supply energy for a specific range of durations. This shows, for example, that in 2007/08, there must be at least 3739 MW of capacity that can operate for at least 24 hours in each year. The total requirement for capacity in this year is 4000 MW so the difference between these figures, 261 MW, could be



Graph 5. Availability Curve (Expected Growth Forecast)



Graph 6. Generation requirement and availability 2007/08

provided by DSM capacity that can only operate for 24 hours per year.

6.4 Opportunities for Investment

6.4.1 Opportunities in 2007/08

In 2007/08, which will be the first year of operation for capacity secured through the first reserve capacity cycle, a total of 4000 MW of generation and DSM capacity must be available to meet the reliability criteria. It is anticipated that 3731 MW of this will be provided by plant that either already exists or which is committed to be built. This capacity will include:

- Western Power's existing plant (excluding Muja AB which is scheduled for retirement);
- IPP plant supplying Western Power through long term contracts;
- two cogeneration plants owned by Alinta Power Services;
- two large windfarms;
- 52 MW of upgrades to Western Power existing generation at Muja D, and
- 120 MW of interruptible and curtailable loads.

As a consequence, there is an opportunity for a further 269 MW to be installed to ensure that the full requirement is met. Proposed projects of 750 MW have been identified which may provide this required capacity. These include:

- two additional cogeneration plants proposed by Alinta Power Services;
- a combined cycle plant proposed by Perth Energy;
- the gas-based bidder for the Power Procurement Process; and
- upgrades to existing generation capacity proposed by Western Power.

It can be seen that the proposed projects are sufficient to cover the requirement for new capacity. However, other developers may also seek to provide additional capacity and they can do this as long as they apply for certification of their capacity by 19 August 2005.

At this stage, it is unclear as to whether the IMO will need to conduct a reserve capacity auction at the end of September 2005 to determine which proposals are assigned capacity credits. Proponents are required to nominate, by 9 September 2005, how much capacity they intend to provide to the market through bi-lateral contracts or though an auction. Once this information is provided, the IMO will be able to determine whether an auction is required. The IMO will advise participants by 16 September 2005 as to whether an auction is to be held.

6.4.2 Opportunities in 2008/09

The forecast capacity requirement for 2008/09 is 4124 MW.

It is expected that 300 MW of capacity associated with Stage 2 of the Power Procurement Process will enter service in 2008/09.

This plant has not been listed as committed because the tendering process is still to be completed and no financial commitment has yet been made.

The addition of this facility, and the closure of Kwinana Stage B, will increase Western Power's net capacity by 110MW. This would lift the level of installed capacity, assuming that the 2007/08 requirement has been fully satisfied, to 4111 MW, virtually covering the 2008/09 requirement.

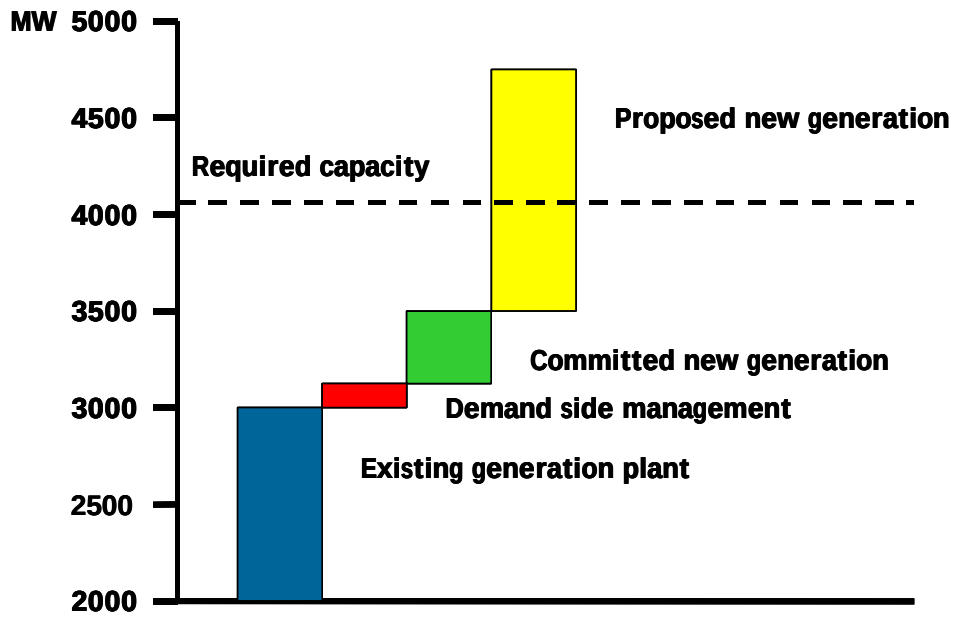
Several other new projects are also proposed to enter service in 2008/09:

- Alinta Power Services proposes another cogeneration plant;
- Griffin Energy proposes the first of three 200 MW units at Bluewaters; and
- Eneabba Gas proposes a 100 MW plant near Eneabba fuelled by coal seam methane.

At first sight, it may appear that these projects are unlikely to proceed because this would lead to excess capacity within the SWIS.

However, new capacity is not being built just to ensure that reliability standards are maintained. Proponents are also seeking opportunities to reduce overall production costs by introducing more efficient, lower cost capacity.

The market arrangements, and particularly the STEM, allow this new capacity to compete directly with older plant, which may be more expensive and less efficient, and progressively displace it from the system.



Graph 7. Generation requirement and availability 2008/09

6.4.3 Opportunities in Subsequent years

From 2008/09 onwards, the demand for electricity is forecast to increase at around 120 MW per year. In addition, Western Power plans to retire further generating units at its Kwinana Power Station so there may be a need for around 200 MW of new capacity in 2009/10. Some of this need may be covered by the significant quantity of new capacity proposed for 2008/09.

7. REVIEW OF PLANNING CRITERIA

The Market Rules require the IMO, from time to time and at least once in every five years period, to undertake a review of the planning criterion and the process by which it forecasts SWIS peak demand. The criteria used in this SOO, and the forecasting processes, have essentially followed those established by Western Power in previous years.

The IMO plans to undertake a review of planning criteria and the forecasting process, which will include consultation with stakeholders, during 2005/06.

8. NEXT STEPS IN THE RESERVE CAPACITY MECHANISM

Persons who wish to offer generation or DSM capacity for service during 2007/08 must register with the IMO and then apply for certification of their proposed capacity. The closing date for certification is 19 August 2005. The required forms for these processes are available on the IMO website (www.imowa.com.au).

APPENDIX 1 – GLOSSARY

Availability curve: a measure of the amount of reserve capacity that must be provided by generation or demand side capacity (DSM) that can operate for at lease 24, 48, 72 or 96 hours each year. The availability curve is used to determine the maximum quantity of DSM that can be accommodated within the system.

Bi lateral contracts: a contract formed between any two parties for the sale of electricity or generation capacity by one party to the other.

Committed generation: new generation capacity for which a proponent has secured financial closure and which is very likely to be constructed.

Demand Side Management (DSM): the ability of a customer to reduce its consumption of electricity through either modifying their operations or operating on-site stand-by generation.

Embedded generation: Generation facilities that are co-located with the load that they supply. The most significant examples within the SWIS are the four alumina production plants.

Gigawatt-hour (GWh): a measure of electricity consumption over time. One GWh is equal to one million kilowatt-hours (kWh) where 1 kWh is equal to the electricity consumed by a one kW load when operated for one hour.

Independent Market Operator (IMO): a body, established by statute, that has responsibility to operate the Wholesale Electricity market including the Reserve Capacity Mechanism.

Independent Power Producer (IPP): any generating company other than Western Power. The term covers both private companies and trading enterprises that are owned by governments other than the government of Western Australia.

Maximum demand: the highest rate of usage of electricity in a given period such as a year, season or day. Maximum demand is measured in megawatts.

Megawatt (MW): a measure describing the rate at which electricity is used. A megawatt is equal to one thousand kilowatts (kW).

Planning criteria: a set of targets set in the Market Rules to which the IMO must plan the reliability of the power system.

Probability of exceedence (PoE): the probability, or likelihood, that a certain level of demand will be exceeded. In developing load forecasts, the concept of probability of exceedence is used to estimate the likelihood that the temperature on any day will equal or exceed a given set of hot weather conditions. A 10% PoE demand event is a level of demand that only has a 10% chance of being met or exceeded. This is a very rare event. Temperature conditions equivalent to this event would be expected to only occur during one year out of every ten.

Proposed new generation: new capacity proposals which have been made public by a developer but which the developer has not made a firm commitment to proceed with.

Reserve Capacity Mechanism: the process by which the IMO determines the required capacity to be available within the SWIS and ensures that this capacity is provided.

Short Term Energy Market (STEM): a day-ahead market operated by the IMO under which market participants can buy electricity from, or sell electricity to, the IMO.

South West Interconnected System (SWIS): the interconnected transmission and distribution systems, generation facilities and associated works located in the south west of Western Australia. The SWIS covers an area generally extending between Kalbarri, Kalgoorlie and Albany.

System Management: A segregated business unit of Western Power that is responsible for dispatching the power system.

APPENDIX 2. FORECASTS OF MAXIMUM DEMAND

Maximum Demand Forecasts With Expected Growth (MW)

	10% PoE	50% PoE	90% PoE
2005/06	3372	3135	2965
2006/07	3519	3267	3085
2007/08	3655	3388	3196
2008/09	3779	3497	3294
2009/10	3917	3620	3406
2010/11	4044	3734	3510
2011/12	4171	3847	3614
2012/13	4291	3955	3712
2013/14	4409	4060	3808
2014/15	4539	4178	3918

Maximum Demand Forecasts With High Growth (MW)

	10% PoE	50% PoE	90% PoE
2005/06	3413	3174	3002
2006/07	3581	3325	3140
2007/08	3735	3463	3267
2008/09	3884	3596	3388
2009/10	4056	3752	3533
2010/11	4205	3886	3656
2011/12	4355	4021	3781
2012/13	4501	4154	3903
2013/14	4653	4292	4031
2014/15	4817	4442	4173

Maximum Demand Forecasts With Low Growth (MW)

	10% PoE	50% PoE	90% PoE
2005/06	3341	3108	2940
2006/07	3472	3224	3045
2007/08	3591	3329	3140
2008/09	3701	3425	3227
2009/10	3809	3519	3311
2010/11	3914	3612	3395
2011/12	4016	3702	3476
2012/13	4119	3793	3559
2013/14	4218	3881	3639
2014/15	4315	3967	3716

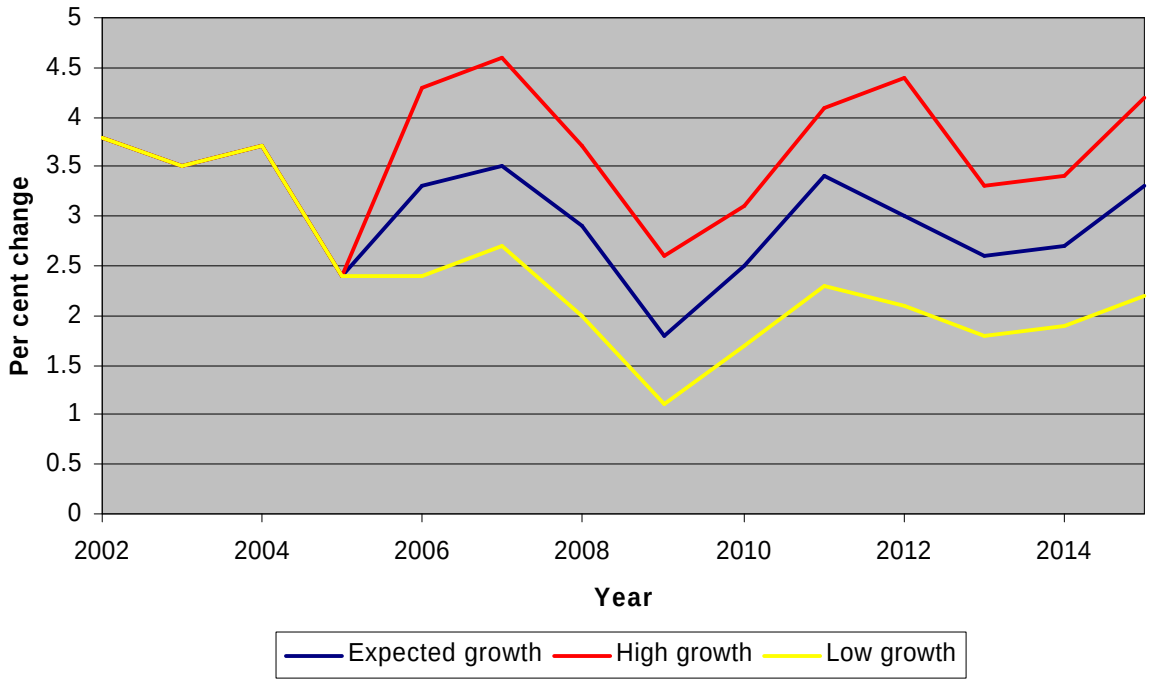
APPENDIX 3. FORECAST OF SENT OUT ENERGY – GWh

	Expected growth	High growth	Low growth
2005/06	13053	13197	12987
2006/07	13448	13715	13292
2007/08	13803	14175	13556
2008/09	14059	14604	13758
2009/10	14379	15114	13929
2010/11	14728	15595	14147
2011/12	15107	16126	14359
2012/13	15471	16674	14618
2013/14	15817	17281	14854
2014/15	16237	17945	15081

APPENDIX 4. GENERATION CAPACITY 2007/08 to 2014/15

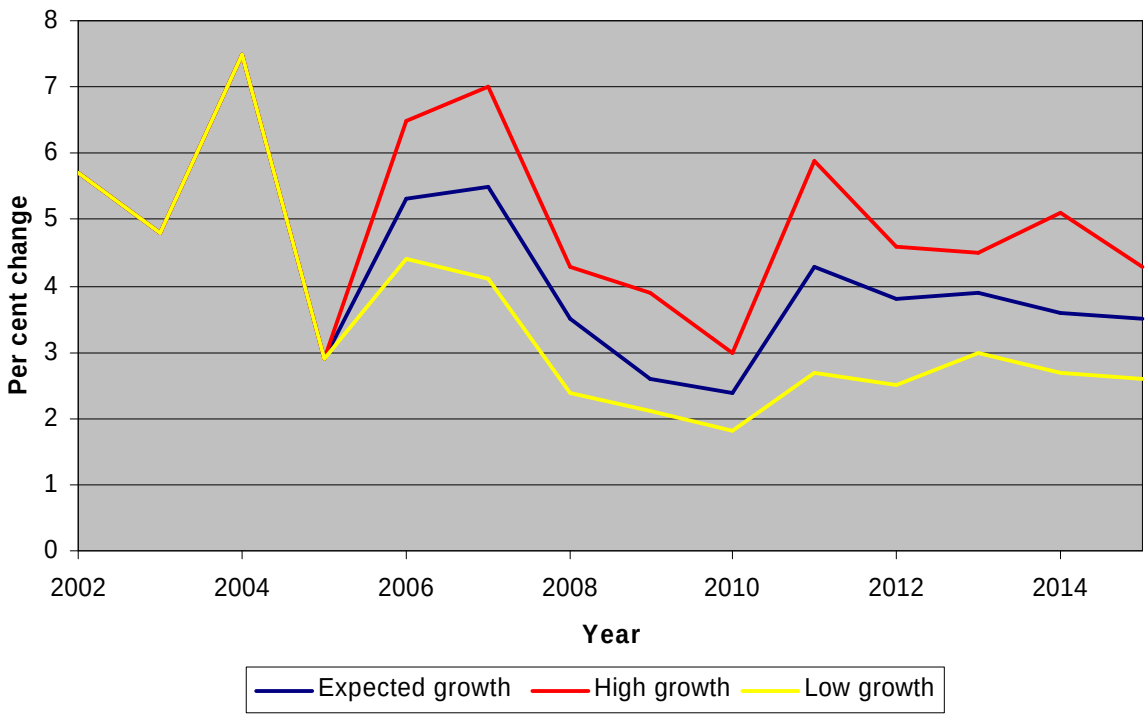
Generation and DSM capacity – MW	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Existing generation	3224	3034	2834	2834	2834	2834	2834	2834
Committed new generation	387	387	387	387	387	387	387	387
Proposed new generation	750	1190	1190	1530	1670	2010	2150	2290
Demand side management	120	120	120	120	120	120	120	120
TOTAL	4181	4731	4531	4871	5011	5351	5491	5631

APPENDIX 5. FORECAST GDP GROWTH



Graph A5.1. Australian GDP growth 2001-02 to 2014-15

APPENDIX 6. FORECAST GSP GROWTH



Graph A6.1 Projected Western Australian GSP growth

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