

# Consultation on Policy Statement

Last November, I issued a Policy Statement in which I set out my interpretation of the Control of Electricity Prices (Sark) Law, 2016. In particular, I described the matters that I thought were most important at that time in determining whether or not the electricity prices charged by the only regulated supplier on Sark, namely Sark Electricity Limited, were fair and reasonable. In particular, I noted that I would not consider the costs of alternative forms of generation to be a material consideration and I would only consider the costs of electricity supply using the regulated electricity supplier's technology.

The Draft Determination, published March, 2018, indicated that I was concerned that some wealthier customers would choose to install their own generation equipment and disconnect from the regulated supplier's network, rather than pay SEL 66 p/kWh for electricity. Were this to occur, less well-off customers, unable to afford the cost of installing the necessary equipment to self-supply, would be forced to pay yet higher prices, as SEL increased its tariff to compensate for its loss of throughput. I accepted that this was a purely hypothetical conjecture at the time and Sark Electricity Limited's economic adviser argued that this spiralling of prices would not happen. Rather, the introduction of a new technology would, if it were cost effective and competition occurred, lead to an overall reduction in prices.

This risk can no longer be dismissed as hypothetical. The island of Molokaii in the Pacific has some similarities to Sark. It is a beautiful small island, with a larger population of 7,345 but, being in the middle of the Pacific Ocean, is far further distant from fuel sources. Electricity is supplied by diesels over a distribution network and its residents complain that they face high electricity prices, though at 44 USc/kWh (~37p/kWh) they are considerably lower than on Sark. However, over the past few years, wealthier customers have been self-supplying using solar PV. As a consequence, tariffs to the remaining customers have been rising. Therefore, I judge that the risk of fuel poverty prompted by self-generation on Sark is real. Were the regulated supplier's price to be in excess of the full cost of customers' self-generation, prompting them to self-supply, it would be unfair for SEL to rely on less well-off customers in order to maintain its profitability. Given the fact that this mechanism has operated elsewhere and the costs of solar PV cells and batteries have continued to fall since the draft Determination was published (see figures overleaf), I believe that this risk has become a material consideration.

Similarly, SEL's electricity prices are influenced by the cost of diesel fuel. The costs of medium scale wind turbines (a 100 kW, would have a hub height equal to that of the telecommunications tower) and medium sized solar PV farms (100 kW, would require about 1 acre of land) continue to fall. My calculations of the lifetime average costs of generation from these sources, as reported in the Price Control Order, of around 10 p/kWh, demonstrated that these were lower than the 17 p/kWh variable production cost of SEL's diesel generators on Sark. I noted that the inclusion of these



technologies in the generation mix might have a detrimental impact on the efficiency of the diesels. However, the impact of the intermittent generation on the potential additional fuel costs may be managed by appropriate prediction and scheduling techniques and by installing batteries. I do not think it is reasonable for customers to bear the higher cost of electricity where other, more economical electricity supply technologies are available. As a consequence, the cost of alternative generation technologies may become a material consideration in my deliberations, unless the residents of Sark decide that these technologies are not appropriate for the island.

I should be grateful for comments by 14<sup>th</sup> October 2019.

**Anthony White** 

Commissioner September, 2019

**Figure 1**Battery Costs

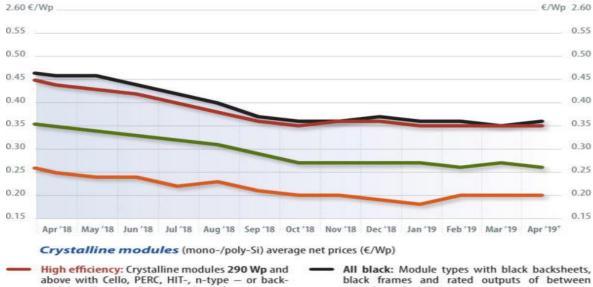
#### Lithium-ion battery price, historical and forecast Li-ion battery price (\$/kWh, 2017 real) 1,000 🔺 900 800 700 600 2025 implied 500 price: \$96/kWh 2030 implied 400 price: \$70/kWh 300 200 100 0 2016 2010 2012 2014 2018 2020 2022 2024 2026 2028 Observed price – – 18% learning rate





# Figure 2 **PV Cell Costs**

#### EU spot market module prices by technology



above with Cello, PERC, HIT-, n-type — or back-contact cells or combinations thereof

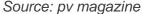
Mainstream: Modules with usually 60 cells, standard aluminum frames, white backing and 260 Wp to 285 Wp - the majority of modules on the market

\* Data up to April 11, 2019

200 Wp and 320 Wp

Low cost: Reduced-capacity modules, factory seconds, insolvency goods, used modules (crystalline), products with limited or no guarantee

More information: www.pvXchange.com







### DRAFT

## **Policy Statement**

- 1. The Commissioner interprets the Control of Electricity Prices (Sark) Law, 2016 as permitting an investigation of the relationship between the prices currently charged for electricity and the costs of such provision by a reasonably efficient operator, including a reasonable return on assets. In this regard, the Commissioner confirms his understanding that a Price Control Order will only be made in cases where it is clear that the prices charged are not fair and reasonable, relative to those that would be appropriate for a reasonably efficient operator.
- 2. The Commissioner notes that there is no provision within the 2016 Law to require any regulated electricity provider to supply electricity or any associated good or service. Nevertheless, the Commissioner considers that the potential impact of customers' decisions to self-generate their own electricity supplies is of interest to him, given recent experience in other small island power systems. As such, the Commissioner considers that the avoidance of fuel poverty, as prompted by some customers generating their own supply, may become a material consideration within the meaning of section 13 of the 2016 Law.
- 3. The Commissioner will not make a Price Control Order which sets a price below the price which the Commissioner determines represents a reasonably efficient electricity provider's reasonable costs of supply, including a reasonable return on the electricity provider's assets.
- 4. For the avoidance of doubt, nothing herein is intended to affect the obligation of the Commissioner to consider the economy and efficiency with which the supply of electricity is generated and distributed within the meaning of section 13(2)(c) of the 2016 Law.
- 5. In assessing the economy and efficiency with which the regulated electricity provider generates and distributes their supply, the Commissioner acknowledges that the regulated electricity provider's reasonable costs of responding to an investigation pursuant to section 3(1)(a) of the 2016 Law or any consultations under sections 14 and 16 of the 2016 Law, are costs which the regulated electricity provider will fairly and reasonably be able to recover through the electricity price. For the avoidance of doubt, this does not include legal costs which may be incurred by a regulated supplier considering the sale of the company nor those that may reasonably be considered as incurred attempting to obstruct the Commissioner, or his agents, from carrying out their duties.

Anthony White Commissioner

September, 2019