Case M-008

Electricity Market Study

Findings and Recommendations

Document No: JCRA 25/01

Date: 16 January 2025

Jersey Competition Regulatory Authority
2nd Floor Salisbury House, 1-9 Union Street,

St Helier,

Jersey, JE2 3RF
Tel 01534 514990

Web: www.jcra.je

Contents

1 Executive summary

1.1 This document presents the Jersey Competition Regulatory Authority (the **Authority**)'s findings and recommendations for the Electricity Market Study.[1] Electricity is a significant household expense and this study was launched amid public concerns over the cost of living and the Government of Jersey (the **Government**)'s drive for decarbonisation.

1.2 The electricity sector is not currently subject to any form of sector-specific economic regulation, but remains subject to the Competition (Jersey) Law 2005, enforced by the Authority. It is within this framework that the market study is being carried out. A market study is an analysis of a market, or features of a market. It examines a variety of evidence to assess how well the market is working and may recommend changes designed to make it work better.

1.3 The study has been carried out against a published terms of reference and takes full account of stakeholder responses to the Authority's Draft Report which was issued in June 2024. In the delivery of this study the Authority has been supported by the EY Economic Advisory team.[2] The conclusions of EY's analysis are presented in the **EY Final Report** published alongside this document. This contains the relevant information and analysis supporting the Authority's findings and recommendations (and should be read alongside this document).

1.4 The EY Final Report indicates that current market outcomes, such as price levels and price stability, compare well to other jurisdictions. When considering various efficiency and other measures, Jersey Electricity (the key provider) also performs well when compared to similar organisations in other comparable jurisdictions.

1.5 However, the report draws attention to specific Jersey conditions, such as the absence of competition, the potential barriers to changing this situation and the future challenges faced by the electricity market which in the Authority's view will likely have the effect of increasing electricity prices. In particular, key future challenges which are likely to put upward pressure on prices (and whose impact is too early to assess) include:

- The wholesale supply contract renegotiation with EdF: there is uncertainty around the level of prices that will be secured during the contract negotiations. Further, whatever the outcome of these negotiations, electricity prices are sensitive to geo-political and macro-economic events;
- The progressive rollout of decarbonisation targets which are expected to increase overall electricity demand; and
- Jersey Electricity's own investment plans to maintain and enhance its own infrastructure.

1.6 Taking all these points into account, the Authority is making two short-term recommendations for Jersey Electricity to provide:

- All relevant information to improve consumers' choice and their ability to easily switch between tariffs to manage their own costs (Recommendation 1); and

[1] All documents relating to the market study can be found at: M-008 Electricity Market Study

[2] EY is a leading professional consulting firm with extensive experience in electricity and energy markets

- Publicly available terms enabling access to its network to support more self and distributed generation (Recommendation 2).

1.7 In the longer-term, the Government's existing energy policy may require further refinement to address the trilemma of achieving its net zero goals, ensuring the Island's security of supply and safeguarding affordability (Recommendation 4). Supporting this, the Authority will also undertake a further review of the electricity market in three to five years to capture the impact of market developments (Recommendation 3).

1.8 The recommendations from the study are for the consideration of the identified stakeholders, and the Authority will closely follow policy developments in this area. This will support the Authority's future review of the electricity market.

2 Background

2.1 This chapter has four subsections:

- Overview of market studies;
- Electricity Market study process;
- Developments since the Draft Report; and
- Structure of this document.

Overview of market studies

2.2 A market study is a flexible tool to explore whether a market, or a feature of a market, is working well for consumers. Broadly, it considers the relationship between consumer behaviour in a market, the behaviour of businesses in that market, the market's structure and other factors relevant to the performance and operation of a market. By looking at these issues, the Authority can determine whether action that can encourage change will help address any actual or potential constraints to competition.

2.3 While the Authority will seek to apply a consistent approach and 'template' to each market study, a market study is not a formal competition investigation, and the Authority has wide discretion in how it frames a market study and the analytical framework it chooses to apply to any market study.

2.4 The outcomes of a market study may be one or more of the following:

- A clean bill of health for the market;
- Consumer/business focused action; and /or
- Recommendations to Government/the Authority.

2.5 It should be noted that should evidence emerge during a study suggesting it was necessary to undertake a formal investigation under the Competition (Jersey) Law 2005, then the appropriate tool is competition enforcement, not a market study. Should this occur, the market study would stop and a formal investigation would be launched.

Electricity market study process

2.6 The electricity sector is not currently subject to any form of sector-specific economic regulation, but remains subject to the Competition (Jersey) Law 2005, enforced by the Authority. It is within this framework that the market study is being carried out.

2.7 With respect to the study, the electricity market was selected as:

- The Authority's last study into this market was completed over 10 years ago[3];

[3] The 2012 study concluded that electricity prices in Jersey broadly provided fair value to consumers, but noted that areas, such as the development of new connection charges and self-generation, may require a future review. Further detail can be found in the Consultation Paper (Box 1)

- Electricity is essential for Jersey households, representing a significant proportion of household expenditure (and a key variable in the cost of living); and
- There have been wider market developments since the last study, such as the emergence of the decarbonisation/net zero focus in Jersey, and across the world.

2.8 In October 2023, the Authority announced the market study and published the terms of reference (see Box 1), a frequently asked questions document and a media release. Following this announcement, EY were appointed after a competitive procurement process.

Box 1: The terms of reference

The Authority will conduct a market study into the electricity market in Jersey. The efficiency of electricity supply in Jersey will be a key focus of the study. The study will also consider market characteristics and comparative data, as well as reviewing current and future market developments and their impact on competition. Overall, it will assess whether recommendations can be made to improve competition and consumer outcomes.

In particular, the study will consider:

- the efficiency of electricity supply in Jersey, taking into account the resilience of supply;
- market characteristics, including consumer demand, market structure and market outcomes;
- comparative data and findings from the previous market study carried out by the Authority; and
- features of the electricity market, including investment in renewables and alternative generation, which potentially impact present and future competition.

Subject to the above, the study will set out recommendations for prioritising areas likely to have a significant impact on competition and consumer outcomes in the electricity market. The scope of the study will take account of the key components of the electricity supply chain, including physical infrastructure, and wholesale supply through to end user outcomes.

2.9 Between October 2023 and June 2024, a Draft Report was developed through several key steps:

- Stakeholder engagement, with 11 stakeholders interviewed, including Government, business/consumer groups and wider market participants to inform the market study;
- Extensive engagement with Jersey Electricity, including information requests to ensure an accurate understanding of the market; and
- Independent research into comparators and wider precedents supported the analysis, along with consideration of the previous study carried out in 2012.

2.10 The analysis was summarised in the EY Draft Report and the Authority Consultation Paper; both published in June 2024. In the Consultation Paper, the Authority set out:

- The key findings from the EY Draft Report;
- The Authority's further considerations for future looking competition policy;
- Draft recommendations; and
- Next steps, including the questions on which stakeholder feedback was being sought.

2.11 The consultation was open for six weeks and seven responses were received. Respondents included the Government, Jersey Electricity, Sunworks (CI) Limited (**Sunworks**), and four anonymous responses. Where available, non-confidential versions of these responses are available on the Authority's website. The Authority would like to thank all stakeholders for their input to the study.

2.12 After the closure of the consultation period, follow-up discussions were held with Government, Jersey Electricity and Sunworks. These discussions helped ensure a shared and clear understanding of points made in the written responses. The Authority also requested additional information from Jersey Electricity, to help address matters raised by stakeholders in their responses with respect to efficiency and consumer outcomes.

Developments since the Draft Report

2.13 The Draft Report was issued in June 2024 and there have been a number of developments since then, including:

- In July, Jersey Electricity announced Solar 5000, an ambition to power five thousand homes with locally-generated solar energy by 2030.[4]
- In August, the Policy Centre Jersey published a policy brief on energy policy. The report provided an overview of energy supply and consumption in the Island and analysed key policy issues.[5] The report also cited the findings of the Authority's Draft Report.
- In October, Jersey Electricity announced the price rises to apply from 1 January 2025 - a 7.5% tariff increase which will add around £2 per week to the average domestic electricity bill of £1,400 per year.[6]
- In November, Jersey Electricity announced the 'BIG upgrade'; a £120 million network investment to support future electricity demand. The investment will provide additional capacity on the network as well as upgrading around 10% of the existing low voltage network to enable twenty thousand customers to switch to electricity for heating.[7]

2.14 These market developments have been thoroughly considered and, where appropriate, reflected in this paper and the EY Final Report.

Structure of this document

2.15 The rest of this document is structured as follows:

- Chapter 3 sets out the market study findings;
- Chapter 4 sets out the market study recommendations; and
- Chapter 5 sets out the next steps.

[4] See: Solar 5000 (Jersey Electricity)
[5] See: Energy Policy (Jersey Policy Centre)
[6] See: Electricity prices to rise by around £2 per week from January 2025 (Jersey Electricity)
[7] See: Biggest ever upgrade to electricity network underway (Jersey Electricity)

2.16 This document also includes two Annexes: Annex 1 provides a glossary; Annex 2 sets out a high-level summary of stakeholders' responses and the Authority's comments on the feedback received.

2.17 In the interest of brevity, this document does not repeat all the background and context included in the Consultation Paper and EY Draft Report, though where relevant a high-level discussion is provided within each chapter.

3 Market study findings

3.1 The EY Final Report presents a detailed view of the market, indicating that current outcomes such as price levels, quality of service and price stability compare favourably, relative to other jurisdictions. Further, Jersey Electricity performs well relative to comparable organisations in terms of efficiency and quality of service. For example, Jersey has a lower number of consumer minutes lost when compared to Guernsey and the Isle of Man, and in 2023, Jersey Electricity's number of complaints per 100,000 customers was 89% lower than in Great Britain.

3.2 Consistent with the previous Authority study into electricity, however, the EY Final Report illustrates the absence of competitive forces in the market, and the likely challenges in promoting an on-Island competitive market structure and process.[8]

3.3 When the Authority carried out its 2012 study there was only a limited requirement to assess key external economic and political factors, or the potential relevance of alternative and renewable energy sources. These issues are now central to the on-Island electricity market and inform views on the future market structure, the potential impacts on consumer demand and the scope for competition. Indeed, the Carbon Neutral Roadmap sets out the Government's aspiration that 50% of Jersey electricity is produced within the Island or from the Island's territorial waters by the 2040s.[9]

3.4 In respect of market entry and structure, the EY Final Report shows the electricity market is vertically integrated, with Jersey Electricity being the only company directly responsible for procuring, generating, transporting and distributing electricity in Jersey. Other companies install and provide advice on renewable and solar systems – such as Sunworks and Rubis. It is also noted that the electricity sector in Jersey is not currently subject to any form of sector-specific economic regulation.

3.5 In respect of information and consumers' ability to exercise choice, either between electricity tariffs or between energy sources, there is evidence that this is constrained. For example, the EY Final Report illustrates that switching rates are comparatively low (the switching rate across electricity tariffs is between 0.5% and 0.7%), and that consumers can face significant constraints when switching between energy sources.[10]

3.6 Electricity tariffs are composed of unit costs and standing charges. The EY Final Report indicates that on-Island pricing for electricity remains generally below Great Britain and other similar jurisdictions. Over the past five years, Jersey imported at least 94% of its electricity demand from France, based on a contract with Électricité de France (**EdF**), which was agreed in 2012 and expires in 2027. The EdF contract is a major factor influencing prices paid by electricity consumers in Jersey.

3.7 With reference to the supply agreement, the Authority notes this is formally made between Channel Islands Electricity Grid (**CIEG**) and EdF. The CIEG is the joint company set up in 1998 between Guernsey Electricity and Jersey Electricity to operate and manage the submarine cables

[8] See section 2 of the EY Final Report

[9] See: Carbon Neutral Roadmap (Government of Jersey)

[10] The Consultation Paper provided detailed discussion of switching – see Box 4 (Switching electricity tariffs) and Box 5 (Switching from other energy sources to electricity)

between mainland Europe and the Channel Islands. Jersey Electricity cannot unilaterally negotiate the upcoming supply contract. This matter is further discussed in chapter 4.

3.8 The current supply arrangement, between Jersey Electricity and EdF, has acted as a form of supply 'stabiliser' and, in effect, helped to insulate Jersey consumers from the full effects of the recent energy market instability. However, retail prices have increased a number of times since 2020/2021 generally in line with inflation (albeit with a lag) and are now approximately 36% higher than in 2018.

3.9 Future supply arrangements, and inflationary pressures, will likely continue to impact on-Island electricity prices. Moreover, changes to wholesale costs, a key element in Jersey Electricity's business, alongside additional investment required to upgrade infrastructure, indicate that future prices to consumers may be on an upward trajectory.

3.10 Alongside the key findings, the EY Final Report clearly highlights areas for forward-looking competition policy. These were also discussed in detail in the Authority's Consultation Paper issued as part of the Draft Report, providing context for the recommendations, which covered four areas:

- **Area 1 - Market uncertainty**: The wider electricity (and energy) market is characterised by relative instability and has shown itself to be sensitive to geo-political events and macroeconomic developments. While Jersey consumers have (to date) been effectively insulated from these market fluctuations[11], these fluctuations serve to illustrate potential market volatility, and the criticality of the EdF contract on future supply arrangements. The Authority's view remains that the renegotiation of the current supply arrangement with EdF is an overriding issue for the market, and this is reflected in Recommendation 4.[12] Further, to capture future market developments, Recommendation 3 commits the Authority to undertake a further review of the electricity market in three to five years.
- **Area 2 - Market structure**: Market structure plays a key role in the competitive process. Jersey's on-Island electricity market is relatively unique in that it has a single vertically integrated supplier, operating across the value chain from generation through to end-user supply. Therefore, any proposed recommendations should be designed to encourage specific Jersey Electricity behaviours and practices, to help deliver consumer outcomes that are more consistent with a competitive process.

  In the same context, consideration is also required as to the potential scope for competition in the future. Currently, there is no competition in electricity generation. Further, reliance on import and the absence of competing generation sources (and competition across the supply chain) means that reliability of supply and resilience is also a consideration. Recommendation 2 is framed in this context.
- **Area 3 - Future demand and supply**: The EY Final Report indicates that average annual electricity consumption for residential consumers on-Island is considerably higher than other comparators – 7,135 kWh in 2023, compared to Great Britain which is estimated to be 2,700 kWh. The EY Final Report also provides a high-level view of future demand in the

[11] See Section 4 of the EY Final Report

[12] Jersey Electricity could procure electricity from any supplier in France, however EdF is the largest generator and supplier in the market

context of the Carbon Neutral Roadmap, e.g. achieving the 2050 net zero target could increase maximum (peak) demand by 25%, with an overall increase in demand of 70%.[13]

Electricity is already a significant component of the energy mix in Jersey, representing 38.4% of final energy consumption in Jersey (2022), higher than Great Britain and the European Union. Subject to developments in other on-Island energy sectors (gas, fuel, etc.) and future Government policy, this proportion could significantly increase in the future. The ability for consumers to switch is key to the competitive process, both across tariffs within electricity, and from other energy sources onto electricity. These issues are captured in Recommendation 1.

- **Area 4 - The Government's policy framework**. The States of Jersey holds the majority of shares in Jersey Electricity. As such, Government can be influential in shaping the company's strategic approach to supply and assurance (including ongoing oversight of the EdF contract). Similarly, the scope for competition across the supply chain is within the scope of future Government energy policy, as is the resilience of supply, pricing, third-party access, self-generation and the quality of service.

  As the electricity market evolves toward decarbonisation, and other potential energy sources become more commercial, consumers and users will require clear signals and incentives to help facilitate a successful evolution. This relates to pricing and affordability, the necessary infrastructure and access, and a clear view of the related timescales and approach. These issues are captured under Recommendation 4, while Recommendation 3 will enable the Authority to consider market and policy developments in a future review of the market.

[13] See section 6.1 of the EY Final Report

4 Market study recommendations

4.1 In the Draft Report the Authority identified three recommendations, two short-term and one long-term. The Authority notes that both the stakeholder feedback and additional analysis carried out since the Draft Report are supportive of the recommendations. The previous draft recommendations (now recommendations 1,2 and 4) have been further refined and are not subject to material changes.

4.2 Stakeholders emphasised the importance of future analysis of market outcomes, given likely market developments and the significance of this market to Jersey's carbon neutrality. Consistent with this, a fourth long-term recommendation (Recommendation 3) on a future electricity market review has now been included and seeks to ensure the market continues to deliver for consumers in the future.

Recommendation 1: Enabling consumers to exercise choice

4.3 In the absence of competition, consumers need to be encouraged to actively choose a tariff and supported to make an informed decision on their tariff choice.

4.4 While there are a variety of tariffs available, most domestic and commercial consumers are on their respective general tariffs. For example, consumers may not have full visibility of how Jersey Electricity decides the start and end time of its time-of-use tariffs.[14] Further, there are different metering requirements for different tariffs. As a result, consumers wishing to switch between these groups of tariffs would need to change their meter (alongside other potential wiring changes) in advance of the switching.

4.5 Further, the ability for consumers to switch onto electricity – from another energy source and supplier – is also constrained. This can relate to metering and the availability of network infrastructure, as well as Jersey Electricity's capital (network) spend, whereby capital expenditure varies according to the number of new connections to the grid and different methods of cost recovery. As set out in the Consultation Paper, the switching process, both across tariffs, and from alternative energy sources, involves multiple stages and can be costly.[15]

4.6 The Authority notes the positive steps Jersey Electricity is taking to improve tariff information and that the 'BIG upgrade' (see paragraph 2.13) will help increase the network capacity for household connections. However, there are likely additional requirements for appropriate metering and wiring. In this regard, planning policy will also be important and may be a mechanism used to support greater consumer choice, for example requiring the provision of necessary infrastructure within any new developments. This has links to Government Policy and Recommendation 4.

4.7 The ability to switch is not just limited to consumers, but also businesses. With respect to this, the Authority notes Jersey Electricity's commitment to launch and develop a business-to-business MyJE app, which will support business choice.

[14] See section 4.1 of the EY Final Report

[15] See Box 4 (Switching electricity tariffs) and Box 5 (Switching from other energy sources to electricity)

Recommendation 1 - Enabling consumers to exercise choice

To support consumer and business choice, Jersey Electricity should provide clear information on all available tariffs (including greater clarity on time-of-use tariffs); and ensure that its infrastructure, systems and processes allow cost-effective switching between tariffs.

Recommendation 2: Access to Jersey Electricity's network

4.8 As Jersey Electricity is vertically integrated, it has access to all necessary information on all segments of the market, while other market participants – and consumers – do not have access to the same level of information (see section 6.4 in the EY Final Report).

4.9 In order to connect to the network (grid), consumers and market participants must first request information from Jersey Electricity, and the cost of connection can be specific to the property and type of connection (noting that the customer pays for the connection). Similarly, a business wishing to install electricity generation will not know the cost to connect to the grid in advance of making the request to Jersey Electricity.

4.10 Stakeholder feedback on the Draft Report highlighted that this lack of information has impacted decision-making, for example, on location and sizing of connection requests for new demand and distributed generation. Appropriate visibility of spare network capacity, as well as clear terms of access and connection to the grid, will facilitate additional on-Island generation by consumers and businesses.

4.11 With respect to solar, the Authority notes that Jersey Electricity has committed to develop a Power Purchasing Agreement (**PPA**). This will be a long-term agreement between the owner of a generating asset, like a solar panel, and Jersey Electricity, detailing conditions like the price and quantity of electricity to be supplied. Jersey Electricity's new Solar 5000 ambition (see paragraph 2.13) could also encourage more consumers to adopt renewable energy.

4.12 Further clarifying the means and terms of access (both price and non-price) to Jersey Electricity's network (and related information), in addition to the development of a PPA, would lower the risks and cost faced by market participants, reduce barriers to entry and increase efficiency across the system.

4.13 The Authority recognises that additional policy development in this area may require multiple rounds of engagement and discussion with those desiring access to Jersey Electricity's network, to be led by Jersey Electricity. As this is in the context of renewables and decarbonisation, the Government may also wish to consider and/or recommend specific terms of access to the network.

Recommendation 2 - Access to Jersey Electricity's network and increasing efficiency

To enable viable self and distributed generation Jersey Electricity should develop general publicly available terms of access, where necessary, supported by the provision of network and operational information.

Recommendation 3: The Authority to undertake a further review of the electricity market in three to five years

4.14 The balance between decarbonisation, affordability for consumers and security of supply is a key issue for Jersey.[16] Many stakeholders who responded to the Authority's consultation noted the importance of electricity to Jersey's economy and sustainability. Further, the Authority received representations from key stakeholders with regards to the importance of monitoring future outcomes in this market.

4.15 Future uncertainty could undermine the achievement of Jersey's policy goals in the electricity market. This study has highlighted the significant upcoming changes in this market: the wholesale supply contract renegotiation, the progressive rollout of decarbonisation targets in addition to Jersey Electricity's own investment plans, and the recent price increases. The EY Final Report concludes:

"*The available evidence does not imply that Jersey Electricity is operating in an inefficient manner. Looking to the future, it will be important to consider how Jersey Electricity can operate efficiently as the electricity market transforms, with expected increases in electricity demand to decarbonise the economy, the renegotiation of the contract with EDF and the potential commissioning of large-scale onshore generation.*"

4.16 The interplay between such changes and Jersey's reliance on imported electricity creates risk for consumers, who may face price increases to support network development, maintenance, and in response to changes or further external shocks to the electricity market.

4.17 To ensure the electricity market continues to work in the best interest of consumers and Jersey as a whole, the Authority will undertake a further review of the electricity market in three to five years. This recommendation captures stakeholders' views that regular oversight of the electricity market is essential to the economic wellbeing of the Island.

> Recommendation 3 – The Authority to undertake a further review of the electricity market in three to five years
>
> The Authority will undertake a further review of the electricity market in three to five years, to capture market developments (such as a new wholesale supply contract). This review will include trends in electricity tariffs, cost efficiency and performance assessment against comparable benchmarks.

Recommendation 4: Competition, resilience and future market outcomes

4.18 Jersey's electricity market faces significant challenges in the future. A material change to existing supply arrangements, between EdF and Jersey Electricity, would have a significant impact on market outcomes. It is plausible that wholesale costs, which represent a significant proportion of the cost for domestic consumers, may increase in the future, though the extent to which the increase would be passed onto Jersey consumers may vary.

[16] These three factors constitute the energy 'trilemma' and are three key objectives that governments often aim to balance in the energy sector, including electricity markets, when developing policy

4.19 Given the significance of the EdF contract renegotiation, the Authority considers Government oversight of the process is important and would be consistent with the development of a refined long-term energy policy.

4.20 Competition can help absorb and distribute the effects of different cost pressures. However, only competition in the upstream segment of the market (wholesale, alternative generation, etc.) is likely to be effective in off-setting cost pressures that may arise under the existing supply arrangements.[17] Similarly, in respect of supply resilience, additional redundancy and security is likely to be achieved through the development of alternative wholesale supply options, such as on-Island renewable generation.

4.21 There remains a high degree of uncertainty around future demand – carbon emission targets, prospective electrification of heat and transport, and wider energy policy matters will all have a bearing on future demand. Relatedly, investment and other resource required to meet future demand will be a key consideration, as will the nature – and vehicle – for any investment in alternative generation and renewable energy sources.

4.22 It is the Authority's view that industrial policy is a matter for Government. As a result, this study has not discussed wider energy policy considerations. For example, whether subsidies and/or other incentives could be used to support options for universal connectivity. Similarly, planning and energy efficiency will have a bearing on any Government proposed policy. This might include measures designed to reduce the cost of energy through greater efficiency, by means of relaxing planning constraints and encouraging energy efficient home improvements.

4.23 Given also that the States of Jersey is the majority shareholder (of Jersey Electricity), it plays an influential part in determining how Jersey Electricity supports the wider economy and decarbonisation in Jersey.

Recommendation 4 - Competition, resilience and future market outcomes

To reduce market uncertainty and improve consumer outcomes, Government should refine its existing energy policy toward a resilient, competitive market structure, with a clear path to carbon neutrality, offering guidance to suppliers and assurance to prospective investors.

[17] It is recognised that consumption and efficiency could be further optimised, although such measures are unlikely to offset a material increase in wholesale costs

5 Next steps

5.1 The recommendations from the study are for the consideration of the identified stakeholders, and the Authority will closely follow policy developments in this area. This will support the Authority's future review of the electricity market to be carried out within three to five years.

5.2 As set out in the Authority's 2025 Business Plan, the market studies regime aims to address issues with competition in markets where change would most benefit Islanders. Previously completed studies include school uniforms, freight logistics and groceries. The Authority will continue work on the construction sector review, and will announce further market studies in due course.

Annex 1: Glossary

This glossary covers the key acronyms and terms used in this paper and supporting EY Final Report.

BEIS – Business Energy Industry Department, UK Government.

Buy back rate – Domestic and commercial consumers with distributed generation receive a buy-back rate for any electricity exported to the network.

CIEG – Channel Islands Electricity Grid (CIEG), a joint venture between Jersey Electricity and Guernsey Electricity.

EdF – Électricité de France, a French Government owned multinational electricity company.

Embedded generation – Embedded generators are sources of energy, like wind turbines or solar panels, which are connected to a customer's electricity supply and export energy back to the grid.

FTE – Full Time Equivalent, a measure which proxies total number of jobs in a company.

GST – The Goods and Services Tax (GST) is a tax on sales of goods and services in Jersey. GST is charged at 5%, including on imports.

HV – High Voltage.

JEBS – Jersey Electricity Business Services, a firm owned by Jersey Electricity group.

Kilowatt (kW) – A unit of power equal to one thousand watts.

LV – Low Voltage.

Marginal cost – The marginal cost is the change in production cost from producing an additional unit.

Megawatt (MW) – A unit of power equal to one million watts, often used as a measure of the output of a power station.

MWh – Megawatt per hour.

Ofgem – Office of Gas and Electricity Markets, UK regulator.

Over The Counter (OTC) trade – A type of trade which occurs in a liberalised energy market.

Power Purchase Agreement (PPA) – A PPA is a long-term contract between a generator owner and a buyer, outlining agreed terms like price and electricity supply quantity.

PV – Solar photovoltaic generator, a technology of generation that utilises photovoltaic material to convert sunlight into electrical energy.

RPI – Retail Price Index, an index that measures increases in prices. For the Jersey RPI, see Retail prices index (inflation) (gov.je).

Standing charge – A fixed daily charge on utility bills, regardless of usage, covering network costs like electricity meter provision.

Unit rate – The unit rate is the price-per-unit of electricity consumed by a customer. Electricity usage is often measured in kilowatt per hour (kWh), so a unit rate would be the charge per each kWh used.

VAT – Value Added Tax (VAT) is a UK Government tax which applies to most goods and services.

WACC – Weighted Average Cost of Capital. The WACC represents the required return on debt and equity for an efficient business.

YE – Year ending, concept used in accounting and economics.

Annex 2: Consultation response annex

The Authority received seven responses to the Draft Report and Consultation Paper, which included four anonymous responses. The three non-anonymous respondents were:

- Government[18];
- Jersey Electricity; and
- Sunworks (CI) Limited.

The responses to the consultation presented a range of analysis and views. The responses also varied in their approach to the draft findings, and in their perspective on the draft recommendations. In high-level terms, the issues raised by respondents aligned with the Draft Report. In addition to the contributions made by respondents on matters raised in the consultation, other issues were also identified for further Authority consideration.

Table 1 provides a high-level summary of the key issues raised by respondents. It also outlines the Authority's consideration of and response to each of the key points arising from the consultation stage.

Not all comments made are captured in the summary table below. For instance, general comments on drafting, additional context or observations on specific figures are not all included. However, the Authority has given careful consideration to each submission, and where appropriate, taken account of them in its findings and recommendations.

Table 1 - Consultation response summary table

Stakeholder	Authority response and approach
Government of Jersey (non-confidential version) • The response raised a series of key issues, e.g., on cost effectiveness and forward-looking efficiency assessment. • The response suggested additional evaluation of certain areas, such as 'energy equity' in the context of competition; and requested further granularity on the main operator's costs relative to business activity. • In addition, the response suggested more extensive comparison with other jurisdictions on consumers in arrears and level of satisfaction on quality-of-service provision. • Government's response also referenced ongoing oversight, and the importance of alignment with the future policy.	Section 3 of the EY Final Report contains further efficiency and cost effectiveness analysis, which has expanded on the analysis presented in the EY Draft Report. Sections 2, 3 and 4 of the EY Final Report have also been developed, with additions on the role of electricity in the wellbeing of those on relatively lower incomes. Section 3 further describes the different types of costs incurred by Jersey Electricity to supply consumers. A comparison with respect to complaints and consumers in arrears (with a focus on Great Britain) has also been added, with additional detail added on available Jersey information. In terms of ongoing oversight, Section 1 of the EY Final Report describes regulatory practice in other jurisdictions. It is also noted that it is important to look to the future in the context of efficiency. This

[18] Note, the Government provided a non-confidential and confidential response

	will be supported by Recommendation 3 which will see the Authority review the electricity market again in three to five years.
Jersey Electricity • The response queried the findings in respect of tariff information and considered that low switching rates are not a measure of poor consumer outcomes. The response also set out the steps being taken to improve information on tariffs and develop a business MyJE app. • In the context of access to physical network, the response outlined a series of Jersey Electricity initiatives aiming to facilitate network access (PPA), but does not support the development of terms of access and the provision of operational information. • The response also raised a concern around the discussion of future supply arrangements in the draft report – Jersey Electricity believes the risks are not as great as outlined in the report.	The ability for consumers to exercise choice and switch remains a key factor in competition policy. Section 4.3 of the EY Final Report has been updated to expand the discussion of switching and this is also reflected in Recommendation 1, which notes the positive steps being taken by Jersey Electricity. Jersey Electricity's comments on initiatives to facilitate more efficient and transparent access are noted. Section 4 and 6 of the EY Final Report have been updated to include these references, e.g., the introduction of PPA contracts for embedded generation in Jersey. The concerns around geographic data have also been noted, and the Authority's view is that an appropriate framework can be developed that mitigates potential risks. On the framing of the future market and risks, the Authority maintains its view on the potential for uncertainty. Wholesale energy markets are not easily forecast, being subject to external shocks, and the Jersey electricity market is further dependent upon Government of Jersey policy, in addition to the European geopolitical and economic climate. The Authority's final findings and recommendations are framed accordingly. Nonetheless, it is also noted in the EY Final Report that renegotiation of contracts is a common stage of electricity procurement.
Sunworks (CI) Limited • Sunworks' response raises points on tariffs and metering, e.g., the absence of time-of-use tariffs for onsite energy storage, and how certain tariffs require electrical works which are expensive for customers. • On metering, the response advocates the use of smart meters for the settlement of distributed generation, and states that additional metering is required on solar/renewable generation. • The response also argues for a standby charge - for commercial generation - to be agreed prior to the customer investing in generation (fixed	Sections 4 and 6 of the EY Final Report have been further developed to take account of these additional points on tariffs, e.g., section 4.1 references the absence of time-of-use tariffs for batteries and other onsite storage (beyond the buy-back rate). Similarly, the additional technical or financial ways in which access to the solar market could be facilitated, including those that Jersey Electricity has influence over, are further described. In terms of the structure, level and approach to standby charges, the Authority notes the main operator's clear intention with respect to the

charge, without annual review). In the same context, Sunworks propose a fixed tariff for most generators – up to 0.5MWp – until the solar market increases in size • Sunworks' response discusses Guernsey's policy approach in the context of facilitating more private sector investment in the energy market.	introduction of PPA contracts. The establishment of these will be a matter for Jersey Electricity in consultation with other stakeholders. The Authority notes that the approach adopted in Guernsey could be a reference point for refining Jersey's energy policy, as per recommendation 4.
Anonymous responses • One anonymous respondent noted that Jersey Electricity favoured electric heating and electric boilers relative to heat pumps, which the respondent felt was to the detriment of consumers. • Another respondent raised a concern that Jersey Electricity's own targets on solar generation lagged behind the UK and other countries. Respondents questioned whether this was a result of the main operator's role in marketing and selling electricity. • A respondent noted that it was inappropriate that price increases had typically linked to the Jersey Retail Price Index, which includes housing costs. • It was also noted that the increase in costs and headcount (Jersey Electricity's staff numbers) were a concern, as the main driver should be the wholesale agreement.	In respect of heating sources and appliances, it is noted that Jersey Electricity do supply alternatives, and that it offers financing for air source heat pumps. The Authority is not proposing further recommendations in this area. In terms of solar PV supply and consumption, section 6.5 of the EY Final Report has been updated to include the new commitment from Jersey Electricity to increase solar generation to enable supply of five thousand homes. Reference is also made to Jersey Electricity's most recent commitment on NetZero, that is a, *"£120 million investment to deliver infrastructure for a NetZero 2050*". With respect to the appropriate inflation index, the Authority notes that the Jersey Retail Price Index is the national inflation statistic for Jersey. While it may not be appropriate for Jersey Electricity to increase all of its costs annually by this measure, it does provide an independent measure, outside of the control of Jersey Electricity. The EY Final Report includes further detail and analysis of headcount in section 3. It is noted that the increase is being driven by the preparation for decarbonisation and workforce renewal. As the EY Final Report notes it will be important to monitor the growth in headcount.