



How can Guernsey ensure its future Electricity Supply?



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Introduction

Due to its increasing urgency and importance to Guernsey GPEG has written a number of papers on the topic of Electricity which can be found on our website in the links below:

- [States Trading Supervisory Board \(STSB\) – With great power come no accountability](#)
- [Action and Independent Expertise are needed now on Energy and the Environment](#)
- [Electricity, Brexit and the French Connection. The States must protect our energy bills, energy security, energy independence and the environment](#)

This paper reviews the recent consultation document issued by the States of Guernsey on the future electricity supply for the island.

The Current Contract

The Island has issued a substantial consultation document on future electricity supply for Guernsey. It is accompanied by two expensive consultant's reports, which add remarkably little to the debate, from PWC and Siemens.

Amazingly the document just assumes that the supply from France will continue for the next 30 years. Some 93% of the electricity on Guernsey is currently sourced from France under a complicated (but secret) contract which is highly advantageous for Guernsey as it is priced well below current market prices.

When that contract was negotiated France had an excess of power, mostly from nuclear and hydroelectric with the lowest prices in Europe. Unfortunately, the French population used this cheap electricity for heating and air-conditioning so the excess supply rapidly vanished. Environmental pressures have meant that increased power generation did not happen and by the spring of 2021 France was buying (largely coalfired) energy from Germany at high prices and burning what fossil fuels they could. Then came Ukraine and now the French are really short of electricity. Some of their nuclear is off-line for a while. French wholesale prices have recently been the highest in Europe.

Our current contractual position needs renewing as soon as 2024. (The relevant footnote in the Guernsey Electric accounts is not clear and the information we were told by the States does not coincide). Certainly, it totally expires in 2027.

A consequence of this supply position is the recent revelation by Mr Roffey.

“Guernsey Electricity and the States are in talks with the French electricity giant about reducing the electricity supply the island receives through the cable link with France.”

The Ukraine war is impacting EDF's ability to supply, and it has emerged that it would pay compensation to Guernsey Electricity if the island was to use less imported electricity this winter. (Despite media statements this compensation would doubtless be offset by the increased cost of oil generation – no profit is to be expected!)

But that would also mean that the local utility would be generating more electricity at the power station.

States' Trading Supervisory Board president Peter Roffey recently told the Scrutiny Committee hearing into STSB's current activities that the possibility was being explored, but he could not offer much detail with talks ongoing.

It's important to remember that diesel [generation] is running during the winter anyway, we rely on it at some point.

It is a question of whether we use more diesel generation.” (No mention of increased emissions of CO2 and pollutants).

Actually, it is possible that there is a “force majeure” clause in the (confidential) supply agreement that means the French could claim that Ukraine mean they can cease supply. Things could obviously move quickly.

What will the French (ETF And RTE for power generation and transmission) agree to?

The background will be that the French will almost certainly be sore from the export of cheap power to Guernsey under the current contract. Even more so if they have to write cheques to Guernsey this winter!

Particularly at peak demand times they are likely to find it very expensive – or even impossible- to keep the heating on in French homes this winter. Not great politics if we are all cosy in Guernsey

whilst the French voters shiver in candlelit twilight.

The volatility of electricity prices, and general inflation, in recent times will mean any form of fixed price contract will be difficult to agree.

In any case over 30 years or so there is a definite probability (anyone's guess as to what probability) that relations with the French would become unfriendly with obvious implications for power supply. Some would say this risk is too high and we must aim for self-sufficiency.

Possible outcomes of a negotiation with our French suppliers are:

- A.** A 30year contract.
- B.** Shorter or rolling contracts. (Note: Jersey has a 3year rolling contract – a poor base for making decisions on subsea cable investment).
- C.** Baseload only supply – generate your own when it's cold.
- D.** Unguaranteed supply – we will give you electricity if we don't need it elsewhere.
- E.** Variable pricing with indexation – or more likely a premium to (very volatile) wholesale prices.
- F.** A straight Gaullist "Non".
- G.** Fixed pricing.

Combinations of these are possible but if we are to rely on French power, we really need a long, and cheap enough, contract period (say 20years) to justify any of the expensive, and necessary, cable connection options being implemented. Short contracts really do not do much for us.

It is worth pointing out that the French supply is not all renewable power. The certificates that "certify" it are very odd. French power is about 10% from non-nuclear (hydrocarbon) sources and we are not on a separate isolated circuit! If we get a long contract with France then actually the decarbonisation of our electricity will be at the whim of France and their actions, particularly now that they are gradually reducing nuclear power.

Clearly the worst outcomes for Guernsey are option F or a simple market (plus premium?) priced unguaranteed supply agreement cancellable at will.

We don't see how you get a proper "Strategy" for electricity supply without a conclusion on negotiations with France.

No deal

The only thing you can do in the near future is to assume no deal. In which case we can only keep the lights on by burning oil. This clearly goes against the States carbon objectives. Some material mitigation is possible over the later years of the next decade. Not much acceleration of this timetable seems available.

Onshore wind

Wind power will reduce the use of oil generation. Onshore wind is the quickest route (8-10 years) to that reduction but comes with substantial objections from the population. (The consultation hardly mentions onshore wind and dismisses it as requiring four times the separation from housing than is actually needed.) It is notable that the UK has just greatly reduced planning restrictions on onshore

power – the balance between visual amenity and affordable power is rapidly changing.

Offshore wind

Offshore wind is a longer and potentially contentious route. Site selection, planning – there will be substantial environmental debate, ordering and massive construction which all means probably means around 13-15 years to output. 10 years for an optimist.

Wind does not always blow; batteries will help in storing energy from windy days for use when the wind does not blow but they are really expensive and are currently really only practicable for a short period of supply. Perhaps a day or less.

Something of a halfway house would be to use some of our offshore rocks where the visual impact would be less (think lighthouses) and construction not too expensive. Would be quicker than going fully offshore.

One thought – a jointly owned offshore wind farm with the French (and Jersey?) could form a basis for a good long-term solution.

Solar Power

Solar can unfortunately only make a relatively small impact on power supply and that mostly when demand is lowest in summer. However, it would help a little with carbon targets as less oil would be used. It, and wind power, are also cheaper than oil nowadays. Solar could be implemented quickly – perhaps 2 years if the political will exists.

Tidal energy

Tidal energy is an obvious source for Guernsey. Combined with batteries it potentially offers a very clean and reliable energy source. The technology is developing, and it might well be a viable option in a few years' time. Obviously, it should be kept under watch. Construction would be a substantial task. Capital cost would be high and given the state of Guernsey's finances the private sector would likely have to be involved.

Other options

Over a decade or so other options may be around. Deep geothermal seems possibly going to get a lot cheaper. Tidal power economics will be improved. Batteries will be cheaper and more durable.

But if we cannot get a satisfactory long term solution with the French then we have to be ready to move to nearly 100% oil derived power and over 10-15 years we can greatly reduce that percentage with wind and solar and batteries. And then perhaps there will be a good route to lower carbon generation from different technology.

In Summary

It is unwise to underestimate the ability of our politicians to delay the issue. Doing basically nothing before the next election is possible and far from unlikely. Making no decisions until the success or, more likely, failure of the negotiations with the supplier (to be concluded post-election - if that much delay can be procured!) is also possible. As long as we have good on-island oil fired power then at least the lights will stay on – but you do kick decarbonisation out to later dates.

However, times have changed – renewable power is currently a lot cheaper than oil derived power and the sooner we get that power (our own or perhaps French) the cheaper it will be for Guernsey consumers. Economics now favour renewables and decarbonisation has become an economic thing to do – “green” is a welcome further reason to go alternative.

We should be getting on urgently with preparation for wind and solar – whatever the timing of the negotiations – so that we minimise the damage from a no-deal outcome. It would, of course, also help the negotiating position of Guernsey with our French suppliers.

Essentially, we want to access cheaper renewable (or nuclear) power from France, or we will have to build renewables ourselves.