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Liberalization of Electricity Market

Economics – BU1003

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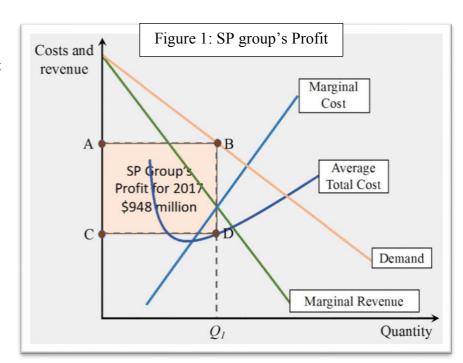
# I. Introduction

Our ancestors were dependent on fire for light and cooking, similarly electricity has become a necessity in today's modern world. Additionally, as the Singapore is a developed country, electricity is inelastic. The decision of opening electricity market in Singapore has empowered the consumers to pick a suitable retailer for themselves. According to consumers, for most of them opening the electricity market had brought their electricity expense down. This study will emphasize that whether opening up the electricity market was a good move or not and is government intervention needed in some way.

#### II Market Structure before the move

There are no close substitutes to electricity. Before the nationwide rollout that started from 1<sub>st</sub> November 2018 ("Liberalisation of Retail Electricity Market," n.d.), there was only one retailer for electricity namely, Singapore Power (SP) Group. In 1995, SP Group corporatized the electricity and gas departments of the Public Utility Board (PUB) with completely owned subsidiaries in power generation, power distribution and power retail (Ministry of trade and industry, Singapore Government press release, March 11, 2000). As all the subsidiaries for

power retail were
owned by SP Group, it
was the major barrier
for any other retailer
to enter into the
electricity market
before the rollout. In
short, SP Group was
Government created

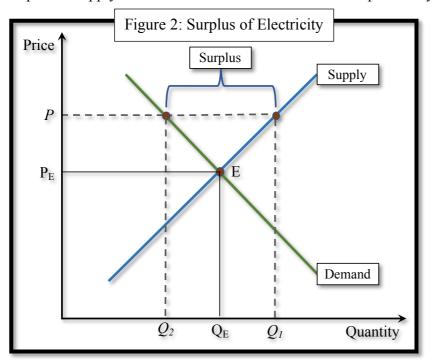


monopoly. SP Group being monopolistic was the price maker for the electricity market in Singapore and naturally they will maximize their profit at which marginal revenue equals marginal cost. In the year 2017, the SP Group's net profit after tax was \$948 million (Heuristic, 2018).

Figure 1 represents that after the difference between average total costs and total revenue, SP group made a profit of \$948 million.

# III. Reasons for electricity rate going down after the move

Although before the move there was only SP Group as the retailer, the rates were not set by them, in fact it was set by Energy Market Authority (EMA), authority to ensure a reliable and secure energy supply and eventually after the market opened up it started to promote effective competition in the energy market. Rates were set to cover fuel costs, building and operating power plants and maintaing the power grids. Also,in Singapore huge amount of oil and natural gas is imported for electricity generation; from 2015 oil prices started declining. Also from 2015, electricity production exceeded consumption that eventually resulted in surplus as supply was more than the demand. There is a possibility that as oil and natural gas



were raw materials and as
their prices fell, the
production of electrcity
was more in Singapore.
Due to surplus, the
wholesale price dropped
below the regulated tariff
but due to the regulations

by EMA, which is similar to the concept of the price floor, customers were bound to pay the regulated tariff.

After opening up the electricity market, the regulated tariff by EMA no longer exists and retailers can either retail the arm of power generators or buy electricity in bulk from power generation companies at wholesale rate which fluctuates every 30 minutes. Currently, retailers charge the cost as per their varying expenses and their business strategies (Cheng & Chew, 2019).

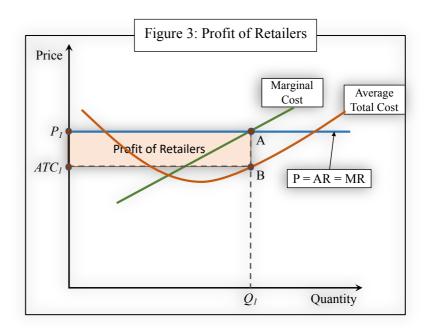
# IV. Dividing into zones strategically

The introduction of open electricity market was a strategic scheme by EMA; to avoid panic and confusion in the users. EMA intended to take the process slow to judge the customer reaction and also to evaluate how successful the whole move is. The country was divided in four zones as per the postal codes; the very first launch in Jurong was done with a soft approach (in April 2018) followed by Northern region (postal codes from 58-78) in November 2018, further in January 2019 North-Eastern zone (postal codes 53-57, 79-80 and 82-83) was targeted and eventually in March 2019 and May 2019 the open market reached Eastern and Southern Singapore, respectively ("Liberalisation of Retail Electricity Market," n.d.)

# V. Market structure after the move

After opening the electricity market, the market structure is similar to perfect competition with the homogenous product as electricity. The prices of the retailer are mainly varied due to the expenses and their business strategies. The company which offers the lowest electricity tariff is now preferred by the consumers. While lowering the rates, the companies have to also

consider their average total cost as well as the fluctuating rate in the wholesale market. In this perfectly competitive market retailers cannot manipulate the wholesale rate; to keep the tariff low for consumers they should



lower their other operating expenses such as wage of employees, etc. As shown in figure 3, for any retailer the point such as A in the figure where Marginal cost is equal to the Marginal Revenue the profit will be maximised. If the retailers succeed to keep their operating expenses low and to keep their tariff less then they will be quite sustainable in the long run but if retailer only keep reducing their tariffs and do not consider their operating expenses then it is quite possible that the retailer may incur major losses in long run and cannot sustain in the market. Therefore, it all depends on the business strategies of a retailer.

# VI. Conclusion

To sum up, opening up the electricity market of Singapore by EMA was a great move that has helped the residents to cut down their electricity expense by nearly twenty to thirty percent, according to EMA (Teh, 2019). After the electricity market has opened up, competition between the retailers is at the peak. Due to which, the security of the consumers can be compromised in the long run. Therefore, it is necessary for the government to conduct constant checks and know the retailers financial health on a regular basis.

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