



**Office of the Sark Electricity Price Control Commissioner**

## **PRICE CONTROL ORDER**

**FOR PRICES CHARGED BY SARK ELECTRICITY LIMITED ("SEL")**

**FOR THE PERIOD**

**01<sup>st</sup> APRIL 2023 – 31 MARCH 2025.**

## **1. INTRODUCTION AND SUMMARY**

On the 8<sup>th</sup> February 2023, in accordance with section 16 of The Control of Electricity Prices (Sark) Law, 2016 (“the 2016 Law”), I published a consultation paper regarding my intention to make a price control order. I invited responses from SEL, electricity consumers in Sark and any other interested parties.

SEL provided a detailed confidential response. There were six responses from electricity consumers in Sark, most of which were confidential and from individuals who generated their own electricity.

Following consideration of these consultation responses, I have decided to make a price control order regulating the maximum prices which SEL can charge (subject to the correction mechanism described below), effective from 1<sup>st</sup> April 2023 until 31<sup>st</sup> March 2025:

- The maximum unit price shall be 53 p/kwh,
- The maximum monthly connection fee shall be £10/meter, and
- The maximum monthly standby charge for “own-generators” shall be £5/KW of installed capacity.

The maximum unit price above was calculated using forecast SEL demand (rather than forecast island-wide demand), the weighted-average delivered fuel price for March 2023, and an overall conversion factor of 2.92 litres/kwh. The allowance for fixed operating costs in the consultation paper has been increased by £25,000/year. All other assumptions in the consultation paper have remained unchanged.

This price control also includes a maximum unit price correction mechanism to allow for monthly changes from forecasts for demand, delivered fuel prices and other revenues. The maximum unit price will also be adjusted annually to account for inflation and depreciation. Crucially, the mechanism also allows for changes to the maximum unit price to allow for additions to the Regulatory Asset Base (“RAB”) following critical capital expenditure to ensure safety and reliability. I have asked SEL to provide me with its proposals, prioritised on this basis, for my consideration and approval.

## **2. CONSULTATION RESPONSES**

In the consultation paper I invited responses to a number of questions. I also indicated that I was interested in hearing the views of own-generators about SEL’s new tariff arrangements and that I would try to make direct contact with them.

I received a detailed response from SEL which provided views on some of the questions which I raised. I also had two conference calls with SEL to discuss its response.

I received six responses from electricity consumers in Sark, most of whom were own-generators. I also held conference calls with two of these own-generators.

In the following sections, I discuss each of the consultation questions which I raised and the responses which I received.

### 3. NEW TARRIFF ARRANGEMENTS FOR OWN-GENERATORS

In the consultation paper I asked if the new tariff arrangements published by SEL in January 2023 for own-generators were fair and reasonable.

There are three different types of own-generators in Sark at present. First, there are Type One consumers who have their own generation but remain connected to the grid and receive “top-up” electricity from SEL at the standard tariff. Second, there are Type Two consumers who have their own generation, remain connected to the grid, sell all their generation to SEL at the buy-back tariff and purchase all their demand from SEL at the standard tariff. Finally, there are Type Three consumers who are disconnected from the grid and are completely self-sufficient.

SEL informed me that own-generators are free to switch between each of the arrangements described above, although one own-generator was unaware of this.

I have compared the tariffs now offered by SEL for own-generators with those available in Guernsey and Jersey. My understanding is that there are no tariff arrangements for any own-generators in Alderney. The comparison is shown in Table One below.

**Table One: Tariffs For Own-Generators In April 2023**

	<b>Sark</b>	<b>Guernsey</b>	<b>Jersey</b>
Standard Rate (p/kwh)	53.00	20.77	17.99
Buyback Rate (p/kwh)	20.00	9.90	7.76
Monthly Standby Charge (£/KW)	5.00	3.07	0.00
Monthly Connection Fee (£/meter)	10.00	0.00	5.97

**Notes to Table:**

1. The buyback rate for Sark is 80% of the published fuel cost component of the standard tariff, rounded down to the nearest penny. This is presently 20 p/kwh.
2. The monthly connection fee for Jersey is calculated using a service charge of 19.62 p/day for a single phase connection.

The buyback rate for Sark is very favorable compared to both Guernsey and Jersey, although this is largely because the avoided costs in Guernsey and Jersey are much lower. Even after factoring in the higher standby charge and monthly connection fee, it seems to me that it should make economic sense for own-generators to sell any surplus electricity to SEL.

Furthermore, even though the standard rate for Sark is much higher compared to both Guernsey and Jersey, it seems fair and reasonable to me that own-generators, who require top-up supplies from SEL, should pay the same rate as all other consumers in Sark do.

One Type Two own-generator was considering the merits of switching to become a Type One customer. There was no appetite however from Type Three own-generators to re-connect to the grid and sell any surplus electricity to SEL. Whilst this rationale may in part be due to a limited supply of surplus electricity, I also detected that it may be partly due to a lack of trust.

In conclusion, I am of the view that the current SEL tariff arrangements for own-generators are fair and reasonable.

#### **4. ISLAND-WIDE OR SEL ONLY DEMAND**

In the consultation paper I asked if it was fair and reasonable to continue to use island-wide demand (rather than SEL-only demand) to determine the fixed cost component of the maximum unit price, in light of the new tariff arrangements for own-generators.

I did not receive any views from electricity consumers in Sark on this question. SEL was clearly of the view that the fixed cost component of the unit price cap should be based solely on SEL demand.

This issue arose a few years ago after several electricity consumers installed their own generation capacity following price increases by SEL. The aggregate demand from these electricity consumers amounts to about 10% of overall island-wide demand. The last price cap was set using island-wide demand to determine the fixed cost component.

There are arguments for and against using island-wide demand. In my view an electricity supplier cannot be held responsible for electricity demand disappearing due to a fall in economic activity. Indeed, this is exactly why this price control includes a correction mechanism to ensure that the supplier is not exposed to this risk.

However, when demand does not disappear and it simply switches from the incumbent supplier to self-supply, the incumbent supplier must bear some responsibility. In my view, on a small island like Sark it should rarely make economic sense for some customers to go off grid completely and self-supply. It seems to me that, at the time, SEL's prices were higher than what was fair and reasonable, and that was a key reason why some consumers decided to self-supply. SEL also had the same opportunity to install new and more efficient generation capacity and to benefit from the much greater island-wide economy of scale.

However, it is also accepted practice in other jurisdictions to allow customers to self-supply, at least partially, typically using forms of renewable generation. In these jurisdictions there are usually reasonable and fair arrangements to trade surpluses and deficits with the incumbent.

In the 2022 Determination my office concluded that, if SEL introduced reasonable tariffs which provided the opportunity for own-generators to trade, then it would be reasonable to use SEL-only demand to calculate the fixed cost component of the price cap.

I concluded earlier in this paper that the current SEL tariff arrangements for own-generators were now fair and reasonable. On that basis I am now satisfied that it is fair and reasonable to use SEL-only demand in the determination of the fixed cost component of the maximum unit price. The situation, however, needs to be carefully monitored. For example, if there was a further material shift in demand away from SEL, intervention may be necessary to protect SEL's remaining customers against the consequential increase in prices.

#### **5. FIXED OPERATING COSTS**

In the consultation paper I asked if my proposed allowance of £305,307 for annual fixed operating costs (and a provision for dilapidations) was fair and reasonable.

I did not receive any views from electricity consumers in Sark on this question. I received a lengthy response from SEL arguing that this allowance was too low, and much lower than what was used in the 2019 price control.

However, SEL's new published tariffs on the 26<sup>th</sup> January 2023 included a fixed cost component of 27 p/kwh and this was based on its 2023 budget for fixed operating costs of £317,816. SEL has informed me that, since this budget was set, a key member of staff has resigned and that it now needs to increase its budget for salaries by £24,230. One would not normally expect salary costs to increase materially when a member of staff is replaced. However, in the case of small organisations, where significant knowledge and experience can be lost with a single resignation, it can sometimes be difficult to substitute for this without incurring additional cost.

I am therefore persuaded that the allowance for fixed operating costs needs to be increased by £25,000 to £330,307.

## **6. DEPRECIATION AND RETURN ON INVESTMENT**

In the consultation paper I asked if my proposed allowances for depreciation and return on investment were fair and reasonable.

I did not receive any views from electricity consumers in Sark on this question. SEL argued that the allowances for both were too low. I will now consider each of these allowances in turn.

In my consultation paper a value of £60,749 was used for depreciation. This value was based on the Regulatory Asset Base ("RAB") values and remaining lives derived by consulting engineers WSP in 2019. These values were adjusted to account for inflation, depreciation and retirement of equipment since then. Other additions were made to the RAB that were not included in the WSP analysis including working capital.

SEL argued that the Draft Determination in September 2019 included an allowance for working capital of £140,000 and that this had now been reduced to £80,000. However, the value used for the working capital value of £140,000 in 2019 included an allowance of £60,000 for other capital items like spares, tools, mobile plant, etc. After 2019 SEL provided separate values for these items to my office, and these are now identified separately in the RAB. Overall, the old allowance of £140,000 has been increased to £152,686 rather than been decreased to £80,000 as suggested by SEL.

In my consultation paper I used a value of £50,392 for return on investment. This was based on an allowed real return of 5% (equating to a nominal return of c13.5% based on 2022 Guernsey inflation).

SEL suggested that a value of 5% real underestimated the political and regulatory risks that existed in Sark. However, SEL did not suggest an alternative value with supporting analysis.

I agree with SEL that the risks are higher in Sark than what would be experienced in other jurisdictions. Typically, a licensing regime exists in other jurisdictions and a network operator

can enjoy a monopoly position unless it materially breaches its license conditions. The announcement last year by Chief Pleas that it intends to tender for a completely new electricity system also casts doubt on the long-term future for SEL.

A real return of 5% compares with a real return of 3.18% allowed for NIE Networks in Northern Ireland, and this is likely to be similar for electricity network companies in other parts of the UK. The additional premium for SEL is in recognition of the additional specific risks which it faces.

The allowances for depreciation and return are both based on estimates by WSP of the RAB value and remaining asset lives in 2019. In the past, my office found it challenging to determine what the original cost of the various assets were, how much consumers had already paid back for these assets, and what the acquisition cost was for the business in 2020. The latter is likely to be a more realistic assessment of the value of the assets.

I have recently been informed what the acquisition cost of the SEL business was in 2020 and the basis for this valuation at that time. SEL has however claimed that it reached an agreement with my office that only the WSP RAB valuation could be used for future price controls. At the time of writing, I am unaware of any such agreement and SEL has not provided me with evidence of any such agreement.

A confidentiality clause in the Schedule to the 2016 Law requires me to obtain consent for the disclosure of certain information, except where it appears to me that disclosure is necessary to enable me to exercise my functions and powers. I am of the view that I could have disclosed and used the acquisition price for the purposes of this price control. However, I did not disclose the acquisition price in my consultation paper in February 2023 and I did not consult on its use and the resulting values for depreciation and return on investment. I have decided therefore that, for the purposes of this price control, I will continue to use the WSP valuation. This, however, does not bind me to use this same approach in any future price controls or variations. I have also provided SEL with a spreadsheet which shows what the likely allowances for return on investment and depreciation would be if the acquisition price was used.

I have decided that, for the purposes of this price control, to use the same values for return on investment and depreciation that were used in the consultation paper.

## **7. USING ACTUAL DELIVERED FUEL COSTS**

In the consultation paper I asked if it was fair and reasonable to use SEL's actual delivered fuel costs instead of delivered fuel cost reported by Island of Sark Shipping (IOSS).

SEL was supportive of this approach, and I did not receive any views from electricity consumers in Sark.

I have agreed with SEL to use its weighted average delivered fuel price for each month. SEL has already provided me with details of its deliveries from January – March 2023.

## **8. DURATION OF THE PRICE CONTROL**

In the consultation paper I asked if I should use a term of two years for this price control which is the maximum allowed by the 2016 Law.

I did not receive any views from either SEL or electricity consumers in Sark on this question.

Considering that this price control includes a correction mechanism (described later), I have decided that the term of this price control will be two years, from 01<sup>st</sup> April 2023 until 31<sup>st</sup> March 2025.

## **9. MONTHLY CORRECTION MECHANISM**

In the consultation paper I asked if it was fair and reasonable to have a monthly correction mechanism to account for the fact that actual fuel costs, demand and other revenues will be different from forecast.

I did not receive any views from electricity customers in Sark on this question and SEL was mainly supportive of this approach.

Details of the monthly correction mechanism can be found in the appendix to this paper, together with a worked example which demonstrates its application.

SEL stated that, whilst it only had a few pre-payment meters, the frequent changes are an administrative headache and a costly use of an engineer's time. However, the balancing fund must exceed £5,000 before any monthly change is triggered. I also offered to increase this threshold, but SEL did not take me up on this offer.

SEL also noted that the correction mechanism makes no allowance for the cash flow impact resulting from seasonal variations in demand. However, seasonal variations are typical in most jurisdictions, and this is one of the purposes of a working capital allowance.

## **10. ANNUAL CORRECTION MECHANISM AND NEW CAPEX**

In the consultation paper I asked if it was fair and reasonable to have an annual correction mechanism to account for inflation and changes to the RAB arising from depreciation, inflation and any new capital expenditure.

I did not receive any views from electricity consumers in Sark on this question and SEL was largely supportive.

In April 2024 the RAB will be updated to account for Guernsey inflation in 2023 and for depreciation of existing assets, derived from the WSP model.

SEL also provided me with outline proposals for new capex. I have asked SEL to urgently review and re-submit these proposals, prioritised based on critical expenditure needed to ensure safety and reliability for the next few years. I will then review and grant approval for immediate expenditure that I consider appropriate.

Given that Chief Pleas has announced its intention to tender for a completely new electricity system, it seems reasonable to me that a separate RAB with accelerated depreciation for new capex should be created for SEL. Consideration also needs to be given to the appropriate

return on investment for this new capex. I consider it appropriate to wait until I am presented with SEL's revised proposals before setting values for accelerated depreciation and return on investment. I also consider it appropriate that depreciation and return payments to SEL should begin as soon as the expenditure is complete rather than waiting until the start of the next year. It will also be necessary to adjust the maximum unit price to allow for this cost recovery.

## **11. OTHER PRICE CAPS**

In the consultation paper I asked if it was necessary to also set a maximum price for the monthly connection charge or for the monthly standby charge for own-generators.

I did not receive any views from SEL on this question. I received a view from one Sark electricity consumer that the £10 monthly connection charge could just be a beginning and that SEL was free to increase this charge at any time.

If SEL were to increase these charges, this would be picked up by the monthly correction mechanism (discussed later) and the maximum unit charge would be decreased accordingly. However, I am of the view that the level of each charge is important to consumers. Furthermore, I concluded earlier that the current revised tariffs were now fair and reasonable for own-generators.

I have therefore decided that the monthly connection fee will be capped at £10/meter, and that the monthly standby charge will be capped at £5/KW installed capacity.

## **12. CALCULATION OF THE MAXIMUM UNIT PRICE**

The formula for the monthly unit price cap (p/kwh) is as follows:

$$P_{cap} (p/kwh) = [AFCC - OR]/D + [VFCC] + K$$

Where:

AFCC = The allowed fixed cost component (p),

OR = Other revenues (p),

D = SEL Demand (kwhs),

VFCC = Variable fuel cost component (p/kwh), and

K = Correction factor (p/kwh)

The allowed fixed cost component includes fixed operating costs, depreciation and return on investment. For this price control the value is  $[325,000 + 5,307 + 60,749 + 50,392] = £441,448$ .

For this price control, the forecast for other revenues remains unchanged from the February consultation paper and is £75,760.

For this price control, the forecast for annual SEL demand remains unchanged from the February consultation paper and is 1,320,00 kwhs.



For this price control, the variable fuel cost component is based on the delivered average fuel cost in March 2023 of 72.84 p/litre and an overall conversion factor of 2.92. This results in a value of 24.95 p/kwh.

The above values result in a unit price cap of:  $[(441,448 - 75,760) * 100 / 1,320,000] + 24.95 = 27.70 + 24.95 = 52.65$  p/kwh.

I have decided that for this price control the maximum unit price shall be 53 p/kwh. As described earlier, during the term of this price control, this value may change as a result of the monthly and annual correction mechanisms.

Shane Lynch

Commissioner

01<sup>st</sup> April 2023

## APPENDIX: MONTHLY CORRECTION MECHANISM

### Monthly Data Requirements from SEL:

By the 15<sup>th</sup> of each month (m), the following data for the previous month (m-1) is required from SEL:

1. The total quantity of electricity sold to customers in kwhs (QS)
2. The total quantity of electricity purchased from own-generators in kwhs (QP)
3. The quantity and delivered price of each fuel delivery
4. The total invoiced for connection fees (£), and
5. The total invoiced for standby charges (£).

### Monthly Forecasts

The maximum unit price has been calculated using the following assumptions:

The forecast quantity (QF) of electricity sold each month by SEL is:

Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
109,912	120,600	123,371	132,739	124,294	108,856	106,877	98,037	106,218	98,037	94,342	96,717

The annual forecast sales are 1,320,000 Kwhs.

The forecast margin from buying back electricity from own-generators is forecast at £183/month.

The weighted average delivered fuel price is forecast at 72.84 p/litre. Using an overall conversion factor of 2.92, this results in a variable fuel cost component (VFCC) of 24.95 p/kwh.

The total forecast for connection fees is  $(538 \times 10) = £5,380/\text{month}$

The total invoiced for standby charges is  $(9,000 / 12) = £750/\text{month}$ .

### Correction Mechanism:

After the data is received from SEL by 15<sup>th</sup> of each month (m), for the previous month (m-1), the total amount of under or over-recovery will be calculated for that previous month (m-1), as follows:

The under or over-recovery caused by the volumes of electricity sold (QS) by SEL differing from the figures in the table above (QF) will be calculated as:

Correction(Q) (£) =  $(D/100) \times (QF - QS)$ , where

D is the difference between maximum unit price (P) and the variable fuel cost component (VFCC).

The under or over-recovery caused by changes in fuel prices will be calculated as:

Correction (FP) (£) =  $QS \times (AFP - 72.84) / (2.92 \times 100)$

Where AFP is the weighted average delivered fuel price (p/litre).

The under or over-recovery caused by the actual invoices for connection fees and standby charges will be calculated as:

Correction (other revenues) (£) =  $[73,560 / 12] - (\text{total invoiced for connection fees} + \text{standby charges})$

The under and over recovery for buy-back margin (BM) will be calculated as:

Correction (buy-back margin) (£) =  $(2,200/12) - QP \times [(0.2 \times AFP) / (2.92 \times 100)]$

### **Balancing Fund:**

On 01<sup>st</sup> April 2023, a Balancing Fund will be commenced with an opening value of zero. This Balancing Fund will then be adjusted each month as:

Balancing Fund (m+1) = Balancing Fund (m)

+/- Correction Q (consumption)

+/- Correction FP (fuel price)

+/- Correction OR (connection fees and standby charges)

+/- Correction BM (buyback margin)

If the Balancing Fund exceeds £5,000 in any month, in either direction, the maximum unit price, P (p/kwh), for the following month (m+1) will be adjusted as:

$P(m+1) = P(m) + (\text{Balancing Fund } m+1) \times (100/QF)$ , where QF is the forecast quantity of electricity sold by SEL in month (m+1), as set out in the table above. The price will be adjusted to the nearest one pence and the remainder kept in the Balancing Fund.

If this amount is less than £5,000 (in either direction), the amount will be added to the Balancing Fund.

### **Worked Example:**

Assume that by 15<sup>th</sup> May 2023, SEL reports that, for April 2023 SEL electricity consumption (QS) was 100,000 kwhs instead of 109,912 kwhs for (QF); the actual fuel price (AFP) was 75 p/litre instead of 72.84 p/litre, other revenues (OR) were £6,000 instead of £6,130, and the buy-back quantity was (QP) 2,500 kwhs (rather than 3,277 kwhs) .

The corrections are as follows:

Consumption correction =  $(53.00 - 24.95) \times (109,912 - 100,000) / 100 = £2,780$

Fuel Price Correction =  $100,000 \times (75 - 72.84) / (2.92 \times 100) = £740$

Other revenues correction =  $(6,130 - 6,000) = £130$

Buy-back margin correction =  $(2,200/12) - 2,500 \times [0.2 \times 75 / (2.92 \times 100)] = £55$

Total correction = £3,705

Therefore, the Balancing Fund would be £3,705 at the end of May 2023 and the maximum unit price for June 2023 would not change.

Let's now assume that by 15<sup>th</sup> June 2023 SEL reported that SEL electricity consumption for May 2023 was 160,000 kwhs, much higher than forecast. All other variables were as forecast.

The consumption correction would be:

$$(53.00 - 24.95) * (120,600 - 160,000) / 100 = -£11,052$$

Therefore, the Balancing Fund at the end of June 2023 would be -£7,347. Under these circumstances the maximum unit price for July 2023 could be reduced as follows:

$$P = 53.00 - (7,347 * 100 / 132,739) = 53.00 - 5.53 = 47.47 \text{ p/kwh}$$

However, for ease of billing, the maximum unit price for July 2023 would be reset at 48/kwh and the balance left in the Balancing Fund. The price for August would be reset at 53 p/kwh +/- any contribution that may be triggered by the June 2023 results.