The main goals of the Essential Services Commission should be to ensure a reliable and secure energy supply, promote effective competition in the energy market and develop a dynamic energy sector in Australia.

Prefacing my comments by noting that Australia intends to supply SINGAPORE with electricity. A simple model exists in Singapore for electricity supply to business and consumers. Focusing on consumers the cost is 23.38c per Kwh with the Tariff composed of

#### 1 Fuel cost

This component of the tariff is calculated using the average of daily natural gas prices in the first two-and-a-half month period in the preceding quarter. For example, the average natural gas price between April and June is used to set the tariff for July to September.

This helps smoothen out any large swings in the oil markets. For households, this means electricity tariffs that are reflective of prevailing market conditions.

About 95 per cent of Singapore's electricity is generated from imported natural gas, the prices of natural gas are indexed to oil prices. This is the market practice in Asia for natural gas contracts.

# 2 Non-fuel cost

This part of the tariff reflects the cost of generating and delivering electricity to our homes. It includes:

- Power Generation Cost
  - This covers mainly the costs of operating the power stations, such as the manpower and maintenance costs, as well as the capital costs of the stations.
- Network Costs
  - This is to recover the cost of transporting electricity through the power grid.
- Market Support Services (MSS) Fee
  This is to recover the costs of billing and meter reading, data
  management, retail market systems as well as for market development initiatives.
- Power System Operation and Market Administration Fees
  These fees are to recover the costs of operating the power system and administering the wholesale electricity market.

The SINGAPORE model is inclusive of both fuel and non fuel costs to arrive at a current rate of 23.38c Kwh, significantly below the combined costs to Australian consumers of both supply charge and rate of use.

Turning to the Australian and in particular the Victorian situation.

#### SUPPLY CHARGE

Electricity usage charge is what households must pay simply for being continuously connected to the energy network set by State and retailer in a manner that is not transparent in actual costs. NOTED from the original Government Electricity ownership by State that had the transmission and consumers connection (Poles and wires) as inherent sunk costs the present supply charges should be clearly identified as long term investment and supply costs of billing, meter reading, data management, and retail market systems. Consideration the actual costs and reductions such as the removal of the meter reading workforce there has only been steady increases in costs to consumers.

# **Electricity Supply Charges in Australia**

It is noted that Victorian consumers pay the highest rate to connect to the supply despite having paid up front for their "Smart Meters" from 2015 to the total estimated cost to consumers in Victoria of \$2B. This is hardly reflected in the State supply rates.

Examples of average electricity supply charges based on five prominent retailers in each state:

NSW 78.02c/day SA 88.91c/day QLD 97.08c/day VIC 106.72c/day

How can such differences in supply charges be justified particularly given the relative size and consumer density in each State and the same major suppliers/retailers.

# **NOTE on Consumer metering**

In late 2015, the Australian Energy Market Commission (AEMC) made a final rule to open up competition in metering services. Competition is intended to promote innovation and encourage investment in advanced meters that delivers new services valued by consumers, at a price they are willing to pay. Improved access to the services enabled by advanced meters gives consumers the scope to better understand and take control of their electricity consumption. They also get greater visibility of the costs associated with their

usage patterns. A variety of services such as remote meter reading, remote access to appliances and different pricing options were enabled by advanced meters.

Investment in advanced meters is now market led. Unless you have a purpose for a smarter meter you don't have to have one. If you do have a purpose for one, such as you are installing solar or storage, or switching to an innovative tariff, then chances are you have the financial incentive to have an advanced meter installed that will provide the services you need.

In Victoria, in contrast to the current arrangement, the smart meter rollout, which began in 2006, was mandated by the State Government for all households and small businesses under its Advanced Metering Infrastructure (AMI) program. There is now nearly complete penetration of smart meters to Victoria's more than 2.4 million electricity customers.

# **AEMC Rule Change**

The AEMC made the rule change because the COAG Energy Council identified that despite the benefits advanced meters can offer, the regulatory framework, such as that in Victoria, allowed, and potentially encouraged, the continued installation of meters with functionality of limited benefit to the customer and at uncompetitive cost.

The AEMC points to the introduction of competition in providing advanced meters helping put downward pressure on the price of these services. This was not found to be the case by the Victorian Auditor General Office's (VAGO) reviews in 2009, as well as the Victorian Government's 2011 review of the program. The VAGO found that the reality of the mandated Victorian smart meter rollout was that the state approved a program that saw the imposition of costs on consumers that they could not directly control, nor could they access or drive many of the benefits. Consumers were charged upfront for the rollout, in some cases before meters were installed.

In its 2015 report VAGO found that there was substantial net cost to consumers with cost benefit analysis finding that the expected benefits of the AMI program fell significantly and became a \$319 million net cost to consumers, which it also noted could rise. Thus Victorian consumers, had been paying for the roll-out of smart meters, have paid more than \$2 billion in regulated metering charges and now "enjoy" the highest cost of supply despite being the smallest geographic area of mainland States.

Significant reason for using a smart meter is the capability to utilise A time of use (ToU) tariff. If you use electricity during a time when there is generally a lot of demand (peak), you will be charged more per kWh. Likewise, if you use energy when there isn't a lot of demand on the grid (off-peak) you will be charged less. These peak and off-peak times can vary depending on the time of day, day of the week, or even certain holidays or seasons, and are usually divided into three rates (peak, off-peak, and shoulder). However, the perceived benefits of ToU tariff has been distorted by the retail suppliers who have

decided ( or been approved by the ESC ) to limit the hours charged for shoulder and off-peak rates.

## **SOLAR FEED IN**

Considering the past "Gold Plating" of poles and wires, due to the costs being born by users through constant increase in charges caused by the current ESC mechanisms. The present reductions in feed in rates and cut off of feed claimed to be necessary as the "network" is not capable of handling the feed in from consumer PV. - is simply not understood as there is no transparency in either providers cost claims or the ESC mechanisms for review.

Does the ESC use a long term cost analysis mechanism to justify price increases or is it just a short term cycle of cost increases to consumers based on what the energy market seeks on a year on year basis.