

The Energy Market Company's

# 'GO DIRECT' GUIDE



What You Should Know Before You Register As  
A Direct Market Consumer  
In Singapore's Electricity Market

If you are a contestable consumer and would like to buy electricity directly from the wholesale market — EMC's guide for Direct Market Consumers has been written especially for you

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# INTRODUCTION

The launch of the National Electricity Market of Singapore (NEMS) on January 1, 2003, as part of the liberalisation of the nation's power industry has created a range of exciting and potentially advantageous options for power consumers.




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NEMS is designed to promote the efficient supply of competitively-priced electricity, open up the retail market to full competition, allow certain government-owned assets to be privatised and encourage private investment in Singapore's power system infrastructure.

Apart from the benefits of improved efficiencies in the power industry, liberalisation gives consumers the power of choice: the choice to decide how they want to buy their electricity, and from whom — all at market-driven, competitive prices.

In NEMS, which is run by the Energy Market Company (EMC), prices can change every 30 minutes as offers from generators to supply power are matched with demand from retailers and consumers.

What this means for some large “contestable” consumers is that they are now able to make optimal pricing decisions on electricity to suit their needs and budgets.



If you have become contestable and if you are considering the Direct Market option, this guide is for you. It will walk you through the process of registering with the EMC as a Direct Market Consumer and explain the conditions and obligations, which must be met before you can buy electricity direct from the wholesale market.

### **How do I know if I am a contestable consumer?**

The Energy Market Authority (EMA), which is the energy regulator overseeing the electricity market and the roll-out of the retail liberalisation programme, will write to inform you, one month in advance, when you qualify as 'contestable'. In total, you will have about 90 days, including a 60-day grace period, to decide on your mode of power purchase.

Only those who consume at least 2MW of electricity in one year and require electricity to be supplied at high voltage are regarded as contestable. But this status will ultimately be extended to all consumers in phases.

Consumers who are not yet contestable will continue to buy their electricity through the current supplier, SP Services Ltd, until they are advised by the EMA that they qualify. Consumers who do not meet the threshold, and have not received a letter from the EMA informing them of their contestability, will remain non-contestable. These non-contestable consumers will continue to buy electricity at regulated electricity tariffs until they become contestable and have decided on their option of purchasing electricity or until the end of the grace period, whichever is earlier. However, if you think you are contestable but have not received a letter from the EMA, please contact the EMA at 1800 225 5393.



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# SO WHAT ARE MY NEW CHOICES?

As a contestable consumer you can be a Retailer Consumer, an MSSL Consumer or a Direct Market Consumer.

Opting to be:

- A **Retailer Consumer** means switching from SP Services and buying electricity from a licensed retailer. Visit [www.ema.gov.sg](http://www.ema.gov.sg) for a list of retailers.
- An **MSSL Consumer** maintains the status quo. You remain with SP Services, the current Market Support Services Licensee, and buy electricity indirectly through them from the wholesale market at wholesale electricity prices. Contact SP Services at: **1800 233 8000** or visit [www.mssl.com.sg](http://www.mssl.com.sg) for information.
- A **Direct Market Consumer** entails buying electricity directly from the wholesale market. As a Direct Market Consumer, you buy only what you need for your own consumption and you are not allowed to resell this electricity to others.



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## THE STEPS ● ● ● ● ● ● ● ● ● ●

### To become a Direct Market Consumer, you will need:

1. A letter from the EMA confirming your status as a contestable consumer
2. A wholesale market trading licence from the EMA
3. Registration with the EMC
4. A contract with MSSL
5. A contract with PowerGrid
6. A contract with Power System Operator (PSO)
7. At least the minimal IT requirements
8. To meet EMC's prudential requirements
9. Your Company Directors' Resolution



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# THE MAIN DIFFERENCES BETWEEN THE THREE CHOICES

As a **Retailer Consumer**, you buy electricity from a retailer at an agreed price and not directly from the wholesale market — which means that you may not have to worry about variations in your power bills. The power bill will relate directly to the agreement made with the retailer. The retailer, who buys electricity in bulk from the wholesale market and resells it, bears the risk of price changes.




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There could also be another facet to taking the retailer consumer path. Some retailers may trade in more than just electricity and thus may be in a position to bundle power and other items into competitively priced packages. In other markets, some electricity retailers are bundling and offering telecommunications, financial services and roadside automobile assistance. This would allow you to choose between retailers to get the most innovative deal, combining prices and services that best meet your company's needs.

As an **MSSL Consumer**, you buy electricity from NEMS through the Market Support Services Licensee. The MSSL — of which there is only one at present, SP Services — will buy electricity for you from NEMS at wholesale electricity prices and bill you once a month. It will also bill you for grid + MSS charges.

As a **Direct Market Consumer**, you will be able to purchase electricity from the spot market at prices which can vary every half-hour.



The overall price you pay for electricity will include regulated elements for transmission, market support services, market fees for participating in the wholesale market (including EMC fees) and the costs of some additional services to ensure reliable supply.

The electricity portion of the price you pay is determined by market competition. The prices and quantities offered by generators are matched with demand at over 200 locations in Singapore. A uniform price is then set by the market mechanism for a half-hour period. This weighted average price is called the Uniform Singapore Energy Price (USEP) and is used to settle trades for that half-hour.

As demand goes up, USEP may rise and vice versa. So an advantage of being a Direct Market Consumer is that you may be able to buy when prices are down. However, you will be exposed to more risks if you take this option.


You will face changes in electricity prices, which may or may not prove advantageous when compared to paying a contracted fixed rate.

In weighing the pros and cons of this option, do think about the costs associated with buying direct. You will:

- Need computer links and security deposits with SP Services, PowerGrid and EMC.
- Need staff with the expertise to monitor the market, manage your transactions and deal with issues relating to market rules and your participation in the wholesale market.
- Need to make daily settlements. If a settlement is missed, it is taken very seriously and is considered a default.
- Need to comply with market rules. If not, again this is considered a serious offence and you may face a penalty.



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- Be expected to shoulder some of the burden, should other market participants default on payments (see Page 17 for more details).

However, pricing becomes far more transparent and you get the opportunity to manage your own risks.


Although there are several significant obligations attached to the Direct Market Consumer option, it does give large consumers an avenue to take advantage of price trends in NEMS, especially if they can manage their production to achieve higher operational efficiency without raising the risk of increasing their power bills.



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Those who are most likely to gain from being Direct Market Consumers are:

- Sizeable power users who are able to spread the fixed costs associated with being a Direct Market Consumer. If these fixed costs and added risks append too much to the unit cost of electricity, then perhaps going through a Retailer or MSSL may be cheaper.
- Consumers who can react quickly to high NEMS prices by cutting down on power use in real time.
- Consumers who wish, and are able to, absorb the risks associated with wholesale price fluctuations, rather than pay a Retailer to manage these risks (for example, through long-term contracts to ensure price certainty).



Many large consumers who directly participate in other electricity markets hedge their exposure to the spot market with other market participants. This allows the consumers to manage their level of exposure to the spot market and manage their electricity price risk.



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**HANG ON**

Wait for the EMA letter to tell you that you are contestable

**PICK YOUR OPTION**

Make sure you understand your timetable for making a choice

**DIRECT MARKET CONSUMER**

There are several obligations and conditions you need to understand before you select this option.

Read this guide for an overview of these obligations

**YES  
TO ALL**

**FINAL STEPS**

- Apply for a licence with EMA
- Apply for registration with EMC
- Apply for contract with MSSL
- Apply for contract with PowerGrid
- Apply for contract with PSO
- Obtain Company Directors' Resolution



# GETTING THE EMA LICENCE

To become a Direct Market Consumer, you must first apply for an electricity licence from EMA. Please contact:

- Ms Wong Mui Quee on 6376 7548  
Email: [wong\\_mui\\_quee@ema.gov.sg](mailto:wong_mui_quee@ema.gov.sg)

**or**

- Mr Ang Zi Kai on 6376 7550  
Email: [ang\\_zi\\_kai@ema.gov.sg](mailto:ang_zi_kai@ema.gov.sg)

If you are looking into the Direct Market Consumer option, you are welcome to talk to us at EMC in parallel with the EMA process (see Page 21 for contacts).



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# SEVEN IMPORTANT STEPS

Once you have obtained a licence from EMA, you can start to apply for registration with EMC to be a Direct Market Consumer. This will make you a market participant alongside generators and retailers.

When registering with EMC, you must meet a range of obligations and criteria specified by the Singapore Electricity Market Rules and the Electricity Act (Cap. 89A). These seven steps will help provide you with an overview of these obligations:

## 1 Read and Understand the Singapore Electricity Market Rules

The Market Rules act as a contract between you and EMC. You need to fully understand the implications and obligations of these rules for your company. To obtain a copy of these rules, visit the EMC website at [www.emcsg.com](http://www.emcsg.com)

## 2 Sign a Contract with Power System Operator

You need a contractual agreement with the Power System Operator, which is a part of EMA. The Power System Operator is responsible for ensuring the security of the supply of electricity to consumers and for the secure operation of the transmission system.

Contact Mr Lim Thien Seong at 6872 7312 or email: [LIM\\_Thien\\_Seong@ema.gov.sg](mailto:LIM_Thien_Seong@ema.gov.sg)

## 3 Sign a Contract with the Market Support Services Licensee

You need:

- A contractual agreement with the Market Support Services Licensee, which is currently SP Services Ltd. The MSSL is responsible for reading electricity meters to ensure transactions by market participants are correctly settled by EMC.



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- To open a consumer account at the MSSL and submit a security deposit for MSSL charges and transmission services charges.
- To set up an Electronic Business Transaction (EBT) system terminal for transferring the relevant information and invoices to/from MSSL and EMC.

Contact **aboutmssl@spower.com.sg** or call SP Services at 1800 233 8000 for information.

#### 4 Sign a Contract with PowerGrid Ltd

To buy electricity from the wholesale market, you must be linked to the electricity grid to draw energy for your use. PowerGrid Ltd, which is responsible for the development and maintenance of the transmission grid in Singapore, will require you to sign a Consumer Connection Agreement and provide a security deposit.

Contact **aboutmssl@spower.com.sg** or call PowerGrid at 1800 233 8000 for information.

#### 5 Get IT Right

At minimum, you will require one personal computer equipped with Microsoft Windows 2000 software, Microsoft Internet Explorer Version 5.0, and an Internet connection to help you communicate reliably and securely with EMC systems.

It is recommended you set up a back-up facility to ensure you are able to meet your daily obligations to the market.

#### 6 Meet EMC's Prudential Requirements

The wholesale market is a daily settlement market where you pay for today's trade in 20 days' time. This differs from the monthly settlement provided by SP Services and the retailers. Do consider the financial impact of this 20-day settlement on your cash flow.

To ensure the financial integrity of the market, EMC needs to secure enough money in advance to cover the 20-day trade cycle, plus an additional amount for possible delays due to disputes and payment defaults. In all, you will need to offer financial security to cover 30 days of your trades before you can be registered. This financial security can come in the form of cash, Singapore Government Treasury Bills, a Banker's Guarantee, or any combination of the three. EMC will help you calculate the initial financial security required.



To gauge how much you need to deposit with EMC, perhaps, this example will help. If the average wholesale electricity price is \$100 per MWh and your average electricity consumption is 3MW, then your financial security would be about \$450,000. However, as prices can vary significantly from period to period, EMC may require you, at any time, to top up this amount within two days if your deposit is insufficient.

The 'margin' call is made when your unpaid trades reach 70% of your financial security deposit held by EMC. In this example, a margin call will be made once your unpaid purchases reach \$315,000 (i.e. 70% of \$450,000). The amount needed for the top-up will depend on your expected trades. If you need help in calculating this, contact Ms Yuen Mei Yee at EMC on [meiyee.yuen@emcsg.com](mailto:meiyee.yuen@emcsg.com), or call 6779 3000.

### **7 Obtain your Company Directors' Resolution**

You need a resolution from your company directors to authorise your participation in the market.

EMC would be happy to help you understand these requirements and to put you in touch with the right parties to discuss them.

Please ensure you have all the required documentation if you want to officially register as a Direct Market Consumer. If you need help, contact the Market Administration Team of EMC at [MPRegistration@emcsg.com](mailto:MPRegistration@emcsg.com) or call 6779 3000.



# A FEW MORE THINGS TO CONSIDER

While the preceding seven steps bring you closer to going direct, there are other important factors to consider including:

## **Internal Expertise**

You may need some expertise in-house to deal with all the issues relating to direct participation in the wholesale electricity market. This person, or team of people, should be able to understand the Market Rules, the Electricity Act and be prepared to actively participate in the market via information forums and consultation.



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## **Bill Settlement**

You need to work with EMC to establish a new bill settlement process within your company, as bills for Direct Market Consumers are settled daily.

EMC will send you an itemised preliminary settlement statement six business days after the trade is done, i.e., on D + 6 business days (where D equals the trading day).

On D + 10 business days, EMC will issue the final statement and you need to settle payment by D + 20 *calendar* days.

As a Direct Market Consumer, you will be charged actual electricity price (USEP) per MWh consumed. In addition, there will be other cost components such as:

- Hourly Energy Uplift Charge (HEUC)
- Monthly Energy Uplift Charge (MEUC)
- EMC and PSO administrative fees
- Allocated Regulation Price

All the above charges are reflected in the Wholesale Electricity Price (WEP). For a guide on the actual cost of each component, you may wish to refer to the WEP prices which EMC has posted on its website [www.emcsg.com](http://www.emcsg.com)

Please note, this does not include MSSL or PowerGrid charges.

**REMINDER:** Settlements in the wholesale market are made on a daily basis and any default in payment is considered a serious breach of the rules, with serious consequences.



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### Shared Risks

The wholesale electricity market is like any other commodity market where all participants are obliged to uphold the financial integrity of the market. In practice, if one participant defaults on payment and the money cannot be recovered fully by that participant's security cover, the shortfall will be recovered from the other market participants, including Direct Market Consumers.

While it is not possible to predict if there will be such charges and what these charges could amount to, it is important that you are aware of this obligation.

## Playing by the Rules

As a Direct Market Consumer, you are obliged to play by the Market Rules. These rules frame the market and act as a contract between you and the EMC. As with any contract, there are processes in place to penalise any party which breaches these rules. There is also a dispute and compensation resolution process to address grievances.

The Market Rules, however, can be changed. Apart from fulfilling your rule obligations as a Direct Market Consumer, you have a role in helping to evolve an efficient and competitive wholesale market through your feedback and suggestions. An overseeing body called the Rules Change Panel considers rule changes proposed by market participants and other parties. Here again, it is vital that you are aware of this process as any rule change promoted by other parties might (directly or indirectly) affect you.



# FIGURING OUT THE COSTS

While we can give you a broad picture of the costs involved, bear in mind that these are not exhaustive and may differ, depending on your own due diligence and needs.

## Fixed Costs

- Energy Market Authority licence fee: \$100 when application is approved and \$100 for each subsequent year

## Variable Costs

- Market fees paid per MWh consumed
- Legal fees for reviewing contracts, rules etc.
- IT links to the market systems
- Hiring staff with the right expertise to manage your electricity purchases
- Security deposits with SP Services and PowerGrid
- Security deposit with EMC (amount will depend on your estimated consumption)
- PowerGrid service fees (also applies to Retailer and MSSL Consumers)
- SP Services fees for meter reading (also applies to Retailer and MSSL Consumers)
- Default levy cost/risk sharing (see Shared Risks, Page 17)
- Possible fines and penalties for rule breaches



# THE FINAL STEP

Once you have considered these issues and obligations, you may be ready to go ahead with registration as a Direct Market Consumer. To do so, please complete and submit an official EMC registration form which is available at **[www.emcsg.com](http://www.emcsg.com)**



Applications take a minimum of 20 business days to process and you will be informed, in writing, of the outcome.

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# WHERE TO FROM HERE?

The Energy Market Company is committed to nurturing a competitive and efficient wholesale market. We welcome your interest in this exciting industry and would be happy to work with you as you examine the option of becoming a Direct Market Consumer.

If you would like to meet with EMC's staff to discuss becoming a Direct Market Consumer, please contact us at 6779 3000 and ask for Ms Wang Jing or Mr Paul Poh of our Market Administration team.



# IMPORTANT NAMES IN THE ENERGY GAME

**EMA** — Energy Market Authority is the energy regulator. EMA oversees the entire electricity market and the roll-out of the retail liberalisation programme.

**EMC** — Energy Market Company is the market operator that runs the National Electricity Market of Singapore (NEMS).

**MSSL** — Market Support Services Licensee is responsible for services such as meter reading.

**NEMS** — The National Electricity Market of Singapore opened on January 1, 2003. One of its aims is the efficient supply of competitively priced power.

**PSO** — Power System Operator is part of EMA. PSO ensures the security of power supply to consumers and the secure operation of the transmission system.


**PowerGrid Ltd** — PowerGrid Ltd is responsible for the development and maintenance of Singapore's transmission grid.

## Retailers

Retail Company	Website	Telephone
Keppel Electric Pte Ltd	<a href="http://www.keppelenergy.com">www.keppelenergy.com</a>	6278 1800
SembCorp Power Pte Ltd	<a href="http://www.sembpower.com">www.sembpower.com</a>	6236 6293
Senoko Energy Supply Pte Ltd	<a href="http://www.senokopower.com.sg">www.senokopower.com.sg</a>	6750 0260 6750 0262
Seraya Energy Pte Ltd	<a href="http://www.serayaenergy.com.sg">www.serayaenergy.com.sg</a>	6238 7887
Tuas Power Supply Pte Ltd	<a href="http://www.tpsupply.com.sg">www.tpsupply.com.sg</a>	6838 5565



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**SP Services** — The current MSSSL, formerly known as Power Supply Ltd.

**USEP** — Uniform Singapore Energy Price is the weighted average price set by the market mechanism for every half-hour period in the day. It is based on supply and demand at more than 200 locations in Singapore and is the price used to settle trades for that half-hour period.

**WEP** — The Wholesale Electricity Price serves as a net electricity price inclusive of all administrative costs incurred in the wholesale market.



# NOTES



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