Determination

26th October 2022

Summary

The Draft Determination came to the preliminary conclusion in August 2022 that the prices charged by Sark Electricity Limited (**SEL**) for electricity were neither fair nor reasonable. Following its publication on 23rd August 2022, my Office received 25 submissions on this Draft Determination which I have considered carefully. Most, but not SEL, supported the methodology employed, the associated underlying assumptions and the preliminary conclusion.

SEL recently lowered its standard tariff from 73 p/kWh to 65 p/kWh for October – December 2022 and narrowed the discounts available to larger customers. Taking all material matters into account, including the fact that diesel fuel prices remain volatile, I still find that the prices SEL currently charges are neither fair nor reasonable. The results of these further considerations, which are presented in this Determination, indicate that SEL could be reasonably profitable over the coming year, were the standard tariff reduced to 59 p/kWh, even if the current discounts were retained.

According to Section 15(1) of the Control of Electricity Prices (Sark) Law, 2016 ("**The 2016 Law**"), my Office may now make a price control order (PCO). Rather than proceed immediately to a consultation on a PCO, I believe it is preferable for Sark Electricity Limited [1](SEL) to reconsider its tariffs. Mr Witney-Price has indicated to my Office that SEL is likely to introduce its much-heralded new tariff structure in the near future. If necessary, it will be for my successor to set a new PCO and possibly administer any associated regular adjustments to the maximum prices, to accommodate changes outside SEL's control, such as fuel prices.

Background

The Draft Determination[2] examined the cost of providing electricity using SEL's existing system, drawing on the conclusions of the EIS report undertaken for Chief Pleas and the report by energypeople which had been commissioned by my Office. These reports described the poor state of much of SEL's above ground system, the generators, transformers and switches. Energypeople also found that the system layout was inappropriate for the load served and that many of the cables were inappropriately sized.

My analysis found that a maximum unit price of 64 p/kWh would be sufficient to allow SEL to make a reasonable profit, based on diesel fuel prices at the time (August 2022), estimates of future consumption and revenues expected from SEL's monthly minimum usage charge (MMUC).

The energypeople report also examined the cost of building and operating a completely new distribution network, powered by a mix of wind, solar and diesel back-up generators, based on a

[1] Depending on the context, SEL refers to Sark Electricity Limited and, at times, Sark Electricity Holdings Limited (SEHL).

[2]Draft Determination for Consultation, 23rd August 2022, Office of the Sark Electricity Price Control Commissioner, available at www.epc.sark.gg

number of assumptions concerning, amongst other factors, consumption levels, equipment prices, fuel and financing costs. This report concluded that electricity could be provided in Sark at a cost of well under 60 p/kWh. The Draft Determination accordingly came to the preliminary conclusion that the prices charged for electricity in Sark were neither fair nor reasonable and sought comments from interested parties.

My Office received 22 submissions on the Draft Determination from residents. These may be found at www.epc.sark.gg. The Policy & Finance Committee of Chief Pleas stated that it had no objections to the proposed Determination. SEL has also provided my Office with responses to these submissions. SEL's rebuttal of complaints by residents was, in my view, occasionally misleading and inaccurate but I record them where appropriate below.

SEL submitted two formal responses to the Draft Determination, one through its advocates, Carey Olsen, and one on its own account. Carey Olsen complained that there were a number of matters raised in the Determination with which they disagreed. Most of these have been raised by SEL previously and my Office has responded in detail, identifying where SEL or Carey Olsen were either mis-informed or mistaken. Neither SEL, nor Carey Olsen, appear to have taken notice of these corrections. I have asked SEL if my Office may publish its submissions, but it has requested that confidential, proprietary, or GDPR related issues are redacted. Rather than rely on my own guesswork, I have asked SEL to identify the perceived problematic areas. My response to SEL's submissions will be placed on the web-site, www.epc.sark.gg, along with SEL's submissions, when I have received the information required.

Matters arising from Submissions to the Draft Determination

No responses from residents challenged the preliminary conclusion that SEL's prices were not fair and reasonable. SEL and its Advocates did not object specifically to the conclusion itself but indicated many areas where they disagreed with parts of the analysis. These major areas of disagreement, together with matters raised by residents, are discussed below.

Methodology

1) Regulated Asset Base

   None of the respondents objected to the use of the Regulated Asset base approach to determine reasonable profits and depreciation charges that a regulated supplier should be allowed to charge.

2) Renewable Generation

   My Office has also considered the price that a reasonably efficient company would incur supplying electricity in Sark. I believe such an operator would wish to consider ALL commercially available technologies, not just diesels. Carey Olsen argued that my Office should not consider such alternative costs. It argues that, in November 2018, my Office stated that, given that such costs were "hypothetical" in Sark, they would not be considered. Carey Olsen overlooked the subsequent updated Policy Statement issued by my Office in draft in September 2019 and confirmed in November 2019, stating that the costs of renewable energy were a material consideration, since they were no longer "hypothetical". I therefore dismissed Carey Olsen's objection.

Application of Methodology

A number of issues were raised concerning my Office's implementation of the basic methodology.

1) *Profit protection for SEL through monthly adjustments*

   Residents appear to be content with the adjustment mechanism for fuel prices, as SEL appears to be with its recent tariff announcement. I believe that variations on account of economic activity are also outside SEL's control and should be passed through.

2) *Island – Wide Sales*

   All residents who responded on this issue were supportive of my Office using island-wide electricity consumption, rather than just sales over SEL's network, when determining prices. SEL has not provided my Office with a justification for allowing it to charge higher prices because some customers decided to disconnect due to SEL's previous pricing arrangements. SEL has since accepted these arrangements as being "unfair". SEL claims that my Office is punishing SEL for the poor behaviour of its previous owner and that it is not fair to continue to punish SEL under new ownership. I believe this misses the point. SEL lost ~10% of its market on account of this earlier policy and this Office made no secret of its intention to ensure that the price of electricity to all other customers would not be adversely affected as a result. Therefore, when the new owner, Mr Witney Price, acquired SEL and SEHL in March 2020 it was fully aware that maximum prices would be set on an Island Wide basis.

   I understand that SEL will soon be offering a fairer commercial arrangement for "own generation" as part of its new tariff structure. If "own generators" decide to take advantage of these arrangements, whereby they can exchange power with SEL at fair prices, I believe it would be appropriate to adjust SEL's revenues according to the amount of electricity it sells over its system, rather than the Island total.

3) *Discounts*

   Almost all residents who responded did not appear to be content with discounted tariffs for larger users. SEL, on the other hand, argued that, because the cost of providing power is lower for larger consumers, it is only fair that large customers should enjoy lower prices than those only taking a limited supply. I expect that SEL has been misled by the fact that unit electricity prices for large commercial and industrial customers in Britain are lower than those for domestic customers. This is because customers in Britain are supplied at different voltages, depending on their level of demand. Industrial and commercial customers, who are supplied at high voltages, do not pay towards the cost of building and maintaining the extensive low voltage network used to supply domestic customers. In addition, Britain is supplied by a mix of different generation technologies and the unit cost of generation varies considerably during the day. Sark, as ever, is different. All customers are supplied from the same low voltage network and there is only one form of generation, so variable costs are more stable.

   SEL argues that those using more of the fixed costs of supply should pay in proportion towards their costs. I agree completely. The costs of electricity comprise variable costs (driven almost entirely by fuel costs) and fixed costs (staff, operations, administration, services and finance). Therefore if, for example, large customers account for 25% of electricity sold by SEL, they should pay 25% of these fixed costs on a completely "fair" basis. Under a single unit price for all, that is what happens. The gross margin on each unit sold is identical, so one customer's contribution to fixed costs will be in direct proportion to the amount of electricity it consumes. In other words, "equal pricing" is "fair". By setting discounts for large customers, those on the Standard tariff subsidise those on the Commercial tariff.

This is not to say that discounts are "wrong". It might be the case that, by subsidising commercial customers, the economy of Sark is improved, to everyone's benefit, SEL included. Of course, the opposite arrangement could be introduced, whereby commercial customers subsidise the fuel poor. These are considerations for SEL and Chief Pleas, not my Office. SEL has argued that it is the large discounts that have prevented its remaining large commercial customers from setting up their own generation. I have not seen evidence that this is the case. Moreover, I am conscious that some customers on the standard tariff have decided to supply themselves and a number of respondents (domestic customers) mentioned that they are considering doing so.

Assumptions

There was little commentary on the assumptions adopted for the calculations underpinning the Draft Determination.

I proposed a return of 7.5% on new investment and 7.3% on existing assets as being fair, if SEL's profits are automatically protected by adjustments to the maximum prices, as occurred under the Variation. I note that one resident thought otherwise and SEL said that it would be content with 3.8%. Currently, markets are in a very unstable state but, from my recent experience as a non-executive director of an investment trust that invests in the "energy transition", I believe that the rates proposed by my Office would be required by professional investors.

New System

Fourteen respondents commented on the possibility of a new electricity system for the island and all were in favour. One respondent expressed disappointment that SEL had made no attempt to introduce renewable energy options and another expressed interest in tidal power, if that were possible.

SEL's response to these submissions claims that it is only the recent situation in the Ukraine that has led renewables to appear to be attractive for a market with only 1,200,000 kWh consumed annually. SEL argues that a system supplied by diesels alone would usually provide electricity at a lower average cost than a mixture of wind, solar and backup diesels. SEL accepts that diesels are dirtier than renewables but, based on a consumption level of 1,400,000 kWh, SEL claims it *could* have provided power at an average price of 48 p/kWh, with the average fuel price of 2021.

SEL claims that the energypeople report estimated an average cost of 53.2 p/kWh for the same level of consumption and that the energypeople analysis calculated operating costs only and did not allow for capital expenditure or a return on capital. I have the following observations:

- The energypeople report[3] estimated that the average cost of supplying 1,400,000 kWh as 45.0 p/kWh, not 53.2 p/kWh as SEL claims. At 1,200,000 kWh, the price would be 51.9 p/kWh. The energypeople report included capital expenditure and a return on capital over the operating lives of the equipment. It is possible to assess the impact of using different assumptions by using energypeople's model, available at www.epc.sark.gg. It appears that Mr Witney Price has not read the document, or operated the model, sufficiently carefully.
- I am surprised by SEL's apparent change of heart on the economic benefits of introducing renewables. The August Price Update of 19th July 2022[4] claims:

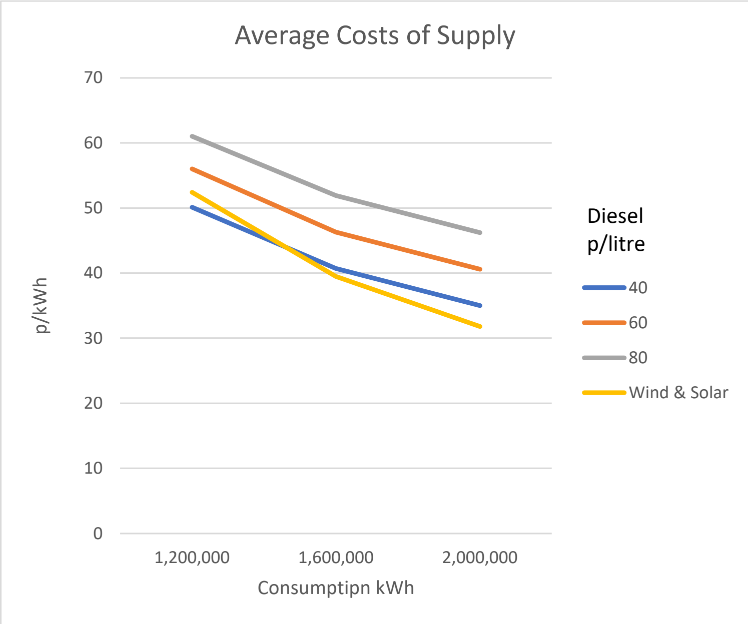
  "….had Sarks Government not actively blocked our energy transformation plans over the last two years; SEL would have had a significantly lower dependence on fossil fuels at this point and the price increases would have been significantly less and begun from a significantly lower price point."

- The energypeople estimate was based on a completely new system, not the current system of generators and network that is at the end of, or in some cases past its reasonable working life and is judged by consulting engineers to require complete replacement. SEL is not, therefore, comparing like with like. Indeed, in November 2021, SEL publicly stated that it needed to "urgently spend £1 million + for desperately needed new kit". Consideration of this amount of immediate new investment was not included in SEL's supporting materials. SEL is now suggesting it only needs to spend £500,000 urgently. I do not accept either of these assessments.
- SEL's current system would be expensive to refurbish, since it is based on a 6.6kV operating voltage, rather than the standard 11 kV for distribution. As a consequence, replacement equipment is difficult to source and tends to be more expensive. Furthermore, the energypeople report indicated that a significant proportion of the low voltage network was inappropriately sized, though currently operational, and stated that they could not recommend the continuing use of the existing network. Both EIS and Energypeople found that SEL's network is not fit for purpose.
- Electricity consumption in Sark is greater than 1,200,000 kWh, even when excluding the consumption by "own generators" and the 19 disconnected properties in the North. SEL has advised my Office that it is expecting to supply 1,280,000 kWh during 2022. For 1,280,000 kWh, the energypeople model calculates a cost of 48.7 p/kWh.
- Moving to wind & solar would provide customers with protection against further disruption to the fossil fuel markets.
- If electricity consumption continues to grow in Sark, as it has since the pandemic, the unit cost of a renewables based system will fall faster than one based on diesels alone. This is shown diagrammatically in the Figure below. It is only when diesel prices are below 40 p/litre and electricity consumption falls below current levels, that diesels would be cheaper. UK road transport untaxed diesel fuel prices have been higher than 40 p/kWh for the majority of the last two decades. Over the past six years, the price of bulk deliveries of diesel to Sark have followed a similar pattern, as shown by the price of IOSS diesel, to which a transport cost should be added, currently 6.7 p/litre.

[3] See the energypeople report, page 38 – Mix 3. Available at www.epc.sark.gg
[4] See Sarkelectricity.com/news-updates

Figure 1

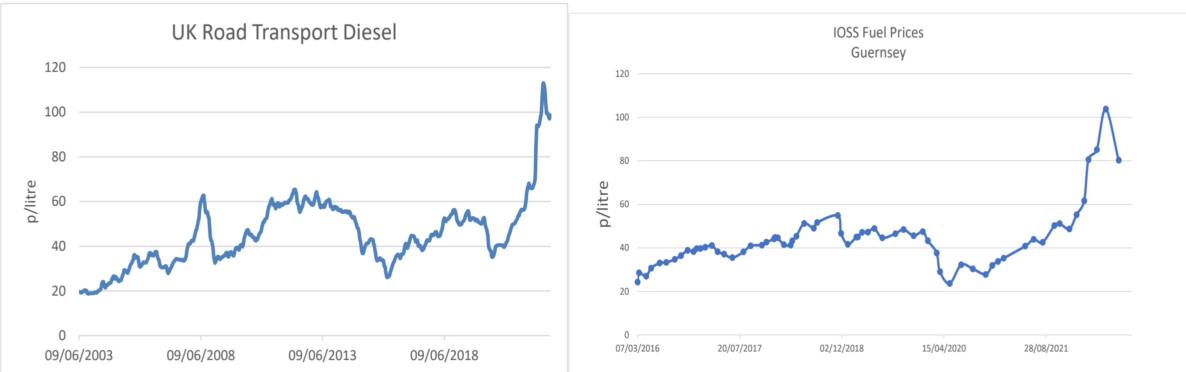
Costs of Supply with Renewables



Source: energypeople's financial model which may be found at *www.epc.sark.gg*

Figure 2

Untaxed Diesel Costs



Source: BEIS weekly road fuel prices *Source: IOSS*

Price

As well as those generally in favour of the findings of the Draft Determination mentioned above, three respondents specifically mentioned that they would use more energy if it was cheaper, two further respondents stated that many islanders cannot pay the current prices, and one made the point that the high electricity price is damaging Sark's economy.

SEL's behaviour

Twelve respondents expressed dissatisfaction with SEL's general behaviour, with comments relating to:

- lack of clarity and transparency
- the island being held to ransom by the company
- a wish for Sark to be independent of SEL
- plans to go off grid
- dangerous equipment placing the community at risk
- equipment had not been properly maintained, but only carried out on a "crisis" basis
- Mr Witney Price "is not a man of his word"
- SEL's approach is slap-dash and it relies on luck rather than professional behaviour
- Large legal costs incurred
- High staff costs
- Witney Price Group Holding's lack of due diligence when purchasing SEL & SEHL.

SEL has rebutted some of these concerns. On the issue of aging equipment, SEL appears to take comfort that the EIS report only flagged up one item as being dangerous, and report that this has now been rectified. I find this complacent attitude disconcerting. SEL also holds that the maintenance cannot be poor because, in so many words, the generators are still operating. More to the point is energypeople's assessment that *"in terms of operational safety, the entire switchgear population is inadequately secured compared to good practice, no switchgear is fenced nor has operational locks fitted on main switches, earth switches of removeable covers. In most locations there are no circuit labels".* Similarly, EIS *concluded "the present network is currently not fit for purpose, in need of many immediate upgrades and replacements and inherently contains serious safety issues".*

One respondent complained that, for an extended period during the summer of 2022, SEL's supply had been entirely dependent on the continual operation of one unit. There was insufficient backup available during the day. SEL confirmed that this was the case but that it had only lasted for eight days and the Guernsey Civil Contingency Committee had been informed.

In the face of criticism concerning access, SEL claims that "*Site access and signage is in accordance with Sark regulations*" knowing very well that there are none. In my view, Sark's residents and visitors should have been able to rely on the electricity company employing good practice. Of similar concern to my Office is SEL's disregard for its employees and others who may be called to operate its equipment in an emergency. Energypeople found that no circuit diagram existed. In an attempt to rebut this finding, SEL wrote

> *"Whilst it is acknowledged by the team that our operating diagram does not look like that which is attached to the Energy people report, SEL would respectfully remind energypeople that the data contained within its diagram is equally available to and used by SEL on a frequent basis.*
>
> *The idea that SEL could have operated effectively for nearly 75 years without this information at its fingertips is, with respect, ill-considered. Electricity is particularly unforgiving and our safety record and operational uptime talks for itself. This is not by chance but by design with reasoned implementation and thorough and ongoing maintenance. Our approach may be antiquated, and out of kilter with ISO standards, but it remains highly effective*."

I believe that SEL's relatively high availability owes much to the fact that there are no overhead lines. The fact that SEL staff have to operate potentially dangerous, inadequately labelled equipment, combined with the lack of easily understandable information, is deeply concerning.

SEL argued that the existence of draft accounts for SEL & SEHL for 2017, 2018 & 2019 (SEL only) was sufficient to carry out financial due diligence and implied that physical due diligence was carried out at the time of acquisition. The reports by EIS and energypeople suggest that the assessment of the equipment was not very thorough.

Lack of Investment
SEL lays the blame for its lack of investment on Chief Pleas for its failure to pass the draft Electricity Law of 2020. This would have provided statutory wayleaves to a licensed supplier of electricity in Sark, had the Law achieved Royal Assent. However, my understanding is that Chief Pleas encountered difficulties in establishing an appropriate licensing authority to grant Licences and oversee their operation and so the Draft Law did not progress.

SEL has complained that, without wayleaves, it could not progress with its Sark Energy Transformation Plan. However, SEL has not even replaced its generators, even though it accepts that the current fleet is unreliable. Such an investment makes commercial sense, since it would improve the reliability of supply and lower SEL's fuel costs. Lack of wayleaves is not a valid excuse for SEL's inaction on replacing its generators.

On other areas urgently requiring replacement, such as switchgear, wayleaves should be sought. It is my view, as supported by submissions to earlier consultations held by this Office, that a company with a good track record and suitably qualified management, or possibly one where Chief Pleas was a stakeholder, would be able to secure voluntary wayleaves from landholders. The unwillingness for some landholders to provide wayleaves appears to be caused by a lack of trust. SEL has not endeared itself to residents by, amongst other matters

- threatening to cut off supplies in June 2021 with just a few days' notice
- lacking audited accounts
- providing inaccurate and unintelligible bills to customers, as well as misleading information in some cases
- the disconnection of customers in the North
- use of old and, in some cases, unsafe equipment
- the excessive use of expensive lawyers

The impasse is likely to remain, with SEL having stated its unwillingness to invest in new network equipment without wayleaves and a number of landholders unwilling to grant wayleaves to SEL.

Dilapidations – or Leasehold improvements
It is normal practice for an operator of machinery to establish a reserve to fund any clean-up operations required at the end of life. It appears that SEL did not create such a reserve when the lease commenced. Mr Witney-Price noticed this absence in 2020 and elected to make a provision, starting in 2022 to collect sufficient funds by 2030. SEL described this as "leasehold improvements" in its management accounts. SEL estimated that £90,000 (2020 prices), would be sufficient to clean the site when the lease expired. The collection was deemed to have commenced in 2012, so a rate

of accrual of £4,500 per annum would have been appropriate for each subsequent year remaining on the lease. This implies that SEL's shareholders would be responsible for the contributions that had not been collected from 2012 to 2022. Presumably, consideration of this amount formed part of Witney Price Group Holding's negotiations over the acquisition in 2020. In 2021, SEL increased the amount required to £120,000, but with no justification. Recently, SEL assured the public that the costs would be small, but gave no evidence to support this position. I am aware that Sark Estates Management, as the site owner, is contemplating undertaking soil and water sampling.

In the absence of any further information from SEL, or Sark Estates Management, I believe it is fair to assume that £90,000 (2020 prices) could be collected through the tariff at an annual rate of £4,500 (2020 prices).

Legal costs

Carey Olsen complain that my Office has not given SEL any clear guidance on how legal costs would be considered in the future. My Office's decisions on the recuperation of current and ongoing legal costs incurred by SEL were set out in my letter to Carey Olsen of 3rd November 2021, as well as more general guidance being provided in the Draft Determination of September 2019 and the Review of the 2019 Price Control Order and Proposed Variation of October 2020. In summary, I consider that £20,000 (2019 prices) should be sufficient to cover the annual legal and regulatory expenses of a reasonably well managed company providing electricity in Sark. SEL has agreed that this sum is "eminently sensible".

If a situation arose where SEL requires sums over and above this "allowance" when a Price Control Order is in place, a case should be made to my Office, as SEL is already aware. My Office's future decisions will be taken on a case-by-case basis after careful consideration. Carey Olsen state that this does not provide sufficient clarity. I disagree. The way I will deal with claims to cover additional legal costs can be gauged from the public documents issued by my Office and the judgments my Office has made to date. For example, I have informed both SEL and Carey Olsen that reasonable annual wayleave charges may be recovered through the tariff and that the reasonable cost of establishing wayleave agreements recovered over the duration of the agreements. I have also made it clear that any additional legal costs sought by SEL, and which my Office judges can be passed through to the end consumer, may be subject to scrutiny by a third party to ensure that they can be considered "reasonable". I believe that any paying party would expect no less.

Carey Olsen referred to SEL's "necessary" and "legitimate" expenditure in connection with the Moerman case but I have explained why I believe it was caused by SEL's haphazard implementation of its own policy to "alternative supplies" at the time, as displayed on its web-site. SEL first insisted that the "buy-back" requirement of the policy applied, which SEL has since acknowledged as being "unfair". SEL also failed to comply with the same policy's undertaking "*We will only remove our equipment when the customer has tested his equipment and proved it".* This process was further compounded by a failure to engage properly with Mr Moerman. SEL has not provided my Office with any reasons why customers should pay for the legal costs that arose from SEL's poor management decisions and poor customer engagement.

The form of price regulation my Office has established for Sark, i.e. setting a price cap, provides SEL with the opportunity to enhance its profitability by managing its costs effectively, such as those for professional services. Unfortunately, in my view, Mr Witney-Price has not, to date, displayed much cost consciousness in regard to legal costs. For example, his "direction" on 7th July 2021, that all communications from my Office to SEL be directed through his Advocates, I regard as a waste of expensive legal expertise. SEL's decision to instruct Carey Olsen on two occasions to request an extension to the deadline for receipt of submissions to the recent Draft Determination was, in my view, unnecessary. Similarly, I see no reason why SEL's submissions should be prepared by Advocates, rather than the company itself. Given the rates charged by firms of Advocates in Guernsey, it is, in my opinion, particularly cost inefficient to use Advocates as a non-legal resource, particularly in the case of a company of SEL's size.

Carey Olsen also complain that my Office has no justification for requesting sight of the price paid for SEL & SEHL by Witney Price Group Holdings in 2020. My response to Carey Olsen explained why I believe that they are incorrect. Carey Olsen also questions why my Office:

- is trying to "set Energy Policy"
- has not investigated the prices charged by other suppliers of electricity, such as Chief Pleas in the North
- cited, in the Determination of 2019, the island of Molokai in relation to developments in Sark

I have explained to Carey Olsen and SEL, many times, that I have not set energy policy, why the price paid for SEL & SEHL could possibly be used as a basis for the Regulated Asset Base in the absence of appropriate record keeping by SEL and how the difficulties encountered by the utility on Molokai were likely to be repeated in Sark, given SEL's previous commercial arrangements. I also reported that I have no reason to believe that the prices charged to the residents in the North by Chief Pleas are unreasonable. The complaints raised by Carey Olsen, on behalf of SEL are, in my view, without merit.

In summary, the submissions my Office has received from residents and SEL's responses, all of which I have carefully considered, do not give me cause to change the conclusion of the Draft Determination.

Developments since Release of Draft Determination

There have been developments in financial and energy markets since the Draft Determination was released in August. Diesel prices at Guernsey have fallen by 24 p/litre, SEL has lowered its standard tariff by 8 p/kWh and narrowed the discounts for larger customers. SEL has also provided my Office with further information relating to electricity consumption during 2022.

As a consequence, I believe it is reasonable to revisit some of the assumptions I adopted for the Draft Determination. These are:

Dilapidations	As mentioned above, I believe it is reasonable for customers to pay into a reserve fund to deal with dilapidations at the power station at the end of the current lease in 2030. I assume these will accrue at £4,500 per annum. I leave it to my successor to decide how to treat revaluations. I would urge that adjustments are forward looking.
Cash costs	The Draft Determination adopted the energypeople report's conclusion that the reasonable fixed annual cash costs of a company SEL's size could be around

	£250,000. The Draft Determination added a further £50,000, to allow for the additional corporate costs that may be required. SEL has not responded with any further details on this matter, though I am aware it has recently appointed another member of staff. I assume this will be funded from the budget set out in the Draft Determination.
Consumption	SEL informed me that it expects to deliver 1.28 million kWh in 2022. This would be 3.7% greater than during 2021. I assume that consumption will rise at 3% over next year.
Own generation	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 the 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 per month. If SEL sets the 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. The current proposed 20 p/kWh represents a discount of 33% on SEL's September 2022 fuel costs.
Adjustments	There appears to be widespread acceptance for the need to protect SEL from fluctuations in fuel prices. I expect the indexation mechanism to continue. Monthly expected demand could continue to be projected from 2019 and 2021 figures (I expect and hope that 2020 was an outlier) and adjustments made each month, though I expect a less frequent adjustment could be acceptable, if required.
Investment	In calculating the maximum unit price, it will be necessary to consider increases in SEL's asset base when any investments are commissioned. This may be achieved by adjustments to the depreciation and return elements of the fixed annual costs for the remainder of the year according to a predetermined calculation.

Future Financial Performance

On the basis of the assumptions made above, I arrive at the following assessment of SEL's financial performance over the coming year.

Table 1

SEL Annual Financial Performance from October 2022-

Units	Island Wide	1,460,000	kWh	
	SEL	1,320,000	kWh	
Std Tariff	59	p/kWh		
MMUC	43,000	£ per annum		
Fuel cost	87	p/l		
Sys efficiency	2.92	kWh/l		
Fuel cost	29.8	p/kWh		
RAB	977,953	£		
Discounts	-	£		
Revenues	821,800	£		
Variable costs	393,288	£		
Gross Margin	428,512	£		
Fixed cash	300,000	para 27 Draft D		
EBITDA	128,512			
Depn	61,800	Table 2 Draft D		
Provision dilap	5,307	£90,000 in 2020 prices over 20 years		
Op Profit	61,406			
Less 2020 U/R	9,424	3 months		
Return on RAB	5.3%			

This shows that, with

- consumption 1,320,000 kWh, up 3% on 2022
- diesel fuel 87 p/litre delivered, the September 2022 price
- no discounts – i.e. equal and fair pricing
- MMUC revenue of £43,000
- no income assumed from own generators, either from trading or the standing charges

SEL could charge 59 p/kWh and enjoy a profit of £61,406. This represents a return on RAB of 5.3%, even after receiving the "under-recovery" remaining uncollected from 2020. I believe that this is very fair, if not generous, to SEL, especially as I regard SEL's management performance over the past two years as being poor. Were a well managed company supplying electricity in Sark which had not lost ~140,000 kWh in sales, the return would be 9.5% per annum.

New System

The Draft Determination described energypeople's analysis of a new system. In my consideration of the costs of delivering electricity in Sark, I adopted different assumptions than those used by energypeople, most notably a higher cost of capital (7.5% per annum, rather than 5%) and a higher capital cost (£2,000/kW) for wind, given that residents may judge a 500kW wind turbine as being too large for the island, and a further £50,000 of salary costs.

This led to the following estimates of the average cost of supplying electricity in Sark

Table 2

Average New System Electricity supply costs

Generation mix: 500 kW wind, 600 kW solar and 600 kW backup diesel

Consumption kWh	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000
p/kWh	60.2	56.75	49.8	44.4	40.0

Source: EPC assumptions applied to energypeople model.

I have discussed with energypeople that its financial model does not explicitly account for the occasions when no wind blows during the night, and the diesels will be required to operate. In order to assess the impact, I assume that these occasions will amount to around 100 hours a year. Assuming that demand during the evening will be around 100kW, this suggests that 100,000 kWhs will need to be supplied by diesel each year. This will require 27,800 litres of diesel. At September's price of 87 p/litre, this amounts to £24,180. If spread over SEL's sales of 1,320,000 kWh, this would add 1.8 p/kWh to prices.

This suggests that a new system would also be capable of supplying electricity at prices well below those currently charged by SEL.

I therefore conclude that SEL's current price of 65 p/kWh and discounts of 2-4 p/kWh are neither fair nor reasonable. I recognise that, according to Sections 15(1), (2) & (3) of the 2016 Law, my Office may now proceed to consult on a Price Control Order and impose maximum prices on:

- Unit charges
- Standing or Standby Charges
- Sales to own generators (but my Office has no powers to control "buy-back").

However, I hope that SEL will take this opportunity to review its tariff and make a PCO unnecessary.

Anthony White

Commissioner

26 October 2022