



Office of the Sark Electricity Price Control Commissioner

Consultation On Proposed Price Control Order

8th February 2023

INTRODUCTION

On 26th October 2022 my office formally determined that the prices Sark Electricity Limited (“SEL”) then charged for electricity was neither fair nor reasonable. At that time SEL’s standard rate was 65 p/kwh of electricity consumed. SEL’s also charged a Monthly Minimum Use Charge (“MMUC”) of £40 per connection and provided a range of discounts for larger consumers and staff. In the October 2022 determination my office concluded that a standard rate of 59p/kwh would have been very fair, if not generous.

In accordance with section 15 of The Control of Electricity Prices (Sark) Law, 2016 (“the 2016 Law”), I now intend to make a price control order. Before I can do this however, in accordance with section 16 of the 2016 Law, I must consult the regulated electricity supplier and I may consult more widely as I see fit. I have decided to consult widely and I welcome responses to this consultation from SEL, electricity consumers in Sark and any other interested person. Please send your responses by e-mail to commissioner@epc.sark.gg by 5 pm on Thursday 02nd March 2023. It is my intention to publish all non-confidential responses on my website. If you do not want your response to be published, please mark it as confidential. Please also note that I am required by the 2016 Law to give SEL the opportunity to make representations to me on all the responses to this consultation.

It is likely that the new price control will take effect from 01st April 2023 and I am proposing that it should be for a period of two years.

CONSIDERATIONS FOR THIS PRICE CONTROL

When making this price control order, in accordance with section 16 (1) of the 2016 Law, I must take all material considerations into account. In reaching the determination in October 2022, in accordance with section 13 (2) of the 2016 Law, my office also had to take all material considerations into account. Therefore, I do not intend to revisit the matters which were considered in the October 2022 determination, other than taking into account any new and material matters which have come to light since then.

In particular, I will consider the new tariffs that were published by SEL on 26th January 2023 and applicable from 01st January 2023. I will also consider changes in actual fuel prices, inflation and forecast consumption.

SEL NEW TARIFF STRUCTURE

The new tariff structure published by SEL on 26th January 2023 consists of a unit price of 53 p/kwh and a monthly connection fee of £10 per meter.

It also set out terms for consumers who have their own electricity generation but still remained connected to the SEL grid. This arrangement allows for such customers to both purchase electricity from SEL at 53 p/kwh, and to sell electricity to SEL at a 20% discount to SEL's avoided fuel costs. These customers also must pay a Standby Charge of £5/month/KW of installed capacity.

PRICE CONTROL DESIGN

For this price control I am proposing to set a unit price cap (in p/kwh) for the units of electricity sold by SEL. This is essentially determined by considering the revenues that an efficient operator would require and dividing this by forecast consumption. These "allowed revenues" must be capable of covering the fixed and variable costs of an efficient operator. Consideration however must also be given to other revenues which SEL will receive outside of the unit charge. These include revenues from the connection charge, the standby charge and profits from buying power from own-generators at a discount to its avoided fuel cost.

Actual fuel prices, consumption and other revenues in each month will be different from the values that were originally forecasted. Uncorrected, this would result in SEL either over or under-recovering its actual costs. To ensure that SEL is not faced with this risk, it is necessary to introduce a correction mechanism, similar to that which was introduced in the Variation to the last price control on 01st January 2021. This mechanism can also be used to take account of inflation and any new capital expenditure that is approved during the term of the price control and added to the RAB.

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

$$P_{\text{cap}} (\text{p/kwh}) = [\text{AFCC} - \text{OR}] / C_{\text{island-wide}} + [\text{VFCC}] + K$$

Where:

AFCC = The allowed fixed cost component (p),

OR = Other revenues as described above (p),

$C_{\text{island-wide}}$ = Consumption island-wide (kwhs),

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

K = Correction factor (p/kwh)

I will now discuss each of these terms in turn.

ALLOWED FIXED COST COMPONENT (AFCC)

Allowed fixed costs include operating costs, depreciation and return on investment.

Fixed Operating Costs:

In the October 2022 determination my office concluded that an efficient operator would require £300,000 in 2023 for fixed operating costs and a further provision of £5,307 for dilapidations at the power station. I am proposing to use these values for this price control for calendar year 2023, and to inflate them by Guernsey inflation for the calendar years thereafter.

Depreciation and Return on Investment:

In a regulated infrastructure business, investments tend to be “lumpy”. Rather than consumers paying for these investments immediately, they pay for them in equal annual installments over the expected life of the asset. These payments are known as depreciation. In addition, consumers must pay the investor an annual rate of return on the outstanding investment after depreciation. All of this is accounted for by what is known as the regulatory asset base (“RAB”). Each year the opening RAB value is increased by inflation over the previous 12 months to ensure that the RAB retains its value in real terms.

My office has found it challenging to determine what the original cost of the various assets were, or what the acquisition cost was for the overall business in 2020. In the absence of either of these values, in the August 2022 draft determination, my office used “depreciated replacement costs” and annual depreciation charges derived by consulting engineers WSP in 2019. These values were adjusted to account for inflation, depreciation and retirement of equipment since 2019. Other additions were made to the RAB that were not included in the WSP report. Table One below shows the values that were used for the RAB and depreciation in the August 2022 draft determination.

Table One: RAB and Depreciation Values Used in the August 2022 Draft Determination

Item of Plant	2023 Opening RAB Value	2023 Depreciation Charge
HV Cables	462,343	17,164
LV Cables	235,339	18,103
Generation	120,271	18,131
Mobile Plant	7,173	2,690
Meters	493	25
Furniture and Fittings	1,057	522
IT	3,672	1,692
Tools	6,013	2,198
Spares	53,278	1,303
Freehold Land	1,000	0
Working Capital	80,000	0
TOTAL	970,640	61,828

The opening RAB and depreciation charges in Table One above, that were derived from the WSP report, must be updated for the latest RPI figures, obtained from the official website of the States of Guernsey. These figures are shown in Table Two below:

Table Two: Guernsey Inflation Measured by RPI.

2019	2020	2021	2022
2.3%	1.0%	4.4%	8.5%

Table Three below shows the updated 2023 opening RAB and depreciation charges. I have also revised the Generation depreciation charge by removing the charge for the 600 KV diesel generator which, according to the WSP report, is now at the end of its useful life.

Table Three: RAB and Depreciation Charges Proposed For The 2023 Price Control

Item of Plant	2023 Opening RAB Value	2023 Depreciation Charge
HV Cables	500,541	18,582
LV Cables	254,783	19,599
Generation	130,208	14,138
Mobile Plant	7,173	2,690
Meters	493	25
Furniture and Fittings	1,057	522
IT	3,672	1,692
Tools	6,013	2,198
Spares	53,278	1,303
Freehold Land	1,000	0
Working Capital	80,000	0
TOTAL	1,038,218	60,749

Therefore, I am proposing to use a depreciation charge of £60,749 in this price control for 2023 and to update this value for inflation in the years thereafter.

SEL is also entitled to a rate of return on the average value of the RAB during 2023. The average RAB value from Table Three above is £1,007,843. Given that inflation has already been accounted for in the RAB, it is appropriate to multiply this average RAB value by the allowed real rate of return. In the August 2022 Draft Determination this value was 5% real (7.3% nominal) and, when multiplied by the average RAB value, produces an allowed return of £50,392.

As a comparison, the allowed real rate of return for NIE Networks in Northern Ireland is currently 3.18% and values for the DNOs in GB is likely to be similar.

I am proposing to use an allowed return of £50,392 in the price control for 2023 and to update this for changes to the RAB value in the years thereafter.

The total proposed for the Allowed Fixed Cost Component is therefore $(300,000 + 5,307 + 60,749 + 50,392) = £416,448$

OTHER REVENUES (OR)

During the price control period, SEL will receive other revenues from the connection charge, the standby charge and profit from buying power from self-generators at a discount to its avoided fuel cost.

SEL informed me that the total number of meters that will attract the £10 monthly charge is 538. Therefore in 2023 SEL should receive £64,560 from its new connection charge.

SEL also informed me that it is forecasting to receive £9,000 from the standby charge for own-generators in 2023, and £2,200 profit from buying back electricity from these customers. B

Therefore, the total forecast other revenues for 2023 is £75,760. I am proposing to use this forecast value in this price control but to allow for monthly correction if the outturn value is different.

VARIABLE FUEL COST COMPONENT (VFCC)

Variable fuel costs incurred by SEL, and expressed in p/kwh, are the product of the delivered diesel price (p/litre) to Sark and the assumed overall conversion factor (kwhs/litre) for converting this fuel into electricity delivered.

In the 2022 Determination, my office used an overall conversion factor of 2.92 kwhs/litre. I am proposing to use this value for the purposes of this price control.

In the 2022 Determination, my office used delivered diesel costs reported by Island of Sark Shipping (IOSS). SEL has recently entered into a new Fuel Supply Agreement. Prices in this agreement are linked to the Platts index and, in my view, are competitive, transparent and more representative of SEL's actual costs. SEL is willing to share

these actual diesel costs with me going forward. I am therefore proposing to use these actual monthly costs for the purposes of this determination. Initially, I will use forecast values (based on the January 2023 price), but will later correct to allow for actual outturn values.

The delivered price for January 2023 was 81.67 p/litre. Using an overall conversion factor of 2.92, this results in a variable fuel cost component of 27.97 p/kwh. This compares to a diesel price of 87 p/litre and a variable fuel cost component of 29.8 p/kwh in the 2022 Determination.

CONSUMPTION

In the 2022 Determination my office forecast annual electricity consumption from the SEL network as 1,320,000 kwhs and island-wide consumption as 1,460,000 KWhs. SEL has informed me that it is forecasting consumption from the SEL network at 1,333,350 kwhs for 2023. For the purposes of this price control, I am proposing to set forecast consumption for 2023 from the SEL network at 1,320,000 kwhs and 1,460,000 on an island-wide basis.

The formula on page one of this paper uses island-wide consumption for determining the fixed cost component of the unit price cap. The continued use of island-wide consumption was considered in the 2022 Determination. My office concluded that:

“If SEL allows own generators to connect to its network and they agree to buy and sell power from and to SEL, then I believe it would be reasonable to include only the electricity SEL sells to them in calculating total sales for the purposes of setting maximum prices. I expect SEL to set a charge for this service and it has suggested £5/KW/month. If SEL sets prices for trading at a reasonable level, based on its fuel saved or used, I see no need to set a maximum price for this “standing charge”. If the deal is not attractive, then customers will choose not to use it. Rather than set a fixed price, say 20 p/kwh, I suggest that one based on fuel costs – 20% to sell to SEL would be more sustainable and appropriate”.

On 26th January 2023 SEL published new tariff arrangements for own-generators. SEL introduced a Standby Charge of £5/KW/month for own-generators, and a “buy back” rate for sales to SEL equal to SEL avoided fuel costs – 20%. Sales from SEL to own-generators are at the standard rate of 53 p/kwh and own-generators would also pay the monthly connection charge of £10 per meter.

As part of this consultation, I am very interested to hear the views of own-generators on these new tariff arrangements. In addition to your written responses, I would also welcome the opportunity to discuss the matter with you by conference call and I will try to contact you in due course. In the meantime, I am reserving my final judgement on the use of island-wide consumption or SEL consumption for the purposes of determining the fixed cost component of the unit price cap. In my calculations below, I show the proposed price cap using both approaches.

PROPOSED PRICE CAP

The formula set out at the beginning of this paper for the unit price cap (p/kwh) was:

$$P_{\text{cap}} (\text{p/kwh}) = [\text{AFCC} - \text{OR}] / C_{\text{island-wide}} + [\text{VFCC}] + K$$

By substituting the various values proposed in this paper, the proposed price cap becomes:

$$\begin{aligned} P_{\text{cap}} (\text{p/kwh}) &= [41,644,800 - 7,576,000] / 1,460,000 + [27.97] \\ &= 23.33 + 27.97 = 51.3 \text{ p/kwh} \end{aligned}$$

If forecast consumption from the SEL network is used instead of forecast island-wide consumption, the proposed price cap becomes:

$$\begin{aligned} P_{\text{cap}} (\text{p/kwh}) &= [41,644,800 - 7,576,000] / 1,320,000 + [27.97] \\ &= 25.81 + 27.97 = 53.78 \text{ p/kwh} \end{aligned}$$

These values compare to an actual unit price of 53.00 p/kwh in the revised tariffs recently announced by SEL and effective from 01st January 2023.

MONTHLY CORRECTION MECHANISM

The unit price caps proposed above are based on forecasts for delivered fuel price, consumption and other revenues. The actual monthly values for these will be different from these forecasts. There will also be a need to make annual adjustments to the RAB to account for inflation, depreciation, and the potential addition of new approved capital expenditure. Fixed operating costs may also need to be re-considered annually to take account of the impact of inflation.

It will therefore be necessary to employ a monthly correction mechanism to take account of these factors. A mechanism for a similar purpose was introduced in the Variation to the last price control on 01st January 2021. I am proposing to use an amended version of this mechanism for this price control. The mechanism will continue to be based on a balancing fund to take account of changes in fuel prices, consumption, and other revenues received by SEL. It will also be used to account for changes to the RAB and inflation.

It is my intention to discuss the mathematical amendments to this mechanism with SEL over the next few weeks and well before the price control comes into effect. Whilst I have considered it appropriate to discuss the principle of a correction mechanism more widely in this consultation, I do not consider it necessary to consult widely on the details of the mathematical amendments.

CONSULTATION QUESTIONS

Whilst I welcome views on any aspect of this consultation, I am particularly interested in your views on the following questions:

1. Do you consider that my proposed allowances for fixed operating costs, depreciation and return on investment are fair and reasonable?
2. Do you consider that it is fair and reasonable to use SEL's actual fuel purchase costs?
3. Do you consider that it fair and reasonable to have a monthly correction mechanism to account for the fact that the actual values for fuel costs, consumption and other revenues will be different from forecast?
4. Do you consider that it is fair and reasonable to have an annual correction mechanism to account for inflation and changes to the RAB arising from depreciation, inflation or new capital expenditure?
5. Do you consider that 5% real is a fair and reasonable rate of return on investment?
6. Are the new tariff arrangements for own-generators trading electricity with SEL fair and reasonable?
7. In light of the new trading arrangements for own-generators, is it fair and reasonable to continue to use island-wide consumption to determine the fixed cost component of the unit price cap?
8. In light of the fact that the formula for determining the unit price cap includes Other Revenues, do you think it is necessary to have a price cap for the monthly connection charge or for the monthly standby charge for own-generators?
9. Do you agree with my proposed term of two years for this price control, which is the maximum allowed by the 2016 Law?

Shane Lynch

Commissioner

8th February 2023