International Experiences in Retail Electricity Markets

Consumer Issues

PREPARED FOR
The Australian Competition and Consumer Commission (ACCC)

PREPARED BY
Agustin J. Ros
Toby Brown
Neil Lessem
Serena Hesmondhalgh
James D. Reitzes
Haruna Fujita

June 2018
This report was prepared for the Australian Competition and Consumer Commission (ACCC). All results and any errors are the responsibility of the authors. This report does not represent the opinion of The Brattle Group or its clients.

Acknowledgement: We acknowledge the valuable contributions of many individuals to this report and to the underlying analysis, including members of The Brattle Group for peer review.

Copyright © 2018 The Brattle Group Limited
# Table of Contents

Executive summary .............................................................................................................................. iii

I. Introduction ......................................................................................................................................... 1
   I.A. Background: Reviews and inquiries covering retail electricity competition in the NEM ............................................................................................................................. 1
   I.B. Objectives of this report .................................................................................................... 2
   I.C. The NEM ............................................................................................................................ 3
   I.D. Scope and approach ............................................................................................................ 4
   I.E. Jurisdictions reviewed ........................................................................................................ 6
   I.F. Key concepts ....................................................................................................................... 7
   I.G. Structure of this report ...................................................................................................... 8

II. Retail market characteristics ..................................................................................................... 11
   II.A. Jurisdictions where prices are determined in a market ................................................. 12
   II.B. Jurisdictions where prices are predominantly determined by regulation ............... 15

III. Policies to promote retail competition ..................................................................................... 17
   III.A. Policies on transparency and access to information ...................................................... 18
   III.B. Retail market design ........................................................................................................ 38

IV. Policies to protect customers .................................................................................................... 54
   IV.A. Default tariff ..................................................................................................................... 55
   IV.B. Consumer safeguards ....................................................................................................... 66
   IV.C. Targeted policies for vulnerable customers .................................................................... 71

V. Policies that could be relevant in the NEM ............................................................................. 97

Appendix A. Consumer satisfaction........................................................................................... 104

Appendix B. Introduction to detailed jurisdiction summaries ................................................ 107
   B.I. Overview of retail competition ..................................................................................... 107
   B.II. Consumer engagement ................................................................................................. 107
   B.III. Smart meters ................................................................................................................... 107
   B.IV. Consumer safeguards .................................................................................................. 107
   B.V. Targeted protection of vulnerable customers ............................................................... 108
   B.VI. Promotion of competition ............................................................................................ 108
   B.VII. Outcome of retail competition .................................................................................... 108

Appendix C. Detailed summary of each jurisdiction ................................................................ 109
   C.I. Illinois, USA ................................................................................................................... 109
   C.II. New York, USA .............................................................................................................. 126
   C.III. Pennsylvania, USA ......................................................................................................... 140
   C.IV. Texas, USA .................................................................................................................... 154
C.V.  France ............................................................................................................................. 170
C.VI. Germany ........................................................................................................................ 184
C.VII. Great Britain ............................................................................................................. 200
C.VIII. Italy .......................................................................................................................... 232
C.IX. The Netherlands ......................................................................................................... 245
C.X.  New Zealand ................................................................................................................ 259
Executive summary

A. Background

1. In September 2017, the Australian Competition and Consumer Commission (ACCC) released a preliminary report of its inquiry into the retail supply of electricity and the competitiveness of retail electricity supply in the National Electricity Market (NEM). The preliminary report highlighted concerns about insufficient competition in both the wholesale and retail electricity markets, and found indicators that suggested that the retail market is not delivering good outcomes for all consumers. In particular, many consumers are unaware of the price comparison tools that are available and are confused by inconsistent terminology. These customers are paying higher prices for electricity than other customers who are more engaged with the retail market, yet both groups receive similar service offerings.

2. The Brattle Group was engaged by the ACCC to prepare a report on policy options for protecting customers and promoting effective retail competition that have been implemented in other jurisdictions. Our report reviews experience in ten jurisdictions internationally and draws out important examples and common themes that are relevant for the ACCC’s inquiry.

B. Conceptual Approach

3. Our report seeks to help address two of the fundamental questions posed by the ACCC’s inquiry:

- How to ensure that all consumers are reaping the benefits of competition in relation to price and/or service offerings
- How to ensure that essential services are offered to vulnerable consumers within an overall competitive retail market framework

4. In consultation with the ACCC inquiry team, we selected ten jurisdictions to review, covering North America, Europe and Oceania. When we compare jurisdictions and draw out common themes, we see that some policies are aimed at making competition in the retail market work more effectively, whereas other

---

1 ACCC, “Retail Electricity Pricing Inquiry, Preliminary report”, 22 September 2017, p. 5.

2 AGL, Origin and EnergyAustralia hold large retail market shares in most regions and control over 60 percent of generation capacity in NSW, South Australia, and Victoria. See ACCC, “Retail Electricity Pricing Inquiry, Preliminary report”, 22 September 2017, p. 7.

policies are aimed at protecting customers from potential adverse outcomes. Some customer protections are general and apply to all customers, while others are targeted specifically at vulnerable customers. There may sometimes be a trade-off between policies that benefit customers in aggregate and policies which benefit particular groups of customers, and we highlight these trade-offs in our report.

5. Figure 1 summarises the key topics we address. We provide examples of policies addressing each of these key topics from the jurisdictions we review.

Figure 1: Key policy topics

- **Policies to promote retail competition**
  - Transparent customer communication
  - Smart meters and access to information
  - Retail market size and scope
  - Addressing barriers to entry and switching
  - Collective bargaining

- **General policies to protect customers**
  - Default tariff and price regulation
  - General consumer safeguards
  - Complaints and disputes

- **Targeted policies for vulnerable customers**
  - Payment support and payment plans
  - Non-payment support for vulnerable customers
  - Protection from disconnection
  - Prepayment meters as a disconnection alternative

C. Retail market characteristics

6. The goal of retail competition is to create a market with low barriers to entry for firms and low barriers to switching for customers, which should result in competitive prices and improved services on average. However, these benefits of a competitive retail market may be unevenly distributed across customers. Regulators may be uncertain of the extent to which retail competition will benefit all customers and may introduce some form of price regulation as a customer protection measure.\(^4\) Whether this takes the form of a cap on the price of all retail offers, or an “outside option” provided by a regulated entity available to customers as an alternative to market prices, the presence of price regulation fundamentally changes the nature of the market.

\(^4\) Price regulation can take on many forms: regulators can set prices directly; impose price caps; or they can cap the total revenue that a firm can collect. Prices in some parts of the electricity supply chain can be regulated while others are not: for example, in all jurisdictions the price of distribution service is regulated; in some jurisdictions the overall retail price is regulated; and in none of the jurisdictions we discuss is the price of electricity on the wholesale market regulated.
7. Figure 2 shows how we classify the mechanism of price formation in the jurisdictions we examined: some jurisdictions have market prices (without retail price regulation) paid by all or almost all customers; other markets have regulated retail prices paid by the majority of residential customers; and there are two retail markets that we classify as intermediate (Italy because it is in the process of phasing out price regulation, and the Netherlands because prices can be regulated if they are judged to be too high).

Figure 2: Classification of jurisdictions by retail market type

<table>
<thead>
<tr>
<th>Market price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australia (NEM)</strong> has four jurisdictions that are open to retail competition and have no price regulations - Victoria, New South Wales, Southeast Queensland, and South Australia. We focus on these four Australian jurisdictions in the remainder of the report.</td>
</tr>
<tr>
<td><strong>Germany</strong> offers a unique set of protections for vulnerable customers. These customers have little formal protection against disconnections, but can rely on the court system to protect them from disconnections.</td>
</tr>
<tr>
<td><strong>Great Britain</strong> is often viewed as a highly competitive retail market with many retailers, relatively low retailer market shares and high switching rates. Despite having relied on market prices for many years, it is about to re-introduce price regulation.</td>
</tr>
<tr>
<td><strong>New Zealand</strong> has undergone a number of reforms in recent years to bolster competitiveness. For example they ran a multi-media advertising campaign for several years to educate consumers on their retail and switching options.</td>
</tr>
<tr>
<td><strong>Texas</strong> is the only market in the US with no price regulation. Texas is considered highly competitive, with many retailers and a high customer switching rate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intermediate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Italy</strong> was a world-leader in the system-wide deployment of smart meters. The roll out of smart meters has enabled further safeguards to be provided for customers who are in arrears. Instead of being disconnected immediately, they are left with a minimum service for two weeks before they are completely disconnected.</td>
</tr>
<tr>
<td><strong>The Netherlands</strong> has a form of implicit price regulation where retailers are required to submit any new tariffs to the regulator, so that the regulator can check if the tariff is excessive.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regulated price*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>France</strong> allows customers to choose between a flat and time-varying default tariff (price regulated). The large majority of customers are on such tariffs.</td>
</tr>
<tr>
<td><strong>Illinois</strong> allows customer choice aggregation (CCA), a system where municipalities negotiate electricity purchases on behalf of their residents. CCAs exists alongside retail competition and a default tariff.</td>
</tr>
<tr>
<td><strong>New York</strong> State only allows retailers to offer a price plan to low income customers if they can demonstrate that the offer outperforms the regulated default tariff. They are currently undergoing a retail competition review and are considering extending the rule on beneficial retail offers to all customers.</td>
</tr>
<tr>
<td><strong>Pennsylvania</strong> has an energy procurement policy for the default tariff similar to that used by most eastern US states. It has implemented policies to lower switching costs.</td>
</tr>
</tbody>
</table>

Notes:
* With the proposed reintroduction of price regulation, Great Britain could be reclassified as an Intermediate retail market.
* In Illinois, New York and Pennsylvania, default service is offered to customers by the distribution networks, with wholesale costs as a pass through. There are rules governing how electricity is procured by the network and the structure of the default tariff. Customers who do not actively choose an offer in
the retail market are on a default tariff. In some jurisdictions, the price of the default tariff is regulated to create a low cost alternative to competitive supply, but in others the default tariff is high and encourages customer engagement with the retail market. In each jurisdiction with price regulation in Figure 2 (including Italy), most customers are on regulated default tariffs.

C.1. Jurisdictions relying mostly on market prices

8. In Germany, New Zealand, Texas and much of the NEM, the level and structure of retail prices are determined in the market and there is no regulation of retail prices, apart from consumer safeguards. These jurisdictions rely on the process of retailers competing for customers to push down prices and create innovative services that customers’ desire. In the Netherlands, prices are mostly determined in the market but the regulator has powers to cap offered prices if it deems them excessive.

9. In Great Britain, despite having relied on market prices for many years, the regulator has already re-introduced limited (and temporary) price regulation. Traditionally Great Britain has relied on prepayment meters to supply customers with poor credit or payment difficulties. In April 2017 the regulator implemented a “safeguard tariff”, which put a temporary price cap on prepayment meter tariffs. This cap was extended to other vulnerable customers in 2018.

10. In March 2018, the UK government introduced a legislative proposal to extend the price cap to all customers on the default tariff.

C.2. Jurisdictions relying mostly on regulated prices

11. In France, Illinois, Italy, New York and Pennsylvania the majority of customers are on tariffs that are determined outside of the retail market. In these jurisdictions, the default tariff is intended to be a low cost option that customers can actively choose, as well as being the supply option for customers who have never chosen a retailer.

12. In France and Italy the price of default service is set directly by the regulator. In 2016, nearly ninety percent of French residential load and more than 60 percent of Italian customers were on the default tariff. In Italy default tariff price regulation will be abolished from 1 July 2019 onwards.

13. In Illinois, New York and Pennsylvania, default service is offered to customers by the distribution network companies, with wholesale costs as a pass through. There are rules governing how electricity is procured by the network companies and the

---

5 For the regulated default tariff, regulators determine the structure, price level, and other design features of the default tariff.

6 By “structure” we refer to the possibility of charging multi-part prices (typically, a daily fixed charge, plus a kWh consumption charge, and sometimes a kW demand charge).

7 Ofgem, “Update on our plans for retail energy price caps”, 6 March 2018

8 Enerdata, “Italy’s retail power and gas markets will be fully liberalized in 2019”, 4 August 2017.
structure of the default tariff. The design of these procurement rules is such that the generation cost component of the regulated retail tariff is effectively set in the (wholesale) market. This is a common feature in US states that offer residential retail competition. Although default tariffs were intended as a transitory policy on the way to full competition, they have thus far proven to be a lasting feature of US markets, with the exception of Texas.

D. Main findings from other jurisdictions

14. In this section we highlight policies that have been adopted in the overseas jurisdictions we surveyed and which address issues that may be relevant to the issues raised in the ACCC’s preliminary report.

D.1. Policies to promote retail competition

15. **Multi-party access to electricity data can reduce switching costs and promote competition.** Metering data belongs to the customer, but access is often effectively controlled by their retailer. Data can only be shared with third-parties at the customer’s request, but there are often barriers to doing so, whereas the retailer can easily access the data at any time. This asymmetry may give the customer’s retailer a competitive advantage and increase customer switching costs. Granting data access to customer-sanctioned third-parties may intensify competition, since they can more easily compete to provide services such as customised usage information and analysis and bill alerts. In addition, they can provide other services that help facilitate retail competition, such as automatic customer switching. Third-party switching services are available in Great Britain that identify the best deals and handle the switching process. In New Zealand, customers can upload a photo of their bill to a smartphone app which then automatically switches them when a better deal arises. A consultation is currently underway in New Zealand, into how smart meter data can be shared among multiple partners to the household, besides the retailer.

16. In the NEM, the Council of Australian Government (COAG) Energy Council published a consultation paper on facilitating third-party access to energy consumption data in March of 2018. Treasury is also working on developing a national consumer data right that will cover many sectors, including energy. As access to data is expanded to third-parties, privacy concerns will need to be addressed and consumer safeguards put in place.

17. **Official price comparison websites are complemented by active marketing.** New Zealand has the highest annual switching rates out of all of the jurisdictions we surveyed. This is likely attributable to the NZ$11 million “What’s My Number”

---

campaign that ran alongside a price comparison website of the same name, as well as an NGO-run switching tool. Launched in 2011, the 3.5-year campaign involved multi-media advertisements that educated consumers regarding their retail options and the simplicity of the switching process. The New Zealand regulator worked with various community groups, such as budget advisory services and public libraries, to promote the switching tool in an effort to reach lower income and vulnerable consumers. The regulator has concluded that the campaign had “an immediate and ongoing impact”, with two-thirds of customers now believing it was worthwhile to switch retailers. In the Netherlands, the competition commission ran a media campaign in 2013 alongside their price comparison website. Entitled “If you snooze, you lose”, the campaign aimed to raise awareness around the benefits of switching. In a recent trial of price comparison websites in Great Britain, “Check Your Energy Deal”, the regulator used a digital agency to raise service awareness of its price comparison website through social media. While the trial was effective at inducing switching, it is not clear how much was attributable to the social media campaign and how much to the price comparison website.13

18. In the NEM it is not clear the extent to which customers are aware that price comparison websites exist and whether they are able to effectively distinguish between an official price comparison website and an “independent” commercial competitor in a web search. Promoting the official price comparison website through multiple channels can educate customers about the advantages of using one and steer them to the most useful resources. There is a risk that vulnerable customers with language or computer access barriers may be left behind, but this can be countered with sufficient effort in different forms of engagement.

19. **Obligations placed on retailers can constitute entry barriers.** In Great Britain, retailers are responsible for operating a scheme to improve home energy efficiency. Small retailers are relieved of the obligation to participate until they reach a certain size threshold (the obligation starts at 250,000 customers). The idea is to reduce the cost base of smaller retailers in order to encourage entry and promote competition.

20. It is likely that there are significant economies of scale in energy retailing (e.g. due to fixed costs of developing software to manage billing and customer contact). Requiring entrant retailers to comply with the full suite of obligations that apply to existing retailers with millions of customers adds to these fixed costs. This may

---


particularly be the case for prospective “start-up” retailers that want to bring new services and/or a completely new approach to market. Creating a simpler or reduced set of obligations for new retailers below a certain size threshold could lower entry barriers, and allow for greater competition and innovation in the market. However, there will be a trade-off with reduced consumer protections.

**D.2. General policies to protect customers**

21. **Price regulation.** The clearest and most significant policy choice revealed by comparing the design of retail markets across the ten jurisdictions covered in this report concerns the nature of the default tariff. In some jurisdictions, customers who do not actively choose an offer in the retail market default to an offer provided by one or other of the retailers in the market, and there is no regulatory control over the price of this default tariff. In other jurisdictions the structure, price level, and other design features of the default tariff are determined by the regulator. In these jurisdictions, the default service is seen as a low cost alternative to competitive supply and customers can opt-in to it. Even though customers are eligible to participate in a retail market, many or most customers are on the default tariff and are paying a regulated price for a regulated service offering.

22. Default tariffs in the US often use competitive auctions to procure wholesale power. In this way, the regulator can ensure that customers on the default tariff secure service at a competitive price, at least as regards the wholesale power purchase cost element of the final bill, with the other elements of the bill being controlled via cost-based regulation of the network. However, there are drawbacks: the nature of the service itself is regulated, meaning that it is “one size fits all” and the prospect for innovation is curtailed; if the default service is highly subscribed, it may limit the size of the competitive market; and removing customers from the market may increase prices for the remaining customers. In New York, for example, only about 20 percent of customers are on competitive offers. While the default tariff is competitive in one dimension—the cost of wholesale power—there are other services that retailers could compete on that would add value to customers, such as different pricing structures and demand management. In New York, it has been alleged that default service has not allowed retailers room to compete on price for the majority of customers who have selected the default service, and that as a result they have targeted less financially literate (vulnerable) customers with higher priced tariffs.14

23. In markets where the price of the default tariff is set in the market, default prices are generally higher than other offers available in the market and customers do not opt-in to them, but land up there if they are disengaged (i.e., by default). Regulators may wish to shield these customers from high prices through a price ceiling on

---

default service. However, such a policy may backfire by acting as a pricing focal point. In Great Britain, the regulator introduced a tariff ceiling (safeguard) for prepayment tariffs. While this lowered prepayment prices overall, some mid-tier retailers were already offering prepayment prices below the safeguard level. Since the price cap became effective, the regulator has observed that many of the mid-tier retailers chose to increase their prices to match the cap. In the Netherlands any new service offering or change has to be submitted to the regulator at least four weeks before it comes into force. The retailer has to provide a breakdown of the included costs and the regulator uses this information to determine whether the price is excessive. The regulator does not publish its assessment methodology since it believes that doing so would lead to new tariffs clustering around the maximum allowed price, hindering competition.

24. We are not aware of any clear example where widely-available regulated prices coexist with successful retail competition. If a regulated default tariff were to be introduced in the NEM, we would suggest that steps should be taken to limit the number and type of customers eligible for the regulated price, so as to maintain the benefits of a competitive market for the majority of customers. The right to supply customers eligible for a regulated default tariff could be auctioned, and “add on” services such as demand side management and energy efficiency could be included. Eligibility could be limited to vulnerable passive customers who have been unable to engage with the market (e.g., who have remained on the standing offer for some period of time). By having a well-defined, limited group that other customers cannot easily opt into, the availability of a regulated tariff should have less of an impact on retail competition for customers generally. However, we have not found any examples of a regulated default tariff that successfully provides protections for a targeted group of customers without unintended adverse consequences.

D.3. Targeted policies for vulnerable customers

25. **Energy efficiency is an important part of protecting vulnerable customers.** Energy efficiency is relevant to the discussion of vulnerable customers because upgrades to more energy efficient appliances or more insulated housing can lead to significant savings in the long run. Many jurisdictions, including US jurisdictions, Germany, France, the Netherlands, Great Britain and New Zealand, have put significant funding behind energy efficiency measures and have targeted support to vulnerable customers.

26. In Australia, there are no national energy efficiency mandates or funding programs. There are however national equipment and appliance energy efficiency standards

---


and energy labelling; state level funding schemes; and an obligation for retailers to provide customers in hardship with information on how to be more energy efficient. The ACCC notes that information provided by retailers on energy efficiency has largely been limited to electricity audits and general information on government energy efficiency schemes and how to use energy more efficiently. The ACCC further notes that governments are exploring programs to improve energy efficiency in vulnerable households through state based schemes and the National Energy Productivity Plan.

27. **Visibility to the market of passive customers.** In Great Britain, the regulator has plans to create a database of passive customers with a tentative roll-out in 2018, and to make such information available to all retailers to encourage targeted outreach. The database will be populated by the retailers, who will be required to provide details of residential consumers who have been on default tariffs for three years or more. This database is intended to reduce the information asymmetry between new retailers and the incumbent retailers by providing new retailers with information on passive customers, who are precisely those customers who could benefit the most from switching.

28. A policy that would make passive customers visible to competing retailers may assist passive customers to engage with the market and obtain lower prices than the unregulated default tariffs. However, there could be adverse consequences for other customers in the market: where passive customers pay higher prices than more engaged customers for otherwise similar services, this could be viewed as an example of price segmentation. Policies that have the effect of reducing pricing segmentation are beneficial for those customers who were paying the higher price, but may result in price increases for other customers. Since not all passive customers are vulnerable and not all vulnerable customers are passive, it is not clear to what extent this policy would benefit vulnerable customers.

---

I. Introduction

I.A. Background: Reviews and Inquiries Covering Retail Electricity Competition in the NEM

There have been a number of recent reviews and inquiries that have investigated the effectiveness of retail electricity competition in the National Electricity Market (NEM). In June 2017, an independent panel chaired by Dr. Alan Finkel published its Independent Review of the Future Security of the National Electricity Market (Finkel Review). The Finkel Review found that many consumers were not engaging in the market, and identified the need for:

- more pricing transparency and clarity;
- more options, such as distributed energy resources orchestration, so that passive and low income customers can also access demand-side products without high barriers;
- better data access (for service providers to assist consumers, and for consumers to understand their real time energy usage); and
- retailers to be able to identify and assist vulnerable customers.22

In August 2017, Dr. John Thwaites released his independent review of the retail markets in Victoria. His independent panel found that Victorian households were paying on average 21 percent per year more for electricity than if they had switched to the cheapest available market offer. In his view, the fact that Victorian consumers typically pay high prices for their electricity pointed to competition failures in the Victorian retail market, the most important of which being:

- high competition-related costs, such as customer acquisition and retention costs;
- the three Tier 1 gentailers’ market power; and
- current industry practices that make it difficult for consumers to easily compare offers.23

Most notably, on 27 March 2017, the Hon Scott Morrison MP directed the Australian Competition and Consumer Commission (ACCC) to hold an inquiry into the retail supply of electricity and the competitiveness of retail electricity supply in the NEM.24 The ACCC inquiry is considering, among other issues, matters related

---


to: cost components of electricity retail pricing, any barriers to entry, any impediments to consumer choice, and how these things have evolved over time.25

32. On 22 September 2017, the ACCC released a preliminary report outlining its initial findings based on feedback and submissions obtained through public forums and over 150 submissions received from consumers, businesses, and representative groups. The preliminary report highlighted concerns about insufficient competition in the wholesale and retail electricity markets, leading to a severe affordability problem in the NEM. 26,27 In addition, the preliminary report found that despite many signs of competition in the retail market—for example, there are at least 19 active retailers in each main NEM region28 and relatively high rates of switching among the retailers—some indicators suggest that the market is not delivering good outcomes for all consumers.29 Many consumers are unaware of the price comparison tools that are available and are confused by inconsistent terminology. These customers are paying higher prices for electricity than other customers who are more engaged with the retail market, yet both groups receive similar service offerings.

33. The Brattle Group was engaged by the ACCC to prepare a report on policy options for protecting customers and promoting effective retail competition, based on our extensive experience working in retail electricity markets in other jurisdictions. Our report reviews experience in ten jurisdictions internationally, and draws out important examples and common themes that are relevant for the ACCC’s work in the NEM.

I.B. Objectives of this Report

34. Many jurisdictions around the world have liberalised their electricity markets to varying degrees over the past twenty-five years. As these markets have evolved, policymakers, energy market regulators and competition authorities have sought to understand how well these markets are providing an improved service to customers generally, and the extent to which they have protected vulnerable customers, given that the supply of electricity is an essential service. In many jurisdictions, market design and consumer protections have been adjusted over time, and various


27 AGL, Origin and EnergyAustralia hold large retail market shares in most regions and control over 60 percent of generation capacity in NSW, South Australia, and Victoria. See ACCC, “Retail Electricity Pricing Inquiry, Preliminary report”, 22 September 2017, p. 7.

28 There are fewer retailers in regional Queensland, ACT, and Tasmania. See ACCC, “Retail Electricity Pricing Inquiry, Preliminary report”, 22 September 2017, p. 96.

regulatory interventions have been implemented in order to improve outcomes. This report seeks to help address two of the fundamental questions posed by the ACCC’s inquiry related to improving outcomes for consumers:

- How to ensure that all consumers are reaping the benefits of competition in relation to price and/or service offerings?
- How to ensure that essential services are offered to vulnerable consumers within an overall competitive retail market framework?

35. Our report documents the policies and market designs regulators and policymakers in a range of jurisdictions have used to improve outcomes for customers. Our work builds on research undertaken by or on behalf of the Victorian Department of Environment, Land, Water and Planning (DELWP) and the Finkel Review.

36. We identify a subset of policies and designs from the jurisdictions we have reviewed that seem most relevant to the challenges in the NEM that the ACCC’s preliminary report has identified.

I.C. THE NEM

37. The NEM covers Queensland, New South Wales (NSW), Victoria, South Australia, Tasmania and the Australian Capital Territory (ACT). The National Competition Policy (NCP) reforms adopted in 1995 initiated the privatisation and reform of the electricity sector in Australia. Under the NCP, States were encouraged to privatise their publicly-owned electricity operations and permit competitive entry. Some parts of the NEM are still transitioning from the former regime with state-owned monopolies to a competitive market.

38. The opening of the retail electricity market to competition was employed in order to harness the benefits of competitive markets such as greater choice for consumers, more product innovation, and lower prices. Initially, retail prices were regulated; however, the price caps were set high and retailers were encouraged to compete below the cap. Victoria became the first state to abolish retail price regulation in 2009, followed by South Australia (2013), NSW (2014) and South East Queensland (2016). Regional Queensland, Tasmania, and the ACT retain price caps.

39. Retailers in the NEM have obligations under the Australian Consumer Law (ACL), the National Energy Retail Law (NERL), the National Energy Retail Rules (NERR) (which operate under the NERL), and in Victoria, the Energy Retail Code. The ACL

30  Western Australia and the Northern Territory are not part of the NEM.
aims to protect consumers and ensure fair trade in Australia.\textsuperscript{34} The NERR provide additional energy-specific consumer protections by governing the sale of energy to consumers in the NEM.\textsuperscript{35} The NERR are made by the Australian Energy Market Commission (AEMC) and operate under the NERL.\textsuperscript{36} Consumer protections under the NERR include: marketing requirements, retail pricing information requirements, minimum terms and conditions for retail contracts, switching requirements, an obligation for supply, disconnection policies and independent and free dispute resolution.\textsuperscript{37}

40. Apart from the specific requirements mentioned above, general protections from misleading and unreasonable conduct are provided under the Competition and Consumer Act 2011. The NERR also provide for assistance to customers in financial hardship and to medically dependent customers. State governments provide energy concessions and rebates to assist with energy affordability.

41. In Victoria, an additional regulatory regime applies (the Energy Retail Code), and the Victorian Government recently commissioned a review of retail energy markets in 2016 and has already commenced a range of reforms aimed at addressing price, consumer engagement, market complexity, and vulnerable consumer impact.\textsuperscript{38}

\section*{I.D. Scope and Approach}

42. The purpose of this study is to identify experiences overseas and determine which of the specific policies found are applicable to the NEM context. In consultation with the ACCC inquiry team, we selected ten jurisdictions to review from North America, Europe and Oceania. Five of these jurisdictions (France, Great Britain, New Zealand, the Netherlands, and Texas) were recently reviewed as case studies in KPMG’s international review of retail energy markets, commissioned by the DELWP.\textsuperscript{39} To build on the knowledge already available to the inquiry team, we focus predominantly on aspects of these regimes that received less coverage (such as protection for vulnerable customers) and new developments that have arisen over the past several months. In addition, we include Italy, Germany, and several jurisdictions in North America. We focus on the residential customer class in each

\begin{footnotesize}
\begin{enumerate}
\item The ACL is contained in Schedule 2 of the Competition and Consumer Act 2011.
\item ACCC, “\textit{Retail Electricity Pricing Inquiry, Preliminary report}”, 22 September 2017, p. 127.
\item AEMC, “\textit{National Energy Retail Rules}”, accessed 30 May 2018.
\item AEMC, “\textit{National Energy Retail Rules}”, 10 April 2018.
\item Discussions of New York, Germany, and Italy were also included where relevant; however these jurisdictions were not studied in detail. See KPMG, “\textit{Energy retail markets}”, April 2017, pp. 3, 117.
\end{enumerate}
\end{footnotesize}
jurisdiction, and discuss small commercial customers where information was available.

43. A number of the jurisdictions reviewed hold distinct and structural differences to the design of the NEM, and these are detailed below. Analyses of these jurisdictions have been included to demonstrate the variety of different approaches to the regulation of electricity markets that have been adopted and their trade-offs.

44. In particular, some of these jurisdictions rely mainly on competition in a retail market for retail price formation, whereas other jurisdictions regulate prices to a greater or lesser extent. This reflects a trade-off. Effective retail competition can deliver lower bills, more efficient prices and innovative services, but these benefits are realised to the greatest extent by customers that engage with the market. Customers that do not or cannot engage may not realise any benefits from retail competition and may pay significantly higher prices and/or receive worse service than engaged customers as a result. Policymakers in several jurisdictions have adopted (or maintained) retail price regulation as a way to protect customers that do not engage. However, while price regulation may be designed to protect customers that would otherwise not engage with (and benefit from) a competitive retail market, it can reduce the magnitude of benefits that would otherwise be available to customers generally. Our report examines experiences in jurisdictions which have relied on a retail market to set prices for most customers, as well as those which have relied on regulated prices. In Section II we classify each jurisdiction according to the extent to which prices are set by competition in the retail market or by regulation.

45. While jurisdictions differ in the extent to which they rely on the retail market to set prices, all jurisdictions have a range of policies designed to promote competition, in particular through rules about information and transparency. The efficacy of these policies will depend on the overarching market design and in particular are less effective where the majority of customers are on a default supply at a regulated low price. Some rules governing the operation of retail markets are designed to protect all customers, while other measures are targeted specifically at protecting vulnerable customers.

46. For each of the jurisdictions, we have described how the retail market is organised and what policies have been adopted to protect customers. The detailed descriptions are in Appendix C, and in the main body of our report we compare the jurisdictions thematically and draw out specific examples.

---

40 We are discussing regulation of the final retail price charged to customers. This is independent of price or revenue regulation that may occur in other parts of the supply chain, such as the wholesale market and transmission and distribution networks.

41 Worse service could entail lack of valued added services such as smart meters, more frequent billing and better feedback over energy usage.
I.E. JURISDICTIONS REVIEWED

47. The ten jurisdictions we covered were selected because, based on our experience in these markets, each offered experiences relevant to our scope. By way of introduction, we set out briefly why we included each jurisdiction.

I.E.1.a. Jurisdictions relying mostly on market prices

- **Texas** is the only market in the US with no price regulation or regulated provider. Texas has a number of policy initiatives to increase information transparency and educate consumers.
- In **Great Britain**, we investigate a number of policies aimed at vulnerable customers and discuss the results of recent pilot studies focused on bringing passive customers into the market. We also discuss recent third-party technological developments that reduce barriers to switching. Despite having relied on market prices for many years, the regulator has already re-introduced limited (and temporary) price regulation.
- **Germany** also offers a unique set of protections for vulnerable consumers, including a successful program to assist those suffering from fuel poverty. These customers have little formal protection against disconnections, but can rely on the court system to protect them from disconnections.
- **New Zealand** has many similarities in market design to the NEM, but has undergone a number of reforms in recent years to bolster competitiveness. We discuss the successes and failures of these policies, as well as the regulator’s unique approach to encouraging compliance with its guidelines.

I.E.1.b. Jurisdictions relying mostly on regulated prices

- **Pennsylvania** has an energy procurement policy for the default tariff and regulated providers, similar to those used by most eastern US states. It has implemented policies to lower switching costs.
- In **Illinois** customer choice aggregation (CCA), a system where municipalities negotiate electricity purchases on behalf of their residents, exists alongside retail competition and a default tariff, creating an interesting dynamic. Illinois has a unique energy procurement policy for standard offer service.
- **New York** State has new rules in place that only allow retailers to make offers to low income customers if they can show that the offer is beneficial to the customer. They are currently undergoing a review on retail competition, and are considering extending the rule on beneficial retail offers to all residential consumers. The state’s default tariff model is different from other US states.
- In **France**, most customers pay regulated retail prices through the default tariff. We focus on the evolution of tools designed to protect vulnerable customers, such as social tariffs and energy vouchers. We also discuss general consumer protections in

---

By default tariff, we mean the price plan for customers who do not actively choose an alternative price plan.
this market, where consumers report high satisfaction levels despite the high market concentration.

I.E.1.c. Intermediate cases

- As Italy is in the process of price deregulation, we describe the transition period for consumers on the default tariff. Italy was a world-leader in the system-wide deployment of smart meters. We discuss the roll-out’s competitive impact on the market, and its enablement of further safeguards to customers in arrears.
- In the Netherlands, we describe the administration and effects of price monitoring, as well as the impact of several studies on energy efficiency.

I.F. Key Concepts

48. In the jurisdictions we cover in this report, there are several important features that are not present in the NEM, or which may be present but are defined or labelled differently. To avoid confusion, we briefly describe these important features here.

- **Active consumers** are those consumers who appear to be receptive to information from competing suppliers about new service offerings or reduced prices, or who seem willing and able to find such information. Active consumers tend to switch retailers relatively often or bargain with existing providers to obtain the best offers available.
- In contrast, **passive consumers** are those who tend to be less well informed about competing offers, and/or are less engaged with the market. They may find it more difficult to obtain information, or less willing to look for it, or they may find that the marginal transactions and information gathering costs are greater than the marginal benefits of switching suppliers or negotiating lower rates. Passive consumers tend to switch relatively infrequently.
- **Vulnerable consumers** are consumers who are disadvantaged in some way. Vulnerable consumers may have a lower income available to meet the costs of buying electricity, or may be in circumstances where they need to purchase a relatively large amount of electricity (for example, because of poor quality housing or inefficient appliances). Other consumers may be vulnerable for other reasons, such as disability, inability to access the internet, lack of access to banking facilities.
- The **retailer** procures wholesale electricity on behalf of end customers. Retailer roles differ across jurisdictions, and may include billing, metering, customer support and outage support. Retailers are called Retail Electricity Providers (REPs) in the US and suppliers in Great Britain. In some jurisdictions one or more entities are required to offer service at a regulated price. In US jurisdictions the entity providing regulated service is usually the distribution utility. This service is offered as a “default tariff” discussed below.
- **Networks** are responsible for transmission and distribution service. They are also variously called distributors and utilities. In some jurisdictions they will also be responsible for billing, metering, meter reading and providing service under the default tariff.
- The **default tariff** is ostensibly the price plan for customers who do not actively choose an alternative price plan. Customers will also be switched to the default tariff if their contract for an alternative price plan expires and does not have a provision for
automatic extension. However in some jurisdictions the default tariff plays a larger role by providing a relatively inexpensive choice for customers. In these jurisdictions, the default is price regulated and has a large share of the market. A key distinction, which we explore in this report, is between jurisdictions where the default tariff plays a limited role, with the corresponding price being set in the market, and jurisdictions where most customers are on the default tariff, with the price being set by the regulator.

- **Market or retailer offer** is a price plan that retailers offer and that consumers choose from a pool of competitive offers. Market offers typically have an end to the contract, after which retailers may revert the consumers to another (possibly less competitive) price plan if the consumers do not actively renew or switch to another contract. In some jurisdictions, such as Great Britain, retailers have introduced evergreen contracts that have no end date.

- **Community Choice Aggregation (CCA)** is a mechanism of retail competition employed in some jurisdictions. In some US jurisdictions a specific location such as a town or small region is able to opt out of purchasing electricity from the local network and instead purchases from the market (the utility remains responsible for distribution service). All of the loads in the geographic location opt out en masse or they may be required to opt-in. In some European jurisdictions, a similar mechanism allows multiple customers to select a new retailer at once.

### I.G. Structure of this report

49. The detailed research write-ups for each of the ten jurisdictions we examined are included as an appendix to this report. In the main body of the report, we have drawn out the themes that emerged from our research and compared approaches across the jurisdictions.

50. The most important distinction between jurisdictions is the extent to which prices paid by customers (and other features of the retail service offering) are determined in a retail market or by regulation such as through the use of a regulator-mandated default tariff. Section II explains this distinction and explains which jurisdictions have prices determined mostly in a retail market and which have prices predominantly determined by regulation. This distinction is an essential background for the later discussion of market design features and policies to promote competition and protect customers in these jurisdictions.

51. When we compare across jurisdictions and draw out common themes, we see that some policies are aimed at making competition in the retail market work more effectively, whereas other policies are aimed at protecting customers from adverse outcomes that might otherwise eventuate. We have therefore divided our report into two main sections: policies to promote competition; and policies to protect customers.

52. Section III covers policies that promote retail competition. The most important of these policies are focused on the availability and reliability of information that helps customers engage with the market, such as via price comparison websites. These policies are covered in Section III.A. Section III.A.4 collects other policies that promote effective retail competition, such as rules about the switching process.
53. Section IV describes policies designed to protect customers from adverse outcomes in the retail market. The most important of these policies are those concerning the design of the default tariff. Unlike most products and services, almost all households use electricity. Therefore all jurisdictions have arrangements for determining the terms and conditions for supplying even those customers that have not actively chosen a retail price plan—the default tariff. In Section IV.A we describe the design of the default tariff and discuss how default tariffs can have two roles: (1) in all markets, to set the conditions for supplying customers who have not actively chosen a retail price plan; and (2) to act as a low cost alternative to retail offerings. In all of the jurisdictions in which the default tariff plays the latter role, there is some form of price regulation. The rest of Section IV also discusses other policies (beyond the design of the default tariff) designed to protect customers: general customer safeguards and policies targeting vulnerable customers. In general customer protection policies, we discuss minimum standards for retail contracts and the switching process. Policies targeting vulnerable customers tend to include financial assistance in making bill payments, and policies to reduce the risk of disconnection.

54. Figure 3 shows the key topic areas covered in Sections III and IV, which summarise policies available in other jurisdictions:

**Figure 3: Key policy topics analysed**

- **Policies to promote retail competition**
  - Transparent customer communication
  - Smart meters and access to information
  - Retail market size and scope
  - Addressing barriers to entry and switching
  - Collective bargaining

- **General policies to protect customers**
  - Default tariff and price regulation
  - General consumer safeguards
  - Complaints and disputes

- **Targeted policies for vulnerable customers**
  - Payment support and payment plans
  - Non-payment support for vulnerable customers
  - Protection from disconnection
  - Prepayment meters as a disconnection alternative

55. Finally, in Section V we draw out and highlight some policy options that have been adopted in overseas markets and which might be relevant for the evolution of retail markets in the NEM, and the ACCC’s inquiry.

56. We think that there may sometimes be a trade-off between policies that benefit customers in aggregate and policies which benefit particular groups of customers. Depending on the current state of the market, there may be some policies that could make competition more effective without removing customer safeguards. In Figure 4, this would be illustrated by the vertical movement from point A to the frontier. Such a policy would definitely be beneficial because it improves competition...
without any trade-off on consumer protections. For example, if customers were unaware of the resources available to them to assist in switching, then a multimedia campaign that educates consumers regarding their retail options and the simplicity of the switching process (similar to the “What’s My Number” campaign in New Zealand), would enhance competition, without any adverse impact on consumer protections.

57. We recognise, however, that the benefits of competition will not be equally accessible to all customers, and some customers (those that are not engaged in the market) may pay high prices even if competition is otherwise effective. Not all customer non-engagement represents a market failure that requires policy intervention. For example, some customer non-engagement results from a customer decision that the costs to acquire the information necessary are sufficiently greater than potential benefits. Other examples of non-engagement could be more problematic and result in efficiency losses that could be remedied by policy interventions. Policies to protect such customers can involve trade-offs: for example, a policy designed to protect disengaged and vulnerable customers by offering a regulated low-price tariff to these customers may reduce the aggregate benefits of competition because it makes it harder for REPs and suppliers to compete and, will reduce the number of competitors in the long run and thus reduce dynamic efficiency. For example, it could decrease the overall size of the competitive market, leading to fewer competitors and less competition. At point B therefore, this policy would represent a trade-off.

43 This would apply to higher than average income customers whose overall utility would not increase much from significant reductions in their monthly energy bill. Another way of stating this is the income effect of lower energy bills is much higher for lower-income customers than it is for higher-income customers.
In our research we try where possible to identify where these trade-offs exist by examining the impacts of policies. We also look for those policies that can improve market outcomes or protect vulnerable customers for a low trade-off cost without adverse consequences.

II. Retail market characteristics

59. Before comparing the details of market design choices across the ten jurisdictions, we first set out a high-level classification of the interplay between competition and regulation in these jurisdictions.

60. As previously mentioned, electricity is an essential service and as such, retail electricity in all featured markets is highly regulated, with sector specific rules that go beyond regular consumer safeguards and competition policies. Generally these regulations also reflect the jurisdiction’s path and the role of the networks in evolving from vertically integrated monopolies to competitive wholesale and retail markets. Regulations will also reflect the underlying institutions that surround the electricity market—such as the broader social safety net and the degree of political involvement in markets. The combination of jurisdiction-specific factors makes it difficult to compare policies in isolation without understanding each jurisdiction’s particular circumstances. In the section below we try to broadly position the jurisdictions under review to give context to their particular policies.

61. Retail electricity markets are characterised by a combination of rules designed to protect customers and rules to encourage competition. A market with low barriers to entry for firms and low barriers to switching for customers should result in competitive prices and/or better services on average. However as previously mentioned in Section I.G, the benefits of competition may be unevenly distributed and as a result regulators may introduce some form of price regulation as a consumer protection measure. Whether this takes the form of a cap on the price of all retail
offers, or an “outside option” provided by a regulated entity available to customers as an alternative to market prices, the presence of price regulation fundamentally changes the nature of the market.

62. Thus as a first cut at understanding the differences between jurisdictions, we need to understand whether price regulation is part of the retail market. Figure 5 shows how we classify the mechanism of retail price formation in the jurisdictions we examined: some jurisdictions have market prices (without price regulation) paid by all or almost all customers; other markets have regulated prices paid by the majority of customers; and there are two markets that we classify as intermediate (Italy because it is in the process of phasing out price regulation, and the Netherlands because prices would be regulated if they were judged to be too high).

**Figure 5: Classification of jurisdictions by retail market type**

<table>
<thead>
<tr>
<th>Market price</th>
<th>Intermediate</th>
<th>Regulated price*</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Australia (NEM)*</td>
<td>• Italy</td>
<td>• France</td>
</tr>
<tr>
<td>• Germany</td>
<td>• The Netherlands</td>
<td>• Illinois</td>
</tr>
<tr>
<td>• Great Britain ^</td>
<td></td>
<td>• New York</td>
</tr>
<tr>
<td>• New Zealand</td>
<td></td>
<td>• Pennsylvania</td>
</tr>
<tr>
<td>• Texas</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: * NEM jurisdictions without price regulation are Victoria, New South Wales, South-East Queensland and South Australia. Regional Queensland, Tasmania, and the Australian Capital Territory retain price cap regulations, which are determined by local regulatory authorities.44

^ With the proposed reintroduction of price regulation, Great Britain could be reclassified as an Intermediate retail market.

* In the US states price regulation refers to the standard/default offer made available by the distribution network at a regulated price. The regulators set the margin above wholesale cost (which is a pass-through) along with the structure of the retail rate.

**II.A. JURISDICTIONS WHERE PRICES ARE DETERMINED IN A MARKET**

63. In Germany, Great Britain, the Netherlands, New Zealand, Texas and much of the NEM, the level and structure of retail prices45 are determined in the market and there is no regulation of retail prices, apart from consumer safeguards (with the partial exception of Great Britain and the Netherlands, as we explain below). These jurisdictions rely on the process of retailers competing for customers to push down prices and create innovative services that customers desire. Great Britain has the lowest level of market concentration out of the several jurisdictions where prices are


45 By “structure” we refer to the possibility of charging multi-part prices (typically, a daily fixed charge, plus a kWh consumption charge, and sometimes a kW demand charge).
set in the market. Great Britain was also one of the first markets to introduce retail competition. The Herfindahl-Hirschman index (HHI) is commonly used to evaluate the level of concentration in a market, and we show HHI statistics for a range of jurisdictions in Table 1, together with a statistic for the rate at which customers switch between retailers.

**Table 1: Residential market concentration and switching rates**

<table>
<thead>
<tr>
<th></th>
<th>HHI</th>
<th>Switching rates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td>NA</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>2,021</td>
<td>10%</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1,247</td>
<td>18%</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>2,080+</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Oceania</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia - NSW</td>
<td>2,714</td>
<td>19%</td>
</tr>
<tr>
<td>Australia - SA</td>
<td>2,842</td>
<td>12%</td>
</tr>
<tr>
<td>Australia - SEQ</td>
<td>3,697</td>
<td>12%</td>
</tr>
<tr>
<td>Australia - VIC</td>
<td>1,596</td>
<td>13%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>2,584</td>
<td>22%</td>
</tr>
</tbody>
</table>

Sources: Detailed jurisdiction summaries in Appendix C.

Notes: Switching rates in all the jurisdictions above is taken to mean the percentage of residential customers who have switched retailers in a specific year (based on the most recent data we could find).

64. Table 1 shows that Victoria, the first state in the NEM to liberalise its electricity market is one of the least concentrated, with a concentration ratio similar to Great Britain. None of the other states or jurisdictions fall below the ACCC’s threshold score of 2000, which is used as a “preliminary indicator of the likelihood that the [horizontal] merger will raise competition concerns”. Horizontal mergers in industries below HHIs of 2000 are generally less likely to be identified as harming competition.

65. Texas does not publish statistics on residential HHI, but Texas has many retailers, and switching rates are high. As of 2016, there were more than 50 competitive retailers, with more than 360 offers available (as measured using the number of

---

46 The HHI index is calculated as the sum of squares of the market share of each individual firm. Possible values range from 0 (perfectly competitive) to 10,000 (one firm holds 100 percent of the market share).

residential offers in the Oncor area).\textsuperscript{48} In addition, the retailers affiliated with the six Texan distribution networks had a combined residential market share of 30 percent in 2017.\textsuperscript{49}

66. Although retail markets in Great Britain and Victoria are arguably both reasonably competitive relative to other jurisdictions, both have undergone recent market reviews questioning the nature and efficacy of retail competition. In Great Britain there is the prospect of price caps being reintroduced for many customers (via a proposed cap on the price of default tariffs).\textsuperscript{50} In Victoria, concerns about poor outcomes for retail customers led to Dr. Thwaites’ review of the Victorian electricity and gas markets, published in 2017.

67. Following its Retail Market Review in 2010, Ofgem introduced reforms aimed at making the market simpler and clearer for consumers, including by limiting the number of price plans that each retailer could offer.\textsuperscript{51} A Competition and Markets Authority (CMA) investigation later found that some of these interventions had unintended consequences and adversely affected competition (discussed further in Section III.A.2). After the CMA investigation, Ofgem removed the restriction limiting the number of price plans on offer, and in April 2017 it implemented a “safeguard tariff”, which puts a temporary price cap on prepayment meter tariffs. More recently, in February 2018, the government extended the safeguard tariff to customers receiving the Warm Home Discount, and has proposed to extend the price cap to all customers on the default tariff. These extensions go beyond the CMA investigation’s recommendations. In Victoria, the Thwaites review recommended abolishing standing (default) offers and introducing a Basic Service Offer, which would require all retailers to provide a “no frills” offer that does not exceed a regulated price. These recommendations are currently under government review.\textsuperscript{52}


\textsuperscript{49} This is based on the amount of megawatt hours sold. Incumbent market share is 31 percent based on number of customers serviced. See PUCT, “Summary of Performance Measure Data (Non-Confidential Version)”, December 2017, accessed 2 May 2018.

\textsuperscript{50} Ofgem, “Update on our plans for retail energy price caps”, 6 March 2018

\textsuperscript{51} The RMR started in late 2010 and reforms were introduced starting 2013. The “Fairer Treatment” reforms were introduced in August 2013, followed by “Simpler Choices” reforms in January 2014 and lastly the “Clearer Information” reforms were introduced in March 2014. See Helm, D., “Cost of Energy Review”, 25 October 2017, pp. 153-154.

\textsuperscript{52} All other nine out of 11 recommendations have been approved. See Victorian State Government, “Interim Response to the Bipartisan Independent Review of the Electricity and Gas Retail Markets in Victoria”, March 2018, pp. viii-xi.
68. In the Netherlands, any new tariff or change has to be submitted to the regulator at least four weeks before it comes into force, so that the regulator can check if the tariff is excessive. The regulator can require retailers to adjust the price, or directly set the maximum price that the retailer is allowed to charge. In 2016, two retailers complied with the regulator’s direction and adjusted their prices downwards. However in 2017, the regulator had to set a maximum price for the first time. Although censure of prices by the regulator is rare, this may be because retailers think it is a credible threat and act accordingly. As such there may be implicit price regulation in the market. For this reason we classify the Netherlands as intermediate between market and regulated prices.

69. A review into retail competition was also launched by the New Zealand regulator in February 2018, to ensure that “the New Zealand electricity market delivers efficient, fair and equitable prices as technology evolves and [they] transition to a lower emissions future.”

II.B. JURISDICTIONS WHERE PRICES ARE PREDOMINANLY DETERMINED BY REGULATION

70. In France, Illinois, Italy, New York and Pennsylvania the majority of customers are on a default tariff for which the price is determined outside of the retail market. In these jurisdictions, the default tariff is intended to be a low cost option that customers can actively choose, as well as being the supply option for customers who have never chosen a retailer. However, low regulated prices make it harder for retailers to compete and may reduce incentives for retailers to innovate and invest in activities that lead to dynamic efficiencies.

71. In France and Italy the price of default service is set directly by the regulator. In 2016, 88 percent of French residential load and 61 percent of Italian customers were on the default tariff. In Italy, default tariff price regulation will be abolished from 1 July 2019 onwards. For this reason (coupled with the relatively lower proportion


56 This review was instigated after a study by the International Energy Agency (IEA) found that residential electricity customers in New Zealand were facing faster price increases than many other countries under the IEA purview, yet industrial customers were not facing these same price increases. See Ministry of Business, Innovation and Employment, “Terms of Reference for the Electricity Price Review,” accessed at 17 April 2018.

57 Enerdata, “Italy’s retail power and gas markets will be fully liberalized in 2019”, 4 August 2017.
of customers on default service, we classify Italy as intermediate between market and regulated prices.

72. In Illinois, New York and Pennsylvania, default service is offered to customers by the distribution networks, with wholesale costs as a pass through. There are rules governing how electricity is procured by the network and the structure of the default tariff. The design of these procurement rules is such that the generation cost component of the regulated retail tariff is effectively set in a (wholesale) market. This is a common feature of all US states that offer residential retail competition, apart from Texas. Although default tariffs were intended as a transitory policy on the way to full competition, they have thus far proven to be a lasting feature of US markets, with the exception of Texas. The structure of US retail markets is quite different to the NEM since the network service providers have retained their retail service role.

73. In the US (excluding Texas), there are two primary approaches to wholesale energy procurement for the default tariffs, both involving auctions, although Request for Proposals were used initially and may still be used in some instances. The first approach, called “block and spot”, procures fixed quantities of energy in forward markets to meet a load forecast. Differences between forecast and actual load are then covered by the network taking action in the spot market. The second approach, called “load-slice auctions”, procures service for certain pre-determined groups of customers. The “load-slice” approach results in load forecast risk being taken by the successful bidder, whereas in the “block and spot” approach, load forecast risk is taken by the network. In Illinois the block and spot approach has been the norm for default service. Between 40 and 65 percent of customers in Illinois were on default service in 2016, depending on the network.

74. The load-slice approach to obtaining wholesale energy supplies for default service customers is common in Pennsylvania. 65 percent of customers in Pennsylvania were on default service in 2016.

75. In New York 80 percent of residential customers were on the default in 2016. In 2016 the regulator banned retailers from providing service to low income customers unless they can prove to the commission that they could guarantee savings over the network’s default price. The network utility’s regulated default offer price will be hard for retailers to compete with since the utility has a large customer base and hence benefits from economies of scale, and also does not face all the costs that retailers do, such as customer acquisition costs. The New York Attorney General has a current proceeding that is investigating extending the ban to all mass market customers.


59 Mass market customers encompass residential and small commercial and industrial customers.
III. Policies to promote retail competition

76. As the electricity industry was liberalised in jurisdictions around the world, and retail markets were created, customers who were already receiving service under the old monopoly arrangements were transferred over to the new market system, without ever having engaged with it. Over time, some of these customers will have become active market participants, while others may have remained with the default or become disengaged. The policies to promote competition that we examine below focus on two aspects of the customer experience: (1) trying to engage those customers who are disengaged or passive; and (2) trying to provide better and more useful information to customers once they are engaged to allow them to make more informed decisions. Both objectives have the common goal of reducing search and transaction costs for small customers.

77. Customers who wish to choose a new retail service offer are faced with numerous choices, each of which may consist of several complex components. Moreover some of these offers may be confusing to (some) customers. For example, in the NEM, discounts are a common feature of most retail offers, but are not measured from a consistent reference point across retailers, and the ACCC has recognised that this makes it difficult for consumers to effectively compare offers. While the specific issue of discounts that cause confusion does not seem to have arisen in other jurisdictions, policies elsewhere have been implemented to reduce search costs by simplifying customer choices and making offers more comparable. However, increased transparency could mean increased complexity (for example, a requirement that customers be shown all available retail offers may be transparent, but it is more complex than seeing just the few most relevant offers); and simpler choices and standardisation may mean less innovation and product differentiation.

78. Price comparison websites (PCWs) can reduce search costs by aggregating a number of different offers. Some jurisdictions provide official PCWs, while others rely on commercial services. Official PCWs, like the AER’s Energy Made Easy site, may have the advantage of completeness (showing all offers available on the market), but they cannot negotiate better deals in exchange for exclusivity as commercial sites do. Switching services that automatically switch customers can lower switching costs for customers. Both PCWs and automated switching services may encourage some customers to engage with the market, however both may also leave other customers behind, for example, customers with language barriers or trouble accessing the internet.

79. In the sections below we look at policies that make customer choices easier and more transparent, and lower the barriers to switching. We also examine retail

---


61 In this report we have not reviewed consumer protection rules (such as prohibitions on misleading advertising) that apply to the retailing of products and services generally, including electricity.
market design and discuss how the retail market is defined; policies to lower acquisition costs for retailers and how customers can respond to retailer market power with collective bargaining. As described in Section I.G, there may be trade-offs with some policies where promoting competition means reducing consumer protections. For example, in Great Britain the regulator found that compelling PCWs to show all offers (increased transparency) reduced competition among PCWs.

III.A. POLICIES ON TRANSPARENCY AND ACCESS TO INFORMATION

80. Active consumer engagement is predicated on: (1) the availability of information that allow consumers to make meaningful comparisons among various plans; (2) the consumers’ ability to assess their options and choose the ones that best suit their consumption and lifestyle; and (3) the consumers’ ability to act on those choices (whether that is switching to another offer with the same retailer, or switching to another retailer entirely, see more in Section III.B.4).

81. Mass market customers may have systematic behavioural biases that further affect their ability to evaluate information, make decisions and take actions. In 2011, Ofgem explicitly identified four biases that affect consumers’ decision-making process when evaluating energy offers. Ofgem found that consumers tend to: (1) have large amounts of information to analyse and little time and resources to do it (“choice overload”); (2) prefer the current option (“default bias”); (3) be risk-averse and weigh monetary losses more than monetary gains (“loss aversion”); and (4) weigh costs incurred today more than savings down the line (“time inconsistency”). Ofgem concluded that the way offers were displayed (i.e. with complex tariff information that differed from retailer to retailer) exacerbated these biases, thereby leading to consumers becoming more disengaged from the energy market.

82. In the following sections we discuss policies that implicitly address these consumer biases or other issues that may inhibit consumers’ ability to access and assess their electricity supply options. It should be noted however, that customer choice may be impacted by multiple behavioural biases, and that the impact of policies may depend on the details of how they are implemented. For this reason, consumer-orientated interventions, such as new price information labels, should always be tested with actual consumers in as realistic an environment as possible.

---


64 CMA’s Energy Market Investigation Report in 2016 notes that there were concerns that the RMR “clearer information” reforms were not subject to adequate testing prior to introduction. As a response, the CMA recommended a more evidence based approach. In particular their recommendation to Ofgem was to establish a system to identify, test and implement measures to
III.A.1. Price comparison websites and automatic switching

83. Price Comparison Websites (PCWs) are websites that aggregate information from multiple offers in a centralised platform such that consumers looking to switch to a better offer can easily search through options and identify potential savings. PCWs are increasingly common in competitive retail electricity markets, however the impact that they have on market competition will differ with the rules governing them and the presence or absence of an official comparator website. PCWs that allow for easy comparison of multiple offers in one place can lower transaction and/or search costs for customers (the alternative being the customers contacting each retailer) and may become an important part of the customer’s decision-making process. For example, in Great Britain, Ofgem’s 2017 consumer survey found that 49 percent of consumers who had engaged with the energy market found deals through a commercial PCW. However, as we discuss below, the presentation of unclear or misleading information on PCWs could possibly lead to confusion and disengagement for consumers.

III.A.1.a. Official PCWs

84. Many, but not all, jurisdictions have an official PCW, administered by the regulator or some other credibly independent organisation. For example, an official PCW is operated by the energy ombudsman in France and an NGO in New Zealand.

85. This is not the case in Germany and Great Britain, where there are no official PCWs, only commercially run sites. Official PCWs generally operate free of charges and commissions, whereas commercial PCWs are usually compensated directly or indirectly by the retailers that they promote.

86. In the NEM, there are both official and commercial PCWs. The AER operates the “Energy Made Easy” PCW and the Victorian Government operates the Victorian PCW, “Victorian Energy Compare”. These official PCWs display all “generally available” offers, however there is no such requirement for commercial PCWs.

---

This survey defined engaged customers as those who switched retailers, changed tariffs, or compared tariffs with their own or other retailers.


A generally available offer is: “(1) available to most residential and/or small business customers, (2) in a set distribution zone, and (3) with the appropriate meter set-up. Limited offers that are...
87. Commercially run PCWs will also be available alongside the official PCW in those jurisdictions that have official PCWs. Although the regulator or other independent operator may carefully curate the official site, for the most part the commercial PCWs can operate with limited or no regulation outside of general consumer laws. This means that they could potentially only display a subset of offers and recommend those for which they get paid the largest commission. In most jurisdictions there are no rules or obligations for these sites to transparently describe how they select offers for display or what commissions they receive.

88. Table 2 summarises who officially operates the PCWs in the various jurisdictions and whether retailers are required to participate.

### Table 2: Official price comparison websites

<table>
<thead>
<tr>
<th>Run by</th>
<th>Mandatory retailer participation</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>Regulator</td>
<td>No</td>
</tr>
<tr>
<td>New York</td>
<td>Regulator</td>
<td>Yes</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Regulator</td>
<td>No</td>
</tr>
<tr>
<td>Texas</td>
<td>Regulator</td>
<td>No</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>Energy Ombudsman</td>
<td>No</td>
</tr>
<tr>
<td>Italy</td>
<td>Regulator</td>
<td>No</td>
</tr>
<tr>
<td><strong>Oceania</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia (NEM)</td>
<td>Regulator</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>NGO</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: Detailed jurisdiction summaries in Appendix C.

89. The only jurisdiction that has specific rules for commercial PCWs that we are aware of is Great Britain. In Great Britain, commercial PCWs can signal their legitimacy by adhering to the voluntary “Confidence Code” that governs the management of the energy PCWs and switching services. The Confidence Code was originally established in 2002 by the consumer representative organisation, Energywatch, but Ofgem took over the responsibility in 2013. The PCWs that are listed as compliant

---

Continued from previous page

available only to members of a particular club are not generally available and are not shown on the Energy Made Easy website.” See Energy Made Easy, “Glossary”, accessed 1 May 2018.


with the Confidence Code are websites that Ofgem recognises as presenting options and prices fairly and accurately. In 2015, Ofgem amended the Confidence Code so that PCWs could no longer only present “fulfillable” tariffs (tariffs on which PCWs receive a commission if customers choose to switch) on the default PCW webpage. Instead they would have to present all available tariffs to promote “customer trust and confidence in accredited PCWs.” This was known as the Whole of Market Requirement.

90. In its 2016 Energy Market Investigation report, the Competition and Markets Authority (CMA) recommended that Ofgem make changes to the Confidence Code so that the PCWs could be more flexible about what tariffs they presented to customers. This was because in practice, under the Whole of Market Requirement, PCWs did not provide comparisons that covered all tariffs available in the market. For example, collective switching schemes that were hosted by rival PCWs were not required to be hosted on PCWs. Thus, the CMA considered that the Whole of Market Requirement was “potentially confusing and misleading and therefore has the potential to undermine the confidence of customers in PCWs”. In its place, the CMA recommended introducing a requirement in the Code requiring PCWs to be transparent about the information they are providing to customers, for instance, by “displaying a clear message explaining the results on display and clarifying tariffs are not available through their site”. In July 2017, Ofgem decided to go ahead with the CMA’s proposal to modify the Confidence Code in order to allow accredited PCWs to show a partial view of market offers as a default, but added a requirement that accredited PCWs would still offer customers easy access to the full view of market offers.

91. Elsewhere, in the EU, the Council of European Energy Regulators (CEER) published in 2012 a set of recommended voluntary guidelines for PCWs that focus on independence, transparency, completeness and accuracy, and consumer accessibility and engagement. Recognising that retail energy markets are evolving significantly,

---

77 Ofgem, “Decision on the partial implementation of the CMA’s Whole of Market remedy & consulting on new Code requirements”, 3 July 2017, paragraph 2.6.
CEER in 2017, have published an updated set of guidelines that include provisions for “future developments” within the sector, such as smart metering and time-of-use tariffs.  

III.A.1.b. Ensuring customers get the best offer

92. In New York, the regulator requires retailers to update their pricing information on the official price comparison website, Power to Choose, at least once every 30 days. Retailers are allowed to make offers other than those posted on the website; however, they are required to guarantee residential and small commercial customers an offer with rates at least as low as the offer posted on the Power to Choose website at the time of purchase.

93. In Illinois, the PlugInIllinois.org website has a Complaint Scorecard, which ranks retailers by their rate of complaints compared to the average rate of complaints for the entire residential market, and a Complaint Summary, which shows the total number and type of complaints received for each retailer over the last two years. This information supplements the “Price to Compare” feature, which allows customers to compare the price of retail offering to default supply (however, there is a lack of quality of service measure for default supply).

94. In the NEM, a retailer is required to submit information to the AER on each generally available offer for the Energy Made Easy website within two days of the offer becoming available to customers.

III.A.1.c. Innovative PCWs and switching services

95. Recently a number of innovative third-party switching services have arisen in several jurisdictions. These services typically use automation to reduce the number of actions that a consumer would need to take to identify and switch to a better price plan. For example, Cheap Energy Club in the UK (run by MoneySavingExpert.com) saves the consumer’s details and does a full market comparison for electricity and gas offers to see if the consumer is overpaying for their service. It performs the comparison every month, and alerts the consumer via email if the savings are greater than a user-specified threshold. If the consumer decides to switch, she only has to click “confirm” on the pre-filled application.

---


82 AER, “AER Retail Pricing Information Guidelines”, August 2015, p. 20.
Unlike other similar service providers, Cheap Energy Club explicitly gives half of its commission from the gaining retailer as cash back to customers.83

96. Another UK service, Flipper, identifies the best deals for its customers and handles the switching process on the customers’ behalf. Besides automatic switching, Flipper is also different from traditional PCWs in that it charges consumer a flat rate of £25/year rather than taking a commission from retailers. Flipper works by extracting consumption data from customers’ online energy accounts, and searching the market to find the best offer, taking into consideration exit fees and discounts. If the best offer saves customers at least £50, Flipper then starts the switching process on the customers’ behalf (e.g. contacts retailers, sets up an account with the new retailer). Customers then receive the new retailer’s information via email. For customers who do not wish to go ahead with the switch, there is a 14-day cooling off period during which customers can cancel the switch at no additional cost. If the switching is successful, customers are charged £25, and for this fee, Flipper continues to provide its services for another 12 months. For signed up customers, Flipper does a market search monthly; if it finds a better deal, Flipper initiates the automatic switching process again.1

97. In New Zealand, a switching service focused on commercial customers called Saveawatt, launched a residential customer-focused “personal power assistant” mobile app called Frank. Customers only need to download the app, upload a photo of their latest bill, and approve the new plans that the app returns. Both the app and the service are free for customers—Saveawatt charges a fee to retailers in return for their marketing cost savings.84,85

III.A.1.d. Integrated switching campaigns - Lessons from New Zealand

98. New Zealand has the highest annual switching rates out of all of the jurisdictions surveyed. In addition to switching statistics, the New Zealand Electricity Authority’s December 2016 survey found high levels of engagement beyond external and internal switching rates: 30 percent of the 1,200 survey participants had investigated different offers and decided not to switch, and 36 percent had reviewed their current plan and decided not to switch. The New Zealand experience seems to suggest that ease of switching and general awareness are key factors to increasing consumer engagement.

99. Part of New Zealand’s success can be attributed to its NZ$11 million “What’s My Number” campaign. Launched in 2011, the 3.5-year campaign involved multi-media advertisements that educated consumers regarding their retail options and the

---

84  Saveawatt, “Meet Frank – your personal power assistant,” accessed 1 April 2018.
simplicity of the switching process. While the annual external switching rate in the year 2009 was lower than 14 percent across all consumer segments, it climbed to 19 percent at the end of 2014 and reached 21 percent by February 2018.\(^86\) The campaign also produced an online tool under the same name that helped residential consumers calculate savings by filling in a few details, and contained a link to an NGO-run website, Powerswitch, to execute a switch if desired.\(^87\) The regulator worked with various community groups, such as budget advisory services and public libraries, to promote Powerswitch in an effort to reach lower income and vulnerable consumers.\(^88\) From May 2011 through September 2017, the campaign had 1.8 million unique visitors to its website and had facilitated at least 300,000 switches every year.\(^89\) (In New Zealand, as of February 2018, there are 1.8 million residential customers and 250,000 small and medium sized businesses.\(^90\)) While the regulator found in its 2009 review that awareness of the switching process was low,\(^91\) as of August 2017, 68 percent of consumers now believe that it is “worthwhile” to review their retailer,\(^92\) and 24 percent of consumers had switched in the past month because of the campaign (down from the peak of 48 percent in September 2012).\(^93\) The regulator has concluded that the campaign had “an immediate and ongoing impact”\(^94\) while noting that more could still be done to improve consumer awareness and motivation to engage consumers actively in the market. The regulator has now refocused the campaign to encourage consumers to “make a habit of checking they are on the best power deal for their circumstances”.\(^95\)

---


\(^{87}\) Electricity Authority, What’s My Number, “Check your number”, accessed 26 March 2018.


III.A.1.e. Impact of PCWs on switching rates

There are few statistics around how PCWs or other switching service providers have enabled switching. We know of only one trial that tested for the effects of providing a PCW or switching service on switching rates, particularly among passive customers. In the fall of 2017, to test the applications of the disengaged (passive) customer database,96 Ofgem ran the “Check Your Energy Deal” (digital service) trial with 10,000 of E.ON’s customers in Northampton, who had been on its Standard Variable Tariff (SVT) for three years or more. Under the trial, Ofgem selected a PCW partner through an open competition to calculate best deals and provide switching services for the treatment group. To make sure that customers understood the benefits of the switching service, Ofgem used a digital agency to raise awareness through sponsored social media. Early results of the trial found that the digital trial achieved a switching rate of 8.3 percent (868 switches), or 4.6 percent higher than the control group. On average, online switching reached savings of £293 per year.97 Generally, users of the service found the website to be clear and concise, and had a positive experience with the switching service.

III.A.2. Transparency and choice

If consumers perceive retail pricing information to be complex and/or have difficulty comparing offers from different suppliers, consumers may disengage from the market and make poor purchase decisions or avoid them altogether (i.e. stick with their existing retailer by default). There is thus, a trade-off between the benefits of liberalising channels of engagement and the need to protect consumers from excessive and/or misleading marketing. There is a further complication of possible misalignment of interests between passive customers and their suppliers, where current suppliers may face the financial incentive to keep customers as disengaged as possible to profit from them staying on higher tariffs.

In the NEM, discounts are a common feature of most retail offers, but are not taken from a consistent reference point across retailers.98 Thus a customer who selects an offer with a larger discount will not necessarily receive a lower price. The ACCC has recognised that this makes it difficult for consumers to effectively compare offers.99 The ACCC further notes that this has resulted in high levels of price dispersion within the market, with similar customers paying different prices.

---

96 In Great Britain, there is an initiative to roll out a database of passive customers in 2018 that would be made available to competitor retailers for marketing purposes. This database would consist of residential consumers who have been on one or more default tariffs for three years or more. See CMA, “The Energy Market Investigation (Database) Order 2016”, December 2016.


for the same service level.\textsuperscript{100} In this section we examine initiatives and policies in other jurisdictions aimed to make tariffs more transparent to real world consumers and to aid choice.

104. In Illinois and New York, it is stipulated that if the retailer guarantees savings, it must provide a clear written statement describing the conditions under which savings are guaranteed.\textsuperscript{101,102}

\textbf{III.A.2.a. Simpler choices}

105. In late 2010, Ofgem initiated the Retail Market Review (RMR) following concerns that the energy market was not working effectively for consumers. Specifically, Ofgem found that a high number of customers chose not to switch retailers despite being better off if they did, and attributed this passive behaviour to the complexity of pricing information. One of the studies the RMR refers to is a meta-analysis published by Ofgem in 2011. Referring to surveys and other evidence, the study states that consumers in Great Britain struggle to assess retail electricity deals.\textsuperscript{103} According to a survey mentioned in the study, 61 percent of consumers found it difficult to choose electricity retailers, primarily due to the confusion caused by the large number of components in energy tariffs.\textsuperscript{104} Another survey mentioned in the study notes that consumers believed tariff information was presented in a way to them which makes it difficult to calculate their current price and use price comparison websites. The number of tariff options according to the study also makes it difficult for consumers to assess the different deals. A separate Ofgem survey in 2008 reiterates this by finding that 70 percent of consumers found the number of tariffs on offer confusing.\textsuperscript{105}

106. To encourage customer engagement, Ofgem proposed the “Simpler Tariff Choices” package, which imposed a maximum four tariff limit on retailers; created a

\textsuperscript{100} ACCC, “Retail Electricity Pricing Inquiry – Preliminary report”, pp. 123.

\textsuperscript{101} Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities)”, 1 November 2017, Part 412.110 (Minimum Contract Terms and Conditions).


\textsuperscript{103} Wood, J., Ofgem, “What can behavioural economics say about GB energy consumers?”, 21 March 2011, p. 11.

\textsuperscript{104} Wood, J., Ofgem, “What can behavioural economics say about GB energy consumers?”, 21 March 2011, p. 11.

\textsuperscript{105} Wood, J., Ofgem, “What can behavioural economics say about GB energy consumers?”, 21 March 2011, p. 11.
standardised tariff structure that at least one of these four tariffs had to adhere to; and introduced rules to simplify bundles, discounts and reward points. The new standardised tariff was called the SVT and consisted of a unit rate and a standing charge. Ofgem hypothesized that this structure would make it easier for customers to compare tariffs. The tariff also had an “evergreen” feature, where it would not expire at the end of the contract term. This evergreen feature was part of the concurrent “Fairer Treatment” reform. The reforms restricted the type of discounts retailers could offer to two options: a dual fuel discount for when consumers choose both gas and electricity from the same supplier; and a discount for consumers going paperless.

However, the Energy Market Investigation conducted by the CMA in 2016 found that some of the Simpler Choices reforms introduced under the RMR may have distorted competition and reduced customer welfare by restricting supplier behaviours and limiting the choices of customers. In particular, the CMA had significant doubts around the benefits of the four-tariff rule that emerged from the report. The report stated that, given the number of suppliers, customers would have to use price comparator websites to find the cheapest tariff on the market anyway, regardless of the four-tariff rule. In addition, it is also claimed that the four-tariff rule may have made consumers worse off by causing retailers to withdraw a number of tariffs and discounts and change tariff structures. To the CMA, this was a particular concern as it became a threat to innovation around tariffs and smart meters. As a result, the Simpler Tariff Choices reforms are no longer in effect, including the rules prohibiting discounts.

Another area of concern was that the reforms limited competition among PCWs as they were unable to negotiate exclusive tariffs with retailers or give discounts to customers. Due to the four-tariff rule, PCWs could not secure exclusive tariffs with retailers. And, due to limitations on cash discounts, PCWs could no longer attract customers through offering cashbacks. In addition, because of the uncertainty around the cashback rules, many retailers stopped working with

---

cashback websites. This led to retailers removing discounted variable tariffs (meaning that all fixed-period tariffs now also fixed the price through the term of the tariff), two-tier and bundled tariffs, and withdrew prompt-pay discounts, discretionary credits, and rebates and cashback offers.

109. Due to the recommendations by the CMA, Ofgem confirmed the removal of many of the rules arising from the Simple Tariff Choices Reforms in 2016. The CMA proposed to replace these rules with more generalised requirements and as a result in 2017, Ofgem removed the majority of the prescriptive sales and marketing rules and replaced them with a package of “informed choices” principles (three on tariff comparability and two on sales and marketing).

III.A.2.b. Clear information

110. Also resulting from the RMR review was Ofgem’s introduction of “clear information” rules to facilitate customers’ engagement, which required retailers to provide customers, in bills and other communication tools, with: a Tariff Comparison Rate (TCR) to help consumers compare tariffs among different retailers, based on a representative consumer profile; a Tariff Information Label that would present tariffs in a standardised way; personalised annual cost projections based on customers’ actual consumption; and personalised information on the cheapest tariff that the current supplier offers.

---


115 Ofgem, “Modification of electricity and gas supply licences to introduce five ‘informed choices’ principles and remove the majority of the prescriptive sales and marketing rules”, 27 April 2017.

116 TCR represents the cost of a tariff for a typical consumer. It assumes a medium level of usage (a household that uses 3,200 kWhs of electricity and 13,500 kWhs of gas per year), and expresses tariffs including discounts and standing charges in pence per kWh or £ per year.

117 This includes payment method, discount, termination fees, and estimate of annual costs for a typical consumer. Ofgem provides a template for retailers to provide Tariff Information Label on the bill. See Gas and Electricity Markets Authority, “Standard Condition of Electricity Supply License - , Schedule 1 to standard condition 31B”, 1989, accessed 9 March 2018.

111. However the CMA was concerned that these provisions were not subject to adequate testing before Ofgem’s introduction.\textsuperscript{119} Thus, in its 2016 report, the CMA proposed that Ofgem establish an ongoing program to identify, test (through randomised controlled trials when appropriate), and implement measures to help customers become engaged in the market.\textsuperscript{120} Subsequent trials and results are discussed in Sections III.A.1 and III.B.6. The CMA also recommended that Ofgem introduce a license condition (what later became SLC 32A) to require suppliers to participate in this Ofgem-led program.

112. In France, there is also an effort towards providing clearer information in consumer communications. In 2012, French authorities produced a standardised layout (template) for bills, intended to make them easier for consumers to understand.\textsuperscript{121} These standardised bill templates provide customers with specific information such as their consumption history over the full year, a breakdown of different energy components, and information on the sources of generation (renewables, nuclear or thermal).\textsuperscript{122} While retailers are not obliged to use this standard layout, they still have to provide the information listed above.\textsuperscript{123,124}

113. The Netherlands established both voluntary and mandatory rules on information requirements for electricity retailers regarding communication with customers. Since 2006, a voluntary code of conduct is in place covering customer acquisition and retention. For example, the Code of conduct states how companies can advertise to attract new customers. The regulator can take actions if companies who signed up for the code violate it.\textsuperscript{125} The regulator further established several information guidelines that specify the necessary information retailers have to present to the consumers when making them an offer.\textsuperscript{126} The regulator issues penalties when information on energy bills is not complying with the

\begin{enumerate}
\item Légifrance, “Order of 18 April 2012 about invoices for the supply of electricity and natural gas, their payment methods and the reimbursement conditions in case of overpayment”, 26 April 2012, accessed 14 March 2018.
\item DGCCRF, “Prices, tariffs and follow-up”, 2 January 2018, accessed 4 March 2018.
\item ConsuWijzer, “The code of conduct for energy suppliers”, accessed 28 March 2018.
\end{enumerate}
requirements and since 2014, the regulator also obliges companies to amend their websites if they provide incomplete or misleading information.

III.A.2.c. Marketing requirements relating to not misleading consumers

114. In the NEM, the NERL requires retailers to present offer prices in accordance with the “Retail Pricing Information Guidelines”. These Guidelines were recently updated in April 2018 and apply to all types of marketing and publishing of energy plans to small customers.

115. In Pennsylvania, retailers are required to use common and consistent terms, established in the state’s Glossary of terms, in all marketing materials. The use of general, unsubstantiated and unqualified claims of environmental benefits, such as “green” and “environmentally friendly,” is prohibited. Materials that offer terms of service must include a table showing what the price will be for an average customer at three different electricity consumption levels, and clearly show the effective date of the prices.

116. In Illinois, the retail agents engaged in door-to-door marketing cannot imply that they are employed or endorsed by the network, a government body, or a consumer group, and are required to leave a copy of the uniform disclosure statement with the customer at the conclusion of the visit. In New York, the Public Service Commission adopted a voluntary Statement of Principles for the training of retailers’ representatives regarding door-to-door and telephone marketing practices, and the retailer’s general conduct.


129 AER, “AER Retail Pricing Information Guidelines”, April 2018, paragraphs 1, 5, 17.

130 Pennsylvania Public Utilities Commission, “Glossary of Terms”.

131 Pennsylvania Code, “Title 52 Chapter 54. Electricity Generation Customer Choice”.


133 Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities)”, 1 November 2017, Part 412.120 through Part 412.160.

cannot imply that they are a representative of the network, and they should conduct marketing in a language that customers can fully understand.\textsuperscript{135}

117. In Texas, the utilities commission requires all written, electronic, and oral communications, including advertising, websites, direct marketing materials, and billing statements distributed by a retailer to be clear and not deceptive, misleading, unfair or anti-competitive.\textsuperscript{136}

118. In New Zealand, there are rules surrounding marketing only in the context of uninvited direct sales, such as door-to-door sales or telemarketing.\textsuperscript{137} If the retailer fails to comply with its information disclosure requirement, the customer has the right to cancel the agreement at any time. The sales agreement must be written in plain language, and the front page must include the supplier’s contact details, a clear description of the service, as well as the consumer’s rights to cancel the agreement. Even if the retailer fulfils its disclosure requirement, customers have five working days to cancel a contract if they signed it as a result of an uninvited direct sale.\textsuperscript{138}

119. In Great Britain, the six large gentailers stopped door-to-door solicitations in 2010 and 2011, following new license requirements and standards of conduct, and political pressure opposing doorstep sales. However, retailers noted that direct selling was still the most effective tool for reaching passive customers, and argued that their withdrawal from doorstep selling led to a reduction in customers switching retailers in 2012.

III.A.3. Smart meters and access to consumption data

120. Smart meter data allows retailers and other service providers to see when and how customers are using electricity and thus get a better gauge of how much that individual customer costs to serve. In turn, they can offer prices that reward behaviours that reduce retailer service costs, or they can offer services that help customers to manage their costs. For example in Texas, where most customers have smart meters, time-of-use programs like “free nights and weekends” are very popular. In New Zealand, most of the 21 retailers that entered the market in the five years prior to the end of 2016 have built innovative business models that were made

\textsuperscript{135} Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities)”, 1 November 2017, Part 412.120 through Part 412.160.


\textsuperscript{137} To be considered an “uninvited direct sale,” the price of the offer must exceed NZ$100, or be unknown at the time of sale. See Electricity Retailers’ Association New Zealand, “Choosing the right electricity retailer”, 2016, accessed 4 April 2018.

possible by utilising smart meter data to “reduce costs, increase efficiency, improve customer service, and offer new services and tariffs.”

Retailers and other service providers can also offer a number of services to customers made possible through smart meter data. They can for example, create tools to show customers how and when they use electricity; or send bill alerts when consumption reaches certain thresholds. Switching services and price comparison websites can use detailed customer usage data to find them the best price bundle to match their particular consumption profile.

In the next few years, we expect to see a rapid rollout of smart meters, since all European jurisdictions are required by the EU to achieve an 80 percent deployment level of smart meters by 2020, and similar goals have been set in the US jurisdictions. In the NEM, only Victoria has had a system-wide rollout of smart meters, which was completed in 2014 with approximately 2.8 million meters being rolled out. The Victorian rollout was completed by the distribution networks. In the rest of the NEM, the rollout will be retailer-led as per the Power of Choice rules, which came into effect on 1 December 2017. Retailers (operating through independent “Metering Coordinators”) can install smart meters on a voluntary basis at any stage, but are required to use smart meters for all new and replacement meters. However, as of March 2018, there were only 400,000 smart meters installed in the NEM, outside of Victoria. The Metering Coordinator role was introduced as part of the Power of Choice rules, with the meter coordinator having the overall responsibility for metering services. This includes (but is not limited to): provision, installation and maintenance of a metering installation; and collection, processing, retention and delivery of metering data.

---


140 European Commission, “Report from the Commission - Benchmarking smart metering deployment in the EU-27 with a focus on electricity”, 2014.

141 For example the Pennsylvania Public Utility Commission, in implementing Pennsylvania’s Act 129, “requires the state’s seven largest distribution companies to develop energy efficiency and conservation plans … including the use of smart meters by their customers … with the goal of all customers utilising smart meters by 2023”. See Pennsylvania, “Smart Meter Q&A”, accessed 31 May 2018.

142 AEMC, “Final rule to increase consumers’ access to new services”, 26 November 2015.


123. In Illinois, prompted by the Energy Infrastructure Modernization Act, one of the two major networks, Commonwealth Edison reached 2.1 million smart meter installations as of March 2016, while the other major network, Ameren Illinois, is planning a full deployment in its entire service territory by the end of 2019. In Pennsylvania, the Public Utility Commission aims to achieve a complete network-led smart meter rollout by 2023. In New York, the State’s Public Service Commission has approved smart meter implementation plans for each network. In 2016, Consolidated Edison, one of New York’s largest networks, got approved a 6-year implementation plan to deploy 4.7 million electric and gas smart meters.

124. In Texas, legislation was passed in 2005 to encourage and create incentives for networks to begin a mass rollout of smart meters. Currently there are 7.3 million residential and commercial smart meters in the ERCOT areas open to retail electricity competition. In 2015, 81.5 percent of residential customers and 84.2 percent of commercial customers had smart meters in Texas. Texas has an online smart meter data portal developed by IBM called “Smart Meter Texas” which allows customers to access their energy data. The portal is implemented using the US Department of Energy’s “Green Button” data standard, which allows customers to access their data in a standardised format. The Green Button initiative was first introduced in the US in 2011 to give consumers the ability to download their detailed energy usage data by the “click of a green button”. Generally, the Green Button service is provided on the network’s website, however in Texas this service is also provided by the centralised data portal. To share data with a third-party, a customer would need to download the data and send it to the third-party. Since it was implemented in Texas, the Green Button initiative has evolved to include a new product called “Green Button Connect”, which allows customers to share their data with pre-registered third-party service providers directly, without the need to download it themselves, to receive additional data-driven services.

---

146 Commonwealth Edison serves approximately 5.4 million customers.

147 Consolidated Edison serves approximately 3.4 million electric customers and 1.1 million gas customers.


149 Note this refers to the Texas Reliability Entity region, which is equivalent to the ERCOT region. See Department of Energy, “Assessment of Demand Response and Advanced Metering”, December 2017.


introduction, the Green Button initiative has been taken up by networks in California, New York and other states with advanced metering infrastructure.\(^{153,154}\)

125. Italy and New Zealand have already achieved high rates of smart meter deployment, though they achieved them in very different ways: in Italy, the rollout started with a voluntary approach and then became a legally mandated effort undertaken by the networks, whereas New Zealand’s Electricity Authority left the decision to the retailers. New Zealand is possibly the only example to date of a successful retailer-led smart meter rollout. Whilst retailers are leading the effort in Great Britain, this is in response to a legal requirement to have a full roll-out by 2020.

126. The data generated by the meters are commonly considered to be the customer's property. The meter owners, either the distribution network, the retailer, or a third party, are responsible for maintaining this data and giving access to the data only to authorised parties. In the NEM, retailers and distributors have to adhere to minimum standards in regards to the format, timing and cost for delivery of usage data to a consumer or their authorised representative. Usage data must be provided to consumers by retailers and distributors on request four times a year at no charge.\(^{155}\) In addition, usage data must be given to the consumer within ten days of the request.\(^{156}\) The NERR also note that a retailer must provide a small customer with historical energy consumption data for that customer for the previous 2 years on request.\(^{157}\) In March of 2018, the COAG Energy Council published a consultation paper on facilitating third party access to energy consumption data. The Treasury is

Continued from previous page

\(^{152}\) Green Button Connect is not available in Texas. However, Smart Meter Texas allows third-party service providers to access consumer data through the portal if given authorisation by consumers. See Bevill, R and King, R., SPEER, “Improving Access to Smart Metre Data in Texas”, October 2016, p. 5.


\(^{154}\) To see the list of networks offering this service, see Department of Energy - Energy.gov, “Green Button – Open Energy Data”.

\(^{155}\) AEMC, “Final Rules Determination - National Electricity Amendment (Customer access to information about their energy consumption) Rule 2014”, 6 November 2014, p. 32.

\(^{156}\) AEMO, “Metering Data Provision Procedures”, 1 March 2016, p. 4.

\(^{157}\) AEMO, “National Energy Retail Rules - Customer Retail Contracts”, p. 45.
also working on developing a national consumer data right that will cover many sectors, including energy.158

127. In Germany, customers with smart meters can access their data locally at any time, including historical data for up to three years as well as current consumption.159 The Meter Operating Act outlines strict rules around smart meter data use, such as who can receive the data (authorised meter operator, network operator, and energy retailer), in what form (meter operator has to delete any personal data), and how long the receivers can keep the data for (base data has to be deleted 12 months after the closure of the meter).160

128. Italy is planning to make real-time data available to consumers after the roll-out of second-generation smart meters, for which no specific date has been set.

129. In Great Britain, retailers and energy network companies have access to the data, but only at the level of aggregation that is necessary to ensure accurate billing. This means that retailers can access only daily aggregated meter data unless customers give permission for them to access the half-hourly data. This will likely reduce the incentives to propose new products and services to customers.161

130. In the Netherlands, smart meters send usage data every two months to the distribution network operator.162 In compliance with the Personal Data Protection Act, businesses are not allowed to collect and interpret someone’s personal data without that consumer’s explicit permission.163 In cooperation with the Dutch Data Protection Authority, regulator published a checklist on ConsuWijzer that assists customers in learning about their meter provider’s data policies on smart meters.164 The provision of real-time consumption data is provided by third-party commercial services that the consumer chooses and authorises.165

---


159 German Legislation “Meter Operating Act” (Messstellenbetriebsgesetz ,MsbG), 29 August 2016, section 3. Before 2016 the rules on data of smart meters were regulated in the Energy Industry Act and through general rules about personal data protection, article 61.

160 German Legislation, “Meter Operating Act”, 29 August 2016, articles 50, 63, 64.


162 ACM website, “Smart-meter”.

163 This could be the case of energy optimisation.


131. In New Zealand, the Electricity Authority allows and encourages customers to access their own usage data. Customers can request data on their power usage from the past 24 months, and if they have a smart meter installed, they can also see their load profile. The consumer can request this data by phoning or submitting a written request to their retailer, or authorising a third-party agent to submit an Electricity Information Exchange Protocol (EIEP) form to the retailer via the EIEP hub. Having access to this data at no charge facilitates the consumers’ process of identifying the retail plan that is best for them.\footnote{Electricity Authority, “My usage”, accessed 29 March 2019.} \footnote{Electricity Authority, “Requests for consumer consumption information: Procedures”, 18 November 2015, accessed 29 March 2018.} The Electricity Authority is currently conducting a consultation into how smart meter data can be shared among multiple partners to the household, besides the retailer.\footnote{Electricity Authority (2018), “Multiple Trading Relationships Consultation Paper”, accessed 31 March 2018.} The inquiry stems out of a concern that the current system, which focuses on a one-to-one relationship between the customer and the retailer for all of their electricity needs, unnecessarily limits choice and constrains new ways of doing business. Key to this is access to customer data, which electricity service providers, other than a customer’s retailer, face barriers in gathering.\footnote{Electricity Authority, “Multiple Trading Relationships Consultation Paper”, 28 November 2017, accessed 31 March 2018.} As of writing (April 2018), submissions had been collected, but no policy or guidance papers have come out yet.

### III.A.4. Price reporting and monitoring

132. Collecting and publishing price and other data may enable customers, policy makers and regulators to better observe market outcomes, and thereby enhance their understanding of firm, industry or market performance.\footnote{NERA, “Assessment of Price Monitoring in Australia – A Briefing Note for the AEMC”, 14 December, 2007, p.7}\footnote{NERA, “Assessment of Price Monitoring in Australia – A Briefing Note for the AEMC”, 14 December, 2007, p.7} Collecting information from firms may alter their behaviour: collecting information and analysing market outcomes may convey the implicit threat of regulatory intervention if market outcomes are not acceptable, thereby acting as a form of regulation.

133. In retail electricity markets, regulators and other policy makers may routinely collect data from retailers as an input for analysing market outcomes. This reporting and monitoring can take many forms depending on the type of data that the regulator has the power to collect. We broadly observe three types of data collected from retailers in the jurisdictions studied:
1. Data on prices offered in the market – often obtained from an official PCW;
2. Data on the number of customers supplied under each offer / at each price – obtained by regulatory requirements;
3. Data on retailer costs – obtained by regulatory requirements.

In New Zealand and Great Britain, the regulator can calculate the actual average retail price paid by residential customers, but cannot differentiate between different retailers and/or population groups. In New Zealand retailers are required to complete a survey each quarter with total sales, total kWh and total number of connections for residential customers. This allows the Ministry of Business, Innovation & Employment (MBIE) to calculate an average price, which is published quarterly in the “Sales–based Electricity Costs” report. MBIE also estimates a quarterly average regional price series using publicly available offer data from a subset of towns and cities and a representative customer load profile. Prices are weighted by retailer market share. According to MBIE, the purpose of this is to provide an indicator of how recent price increases are likely to impact consumers.

In Great Britain the regulator publishes an average residential retail price in the “State of the energy market”, an annual report which provides an overview of the energy market and assesses how well energy markets are working based on consumer outcomes. The report uses pricing data provided by the Department for Business, Energy and Industrial Strategy (BEIS). The BEIS previously used estimated bill data, but now calculates actual average bill data for nine electric retailers who provide quarterly breakdowns on average consumption by price plan, region and payment type. These bill estimates are then weighted by the number of customers on each tariff. In Great Britain, the regulator also collects PCW price offers, which are published on the regulator’s website and updated monthly.

---

171 This is not strictly true for Great Britain. It is actually an estimate, but is based on actual sales data.

172 For the template of the survey, please see Ministry of Business, Innovation & Employment, “Quarterly Retail Sales Survey”, accessed 18 May 2018.


178 From two commercial PCWs, since there is not an official PCW in Great Britain

136. In Germany and Italy the regulator obtains aggregate level sales and cost data from retailers. In Germany, the Energy Industry Act requires the regulator to monitor the electricity and gas markets, and inform the government about market outcomes.\textsuperscript{180} The regulator can obtain information from market players and industry associations.\textsuperscript{181} Retailers are required to provide the average price that they charge and corresponding consumption volume in kWh for all retail tariffs, split across four different consumption bands.\textsuperscript{182} They are also required to show a breakdown of the various components of the bill such as network charges, concession fees, fees for billing, and metering and meter operation. This allows the regulator to separately estimate the part of the bill that the retailer can influence: procurement cost, sale cost, and retailer margin.\textsuperscript{183} The results of the analysis are published every year in collaboration with the German Cartel Office, and the results are shared with the European Commission and ACER.\textsuperscript{184}

137. In Italy, as part of the regular monitoring of operating conditions in the retail electricity market, the regulator publishes the annual Retail Market Monitoring Report. This report summarises the market outcomes over the last year in order to: assess the extent of competition in the retail markets, highlight any obstacles to the development of competition, and detect alleged irregularities in drafting supply contracts.\textsuperscript{185} Retailers are obliged to report the average prices paid by their residential and non-residential consumers.\textsuperscript{186} The retailers also have the obligation to report a breakdown of their costs.\textsuperscript{187}

138. In the Netherlands, the regulator has the ability to censure prices before they are implemented (see Section II.A).

\textbf{III.B. Retail market design}

139. The retail electricity market has its own set of rules. This is partly because electricity is an essential service and partly a result of how a competitive market has been developed from what was once a monopoly service. In this section we examine

\begin{footnotesize}
\begin{itemize}
\item 180 German Legislation, “Energy Industry Act”, 7 July 2005, article 35 and 63.
\item 182 The first three consumption groups correspond to the designations of “DA”, “DB”, and “DC” according to Eurostat.
\item 185 ARERA, “Retail monitoring report 2016”, 30 November 2017, p.4.
\item 186 We believe this to be a simple average given the lack of mention of any kind of weighting.
\item 187 ARERA, “Retail monitoring report 2016”, 30 November 2017, Section 4.3.
\end{itemize}
\end{footnotesize}
how the market is defined, and the scope of activities that are deemed competitive. In Illinois and Pennsylvania, retailers effectively compete over energy procurement, with all other services (including billing and most customer contact) handled by the network. Restricting the extent of competition in such a way may make entry by new retailers easier, but it also reduces retailers’ ability and incentive to innovate.

140. In many jurisdictions, there are a large number of customers on default service who have never actively engaged with the market. Other customers may have engaged with the market at some stage in the past, but have returned back to a non-market tariff for a number of other reasons. These customers are in a sense hidden, or are much harder for competing suppliers to engage with. As previously mentioned, in Great Britain, the regulator has plans to create a database of passive customers with a tentative roll-out in 2018, following two successful pilots in 2017,\textsuperscript{188} and to make such information available to all retailers to encourage targeted outreach (see Section III.A.1.e).

141. We also look at some of the barriers to entry that new retailers face, and those which regulators have tried to address in various jurisdictions in an attempt to facilitate entry.

142. In order to enter the market successfully, retailers need to acquire customers. In the electricity industry, a losing retailer is notified that their customer is leaving (as part of the switching process) and may try to “save” them. We examine a policy in New Zealand where retailers voluntarily stop targeting departing customers. Such a policy would likely benefit new entrants, who have a growing customer base, as opposed to incumbents. However, in a recent review, the New Zealand regulator found no impact on competition from the ban on saves.\textsuperscript{189}

143. For customers, a key market feature is how easily they are able to access competitive offers and switch. Some of these barriers are easily addressed through regulatory intervention, such as restricting early termination fees, or requiring notices of auto-renewals. Others are more difficult since they are a result of consumer biases, rather than cold logic. For example in Great Britain, while the CMA believes the switching process to be simple, many customers perceive it to be otherwise. Such results emphasise the role of trials and experimentation in designing effective policy.

144. An alternative to individuals switching is collective switching arrangements, which take advantage of collective bargaining. In many jurisdictions including the NEM, collective bargaining has taken place on a commercial basis. However, in some US states, local governments are given the right to switch whole swathes of customers in their jurisdiction, on an opt-out basis.

\textsuperscript{188} See Ofgem, “Small Scale Database Trial, Research Results”, and Ofgem, “Private Beta Digital Trial, Early Findings and Insight”, February 2018.

\textsuperscript{189} Electricity Authority, “Post implementation review of saves and winbacks”, 29 August 2017, p. ii.
III.B.1. Market size and scope

145. Retail competition is not a homogeneous term, and the extent of what is subject to competition differs across jurisdictions. While in all jurisdictions retailers procure wholesale energy on behalf of their customers, other services, such as: billing; metering; meter reading; credit and collection; and outage reporting, may either also be competitive activities or offered as part of the network company’s regulated service.

146. Some jurisdictions have argued that by limiting the scope of services that retailers need to offer, they are reducing barriers to entry, by making the retail service easier to offer. For this reason many of the US jurisdictions, apart from Texas, require the network companies to offer retailers a consolidated billing service, as well as providing the option to purchase the retailer’s receivables, reducing retailer capital needs and risk.

147. While these policies may promote competition in relation to purchasing electricity on the wholesale market for onward supply to end customers, it can also be argued that such policies fail to promote competition in other areas. For example, consolidated billing requires that retailers fit their retail offerings into standardised network bill formats. This can hinder their ability to offer innovative tariffs and customer communications. More generally, restricting the extent of the services that are provided on a competitive basis can reduce the value stack over which retailers are able to compete. This can potentially discourage innovation and limit market entry. Table 3 shows the breakdown by jurisdiction of what is considered a competitive service.

---


Table 3: Competitive subservices for residential customer class

<table>
<thead>
<tr>
<th></th>
<th>Billing</th>
<th>Metering</th>
<th>Meter reading</th>
<th>Credit and collection</th>
<th>Outage reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>No*</td>
<td>No</td>
<td>No</td>
<td>No*</td>
<td>No</td>
</tr>
<tr>
<td>New York</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>No*</td>
<td>No</td>
<td>No</td>
<td>No*</td>
<td>No</td>
</tr>
<tr>
<td>Texas</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td>Germany</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td>Great Britain</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Italy</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td><strong>Oceania</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia (VIC)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Australia (Rest of NEM)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
</tbody>
</table>

Sources: Detailed jurisdiction summaries in Appendix C.
Notes: * In Illinois, retailers have the ability to do their own billing and credit and collection. However, none of the retailers do so in practice. In Pennsylvania, retail customers can ask for separate bills, but only a small percentage of residential customers do so.

In the NEM apart from Victoria, the scope of retail competition encompasses all services, apart from outage reporting, which is handled by the networks. In Victoria, the provision and reading of meters is a regulated service undertaken by the networks.

In some US states, such as Illinois and Pennsylvania, networks are obligated to offer consolidated billing, where the network bills on behalf of the retailer. This is intended to lower the barrier to entry for retailers, since they do not need to incur the fixed cost of developing their own billing system. In Illinois, retailers technically have the ability to do their own billing and collection; however, none of the retailers do so in practice. In Pennsylvania, retail customers can ask for separate bills, although only a small percent of residential customers do so. In New York, retailers can send the consolidated bill, and the customer is allowed to choose their preferred billing option.

In Illinois and Pennsylvania, networks are also often obligated to purchase retailer receivables (credit and collection), whereby the network takes responsibility for collecting the debts of the retailer. These programs are intended to reduce the amount of risk a retailer takes when participating in the competitive market by providing retailers the option to have networks recover their outstanding receivables. Although these policies may reduce barriers to entry, and encourage competition, one could also argue that they reduce the potential avenues for retailers to innovate, differentiate themselves and earn profits.
151. In Europe, the NEM and New Zealand, the retailer sends a single bill.

152. Metering involves all activities to do with the provision, ownership and maintenance of meters, including any subsequent data sharing networks associated with smart meters. Meter reading involves either the physical or remote digital reading of meters, and the collecting and processing of the meter data. While metering and meter reading are non-contestable for the residential class in all four US jurisdictions as well as France, they are competitive services in the other jurisdictions. In New Zealand, metering and meter reading are provided by third-party “metering services providers”.\(^{192}\) This is similar to the NEM, where apart from Victoria, metering and meter readings are provided by a “metering coordinator” that is generally appointed by the retailer.\(^{193}\) One of the questions closely linked to metering competition is who owns and has access to customer smart meter data. This is discussed further in Section III.A.3.

153. In most jurisdictions that we are aware of, including the NEM, outages are reported directly to the network companies.\(^{194}\) In Texas, retailers are required to provide a toll free number for outage reporting and handle this aspect of customer interaction.\(^{195}\)

### III.B.2. Customer acquisition costs

154. In the electricity market, unlike other industry sectors, a losing retailer receives advance notice that a customer intends to switch to another retailer prior to the completion of the transfer. Consequently, the losing retailer can attempt to “save” the customer and persuade them to cancel their switch request.\(^{196}\) Win-backs are similar to saves, except the losing retailer wins back the customer from the gaining retailer after the transfer is complete.\(^{197}\) While saves and win-backs can be seen as a healthy feature of market competition, they may reduce retailer profitability because gaining retailers end up being unable to secure new customers despite incurring the costs of acquiring them. They can also discourage small and

---


\(^{193}\) In Victoria, the distribution companies will be the metering coordinators for small customers. See, AEMO, “Role of the metering coordinator – Fact Sheet”, 31 October 2017.

\(^{194}\) In Great Britain, Ofgem provides a free phone service that customer can call in the event of power cuts, and this service will put them through to their local electricity distributor. See Ofgem, “Power Cuts: Help and Compensation under the Guaranteed Standards”, accessed 5 April 2018.


new retailers who may feel that they cannot compete with larger, more established retailers.\textsuperscript{198}

155. In the NEM, retailers have specific “win-back offers” which are special offers specifically targeted at those consumers that are switching retailers.\textsuperscript{199} In addition, the ACCC notes that at least one of the big three gentailers also have a “back pocket” discount, which is a higher discount that call centre staff can offer to retain customers. Since these offers are not publicly available, the ACCC notes that they create issues around transparency which may make it harder for smaller retailers to gain market share. In addition, the ACCC contends that smaller retailers may also be unable to compete on the magnitude of the discounts as well.\textsuperscript{200}

156. In late 2013, the regulator in New Zealand launched an investigation into the competitive effects of saves and win-backs.\textsuperscript{201} Following a consultation with retailers, in January 2015 the regulator amended the Electricity Industry Participation Code of 2010 to allow retailers to opt-in to be protected from saves (but not win-backs) by losing retailers. Losing retailers were prohibited from initiating contact with the customer to make offers while the transfer was being processed, if the gaining retailer has elected to receive “switch save protection”. Losing retailers are still allowed to offer enticements if the customer initiates the contact.\textsuperscript{202} This amendment was enacted to promote confidence in retailers that they are operating on a “level playing field”.\textsuperscript{203} Retailers who opt-in are prohibited from initiating saves itself, and must maintain their status (opted-in or cancelled) for a minimum of 12 months. The regulator publishes the names of the retailers who have opted in to the Code.\textsuperscript{204}

157. In August 2017, the New Zealand regulator conducted a post-implementation review of the 2015 amendments to the Electricity Industry Participation Code. The

\textsuperscript{198} Electricity Authority, “\textit{Archive – Win-backs and Saves: Background}”, October 2013, accessed 28 March 2018.

\textsuperscript{199} ACCC, “Retail Electricity Pricing Inquiry – Preliminary report”, 22 September 2017, pp. 121-122.


\textsuperscript{201} Electricity Authority, “\textit{Archive – Win-backs and Saves: Development}”, December 2013, accessed 28 March 2018.


\textsuperscript{204} Electricity Authority, “\textit{Competition Effects of Saves and Win-Backs}”, 21 October 2014, accessed 28 March 2018, pp. 36-37.
review found that the number of saves fell but the number of win-backs increased, and there was neither a positive nor negative effect on retail competition.205

III.B.3. Cost of market entry

158. The ACCC defines a barrier to market entry as anything that negatively impacts the “ease with which new firms may enter and secure a viable market.”206 Economies of scale in electricity retailing (for example, fixed costs of billing and customer contact systems) are a barrier to entry. Markets with price-regulated default service may have higher barriers to entry than those without, because customers may perceive the existence of price-regulation as an implicit official recommendation that the regulated default service is the best option. In the retail electricity market, licensing requirements and financing requirements may form a barrier to entry where, in order to meet these obligations, an entrant must incur large fixed compliance costs, while initially securing only a small number of customers over which the costs must be spread. At the beginning, the cost per customer is very high for an entrant. Other potential barriers, such as access to sufficient hedging products are beyond the scope of this study.

159. In our review, we found that the requirements that a prospective entrant must meet vary widely across the jurisdictions. In New Zealand, there are no prescribed requirements—it is expected that the monitoring and compliance procedures in the market will compel entrants to act in the best interests of the market, as well as itself. The Electricity Authority monitors compliance with its guidelines, such as those pertaining to contracts and vulnerable consumers, on an “as needs” basis. The regulator publishes a list of compliant retailers, as well as a list of non-compliant retailers, most of whom revise their actions accordingly following the regulator’s assessment. If required, the regulator has indicated its willingness to mandate changes, though it has not yet found this course of action to be necessary.

160. In the NEM, the requirements to qualify as a retailer are specified in the AER’s Retail Authorisation Guideline. In the application to the AER, a potential retailer must show that they: (1) have the organisational and technical capacity to operate as a retailer and comply with the energy laws; (2) have the financial resources to operate as a retailer and manage market risk; and (3) are a suitable person to hold a retailer authorisation, including not having past licences revoked.207,208


208 Victoria has its own jurisdictional licencing scheme. However, this is intended to be replaced by the National Energy Consumer Framework (NECF). See Energy, “Victorian Licensing Arrangements - Issues Paper”, Victoria State Government, accessed 30 May 2018.
Other jurisdictions impose a variety of requirements. In New York, prospective entrants must submit sample communication and marketing materials, including a sample contract, bill, and disconnection notice. In Illinois, Pennsylvania, and Texas, there are financial requirements for the entrant, such as an investment-grade credit rating or a minimum tangible net worth of US$100 million in Texas. In Germany, there is also a credit requirement.

In Great Britain, retailers are assigned Energy Company Obligations (ECO), in which they must meet carbon emission reduction targets by promoting qualifying products to customers, such as flat-roof insulation. Currently small retailers are exempt from the ECO and other social obligations. Small retailers are defined as those with fewer than 250,000 customers or that supply less than 400 GWh of electricity per year. Compliance with this obligation is tapered up to 500,000 customers. Despite reports that retailers just under the threshold tend to delay their expansion plans, the CMA notes that some smaller suppliers have exceeded the benchmark, and has thus concluded that the exemption does not act as a barrier to expansion.

III.B.4. Switching process and barriers to switching

For a customer actively looking to switch, the process typically involves: (1) the customer deciding to make a switch (whether it is due to moving to a new property or wanting to save money); (2) the customer contacting the new retailer to switch (this could involve filling out paperwork either online or by phone or mail; and (3) the customer being supplied by the new retailer (this could take months, in line with how often the meter is read). A customer may also be automatically switched to another tariff or retailer when the customer fails to make new arrangements when their contract comes to an end.

There may be barriers to switching, whether real or perceived, that prevent consumers from fully enjoying the benefits of retail competition. The following section describes some of these barriers, and goes on to discuss some policies from the surveyed jurisdictions that aim to reduce the impacts of these barriers.

III.B.4.a. Language or literacy barriers

There may be general barriers to shopping for offers due to a lack of internet literacy or necessary language skills. In Australia, in 2016-17, the Queensland government and AGL jointly funded the “Switched on Communities” program which made funding available to community organisations in south east Queensland with the aim of improving consumer access to information on retail pricing, contracts and offers and increase the number of consumers looking for better


deals.\textsuperscript{211} Funding was prioritised for organisations supporting seniors, people with disability, those suffering financial hardship, culturally and linguistically diverse consumers and Aboriginal and Torres Strait Islander people.\textsuperscript{212}

166. We also found various initiatives in the surveyed jurisdictions to address these issues. For example, in New Zealand, the regulator worked with various community groups such as budget advisory services and public libraries to promote their Powerswitch PCW in an effort to reach lower income and vulnerable consumers.\textsuperscript{213} In Texas, where a significant proportion of the population is Spanish-speaking, the Commission maintains an official Spanish version of the price comparison website, called PoderDeEscoger.org (or, “power to choose” in Spanish).\textsuperscript{214} It has the same format and offers the same information as its English counterpart, and is intended to reach Spanish-speaking Texans who have difficulty navigating the English website.

\textbf{III.B.4.b. Perceived barriers}

167. In Great Britain, the CMA believes that for the majority of domestic customers, the process of shopping around and switching retailers should be relatively easy. However survey evidence shows that many customers have never considered switching because it has not occurred to them or because they think it will be too much hassle.\textsuperscript{215} According to the CMA, this could be due to a number of possible reasons including: a lack of understanding of bills; the lack of quality differentiation of electricity; and an absence of a trigger point for engagement, since electricity is continuously supplied, irrespective of whether a customer has signed a contract.\textsuperscript{216} In response to a large number of customers who are not engaging with the market, as mentioned previously, Ofgem is planning to build a database of passive customers who have been on the default tariff for three years in order to promote customer engagement with competitive retailers (see Section III.A.1.e).

168. A survey by Ofgem in 2016 found that there were differences in attitudes towards price between disengaged and engaged customers. According to the survey, disengaged customers tended to think there are no real differences between prices charged by different retailers, and that it would be too difficult to calculate savings if they switched. In contrast, the survey found that engaged customers were more

\textsuperscript{211} ACCC, “Retail Electricity Pricing Inquiry – Preliminary report”, 22 September 2017, p. 144.

\textsuperscript{212} ACCC, “Retail Electricity Pricing Inquiry – Preliminary report”, 22 September 2017, p. 144.

\textsuperscript{213} Electricity Authority, “Market reforms to unlock innovation: OECD hearing on radical innovation in the electricity sector,” 19 June 2017, accessed 28 March 2018, slide 12.

\textsuperscript{214} 27 percent of the Texas population is Spanish-speaking. See Census Scope, “Percent ranking, 2000”, accessed 6 April 2018.

\textsuperscript{215} CMA, “Modernising the Energy Market”, 24 June 2016, p. 3.

\textsuperscript{216} CMA, “Modernising the Energy Market”, 24 June 2016, p. 3.
likely to agree that changing tariff is a good way to save money. As a result, Ofgem notes that disengaged customers are likely to want higher savings from switching than engaged customers.217

III.B.4.c. Switching due to contract expiry and auto-renewal

169. To prevent retailers from placing customers on higher tariffs when customers fail to make new arrangements at the end of a contract, some jurisdictions have implemented requirements around alerting customers when their contacts are coming to an end so that they may make the appropriate arrangements. In Illinois, automatic renewal requires that the retailer notify the customer 30 to 60 days before the renewal date, where the notification is separate from the customer bill.218 In Pennsylvania, retailers are required to notify customers 45 to 60 days prior to the expiration of fixed term contract.219 In the NEM, the Retail Rules require retailers to notify customers on a fixed term contract of contract expiry between 40 and 20 business days before the end date of the contract.220

170. In France, electricity contracts are renewed by the rule of “tacit renewal”. Electricity retailers must send an information notice to consumers between one and three months before the end of the contract alerting them to the contract’s expiry. If consumers do not reply to that notice, the contract is automatically renewed for another year. If the retailer fails to send the notice, consumers are allowed to break the contract at any time without any costs.221

171. In Great Britain, the retailer needs to notify customers that their current contracts are coming to an end 42 to 49 days before the contact ends.222 Customers who do not actively choose a new tariff or retailer at the end of a contract get


220 AER, “AGL pays $60,000 penalty for failing to inform customers of contract end”, 7 February 2018.


222 Ofgem, “Tougher rules on fixed term energy deals come into force as Ofgem’s retail market reforms begin to bite”, 22 October 2013, accessed 5 April 2018.
automatically rolled onto a default tariff, which can be the SVT or any default fixed term tariff as long as it is not more expensive than the standard variable tariff.\textsuperscript{223}

### III.B.4.d. Early termination penalties and switching fees

172. Loss aversion suggests that consumers may be deterred from switching when there are early termination penalties or switching fees, weighing these costs more than potential savings in the future. Recognising that some of these fees are necessary for a switch (e.g. doing an out-of-cycle meter reading), some jurisdictions have focused on clearly disclosing these fees at the beginning of a contract.

173. In the NEM,\textsuperscript{224} New Zealand, Illinois, New York, Pennsylvania, and Great Britain, energy providers can charge termination penalties or switching fees, but have to first disclose them. In Texas, the Electric Substantive Rules (Chapter 25 Rules) stipulate that retailers can collect early termination fees but shall not charge a customer any fee for the switching of a customer to another retailer. If the retailer switches a customer without obtaining their permission first, the Commission may suspend or revoke the retailer’s license.\textsuperscript{225} Similarly, retailers in the Netherlands may also charge penalty payments when customers choose to switch before the end of their contracts. As a safeguard, the 1998 Electricity Act sets a cap on the penalty payment that consumers may have to pay.\textsuperscript{226} As discussed previously, in the Netherlands, if the switch is related to the retailer changing its terms and conditions, the customer does not incur any penalties.

174. In other jurisdictions, retailers are not allowed to charge termination penalties or switching fees. In Germany, the Energy Industry Act officially prevents retailers from charging termination or switching fees.\textsuperscript{227} Minimum term contracts can only be cancelled early if consumers move house or the retailer changes the contract condition, in which case the early termination does not incur any extra cost.\textsuperscript{228}


\textsuperscript{224} There are restrictions on early termination penalties in the NEM under certain circumstances. For example in Victoria, early termination penalties are prohibited for fixed term contracts if the price, discounts or terms and conditions are changed during the contract’s term. See Energy and Water Ombudsman, “Victorian energy law changes”, January 2016.


\textsuperscript{228} Strompresivergleich, “Special cancellation terms”, accessed 6 April 2018.
France, consumers are allowed to terminate their contract at any time, without incurring a penalty even if it is a fixed term contract, although they may need to pay for an out of cycle meter read and any network fees as specified in the contract. However, if the consumer is indebted to the retailer, the retailer can block the switch until some agreement on debt repayment has been reached.\textsuperscript{229} Likewise, in Italy, if a consumer wishes to switch retailers, they are entitled to do so without paying a penalty or any costs. However, the consumer has to give its current retailer at least three weeks’ notice.\textsuperscript{230}

III.B.4.e. Procedural barriers to switching

175. Customers with poor creditworthiness or bad debt may have problems switching suppliers. In Germany many retailers check a customer’s creditworthiness before offering a contract and customers with low creditworthiness may have no choice but to select the default tariff.\textsuperscript{231} In Great Britain, customers with bad debts are usually given prepayment meters. Thus many prepayment customers have debts that they need to pay off. To allow them to switch retailers, the regulator designed a debt assignment protocol that assigns debt when indebted prepayment customers want to switch. It includes reading the meter and going over the payment schedule with the customer. However in 2014, the regulator observed less than one percent success rate for attempted switches under the Debt Assignment Protocol (DAP) process. Being unable to switch from prepayment contracts also limited the number of tariff options available to customers. As of March 2015, prepayment customers in the UK have access to only 22 standard variable tariffs and 4 fixed tariffs, compared to 27 standard variable tariffs and 27 fixed tariffs for direct debit customers.\textsuperscript{232}

III.B.4.f. Grace period

176. Most jurisdictions have a grace period, during which customers can change their mind about entering a contract without incurring any penalties (this is often considered a general consumer right rather than being specific to energy). For example, in the US, there is the Federal Trade Commission’s cooling-off rule, where buyers have the right to cancel a sale within three business days, and need to be informed of their right if the sale was conducted in person.\textsuperscript{233} Similarly, in New Zealand, customers have five working days to cancel a contract if they signed it as a 

\textsuperscript{229} Fournisseur Gaz website, “EDF cuts: what happens with unpaid bills?”, accessed 5 March 2018.

\textsuperscript{230} ARERA, “Resolution 302/2016/R/com”, article 2.1.

\textsuperscript{231} Stuttgarter Nachrichten, “Trouble to find a new energy provider because of creditworthiness”, 13 January 2013.

\textsuperscript{232} Miller, K., Ofgem, “Prepayment review: understanding supplier charging practices and barriers to switching”, 23 June 2015, Figure 2 (p. 15).

\textsuperscript{233} FTC, “Buyer’s Remorse: When the FTC’s Cooling-Off Rule May Help”, accessed 4 April 2018.
result of an uninvited direct sale. If the retailer fails to comply with its information disclosure requirement, such as stating the total price of the service and a clear description in plain language of the agreement, the customer has the right to cancel the agreement at any time.234 In the NEM, consumers have 10 business days “cooling off period”, where they can withdraw from the contract into which they have entered.235 In Great Britain, France, Germany and the Netherlands, consumers have a cooling-off period of 14 days to allow for decision changes. The Netherlands allows a further month to reverse the switch, effectively leaving consumers up to six weeks to change their mind about a switch.236

**Table 4: Elements of retailer switching process**

<table>
<thead>
<tr>
<th></th>
<th>Early termination fees</th>
<th>Grace period for gaining retailer</th>
<th>Third-party verification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>New York</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Texas</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>No</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td>Germany</td>
<td>No</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td>Great Britain</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td>Italy</td>
<td>No</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td><strong>Oceania</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia (NEM)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Yes</td>
<td>Yes*</td>
<td>No</td>
</tr>
</tbody>
</table>

Sources: Detailed jurisdiction summaries in Appendix C.
Notes: * In New Zealand the grace period is limited to contracts arising from uninvited direct sales.

**III.B.5. Collective bargaining**

Collective bargaining can potentially enhance competition by: (1) aggregating purchasers to exert buyer power (i.e., by improving negotiating positions with suppliers, or getting better supply offers as a result of saving suppliers’ substantial

---


customer acquisition costs); (2) mitigating information asymmetries and reducing/delegating search costs for consumers that face high search costs/inertia. Frequently, lowering search costs raises the intensity of competition. Collective bargaining takes place in various forms in the US (known as Community Choice Aggregation), Great Britain, and the Netherlands. Collective bargaining campaigns have happened in the past in the NEM, but we are not aware of the results. In 2017, the Independent Review into the Electricity and Gas Retail Markets in Victoria recommended the introduction of group purchasing for low income and vulnerable customers.

178. Community Choice Aggregations (CCAs) have been authorised in some states in the US to allow a municipality or county to negotiate for the purchase of electric supply of all its residential and small commercial customers. In a sense, CCAs can be considered a rate class with a large demand (such as larger commercial or large industrials) and can use the large demand to negotiate lower rates that are passed along to its citizens. Some CCAs require its citizens to opt-in to the program (otherwise the customer would continue to receive service from its retail electricity provider or the default service) or to opt-out of the program. CCAs are a form of retail electricity competition, although not all states that permit retail electricity competition also permit CCAs (such as Pennsylvania). In addition, there are some states (such as California) that do not permit retail electricity competition for mass market customers, but permit CCAs.

179. Under CCAs, the local government requests bids for the amount and type (e.g., wind, solar, hydro) of electricity or gas demanded and any energy efficiency programs or goals required, and selects a winning energy provider. In some cases communities can also construct community scale generation projects. Thus CCAs let customers within the community have more control over their energy costs and the types of generation resources used to meet their demand.

180. In the ten jurisdictions we have reviewed, two jurisdictions have authorised CCAs: Illinois and New York. Illinois offers aggregation both on an opt-in and an opt-out basis. In 2013, Chicago became the largest city in the country to adopt CCA,

---

237 For example the Big Energy Switch campaign claims to have attracted more than 260,000 customers in 2017, although it is not clear how many actually switched. The Big Energy Switch is a commercial service that earns commission for any accepted offers. See news.com.au, Rolfe, J., “Big Energy Switch: huge savings on electricity bills for campaign supporters”, 28 August 2016, and one big switch, “Our Campaigns” accessed 3 April 2018.


and did so at a time when ComEd’s (the incumbent utility) prices were high.\(^{240}\) One year in, about 60 percent of customers who participated in the program saw savings relative to the prices they would have faced under ComEd.\(^{241}\) Chicago’s CCA program, however, only lasted two years and was discontinued in 2015. The main reason was that the rate Chicago was able to obtain through its CCA contracts was no longer attractive relative to ComEd’s going rate that had moved closer to the competitive rate.\(^{242}\)

181. New York authorised CCAs as part of the 2014 Reforming the Energy Vision (REV) process. In February 2015, the New York Public Service Commission approved CCAs to cover twenty communities within Westchester County, and offered two types of service: 100 percent renewable power and a “basic supply”.\(^{243}\)

182. Not all states are in favour of collective bargaining for energy. In 2011, the Pennsylvania Public Utilities Commission clarified that municipal aggregation would not be allowed without explicit approval from the Commission, stating that it “may actually hinder competition by allowing a single supplier to lock in large groups of customers at a single point in time”.\(^{244}\) The Commission would only approve programs where it is clearly in the public interest to have municipal aggregation. So far, Pennsylvania has not approved any.

183. In the Netherlands a similar bulk buying scheme exists through the “Consumentenbond”, a membership-based non-profit organization.\(^{245}\) The Consumentenbond negotiates, on behalf of its members, collective energy prices with energy retailers. To do so, the Consumentenbond organizes a campaign, the main part of which is an auction where energy retailers bid against each other to provide the best offer. Customers have to register with the campaign prior to the auction, but are not obliged to accept the collective energy price contract that results from it. Instead, they can make a decision once the auction is completed and can accept the offer either via the campaign website or by ringing the

---


\(^{242}\) See, Clear the Air Coalition, “Cleaner Energy or Just Higher Bills? 7 Local Governments That Have Experienced or Explored CCAs”, 16 March 2018.


\(^{244}\) Pennsylvania PUC, “PUC Clarifies Municipal Aggregation Rules”, 17 March 2011.

\(^{245}\) Consumentenbond, “Consumentenbond als vereniging”, 29 July 2016.
Consumentenbond, who then forwards the registration to the retailer.\textsuperscript{246} Between 2011 and 2014, there were nine collective switching campaigns, involving 55,000 to 309,000 consumers per campaign. After the auction customers could decide if they wanted to sign up for the contract under offer, with no obligation. Each of the campaigns resulted in savings of between €1.4 million to €34.7 million for between 8,000 and 110,000 consumers.\textsuperscript{247} However, it should be noted that the efficacy of such collective switching campaigns in the Netherlands is likely small, since the portion of the retail bill that retailers can influence is low—taxes, levies, and network costs account for almost two-thirds of the average customer’s bill.\textsuperscript{248} This, combined with the fact that some customers may already be on better offers, or may be offered better offers if they threaten to leave may decrease the incentives to join collective switching in the Netherlands.\textsuperscript{249}

In Great Britain, there is also a collective switching scheme. Consumers can get together and ask an independent organisation to represent them and negotiate deals with retailers on their behalf. The use of such a service has grown since 2012, but the scale is still relatively small.\textsuperscript{250} The proportion of customer acquisitions made via collective bargaining was less than two percent across the six largest retailers.

DJS Research sought to gather consumer sentiment towards collective switching, and conducted eight focus groups to address this evidence gap. It found that consumers were sceptical of the intermediaries (What is in it for them?), and suspected that these intermediaries were purely driven by commercial motivations. Consumers worried that their registration details would be sold to third parties and used for marketing purposes, or that the new supplier would not provide adequate levels of service.\textsuperscript{251} From its own research, Ofgem also identified risks for consumers in collective switching schemes relating to the transparency of the process and the clarity of offers, discounts, and exit fees.\textsuperscript{252} Together, these concerns and risks may account for the low uptake of collective switching schemes in Great Britain.

\begin{itemize}
\item \textsuperscript{246} Consumentenbond, “Consumentenbond als vereniging”, 29 July 2016.
\item \textsuperscript{247} ACER/CEER, “Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2014”, November 2015, p 300.
\item \textsuperscript{248} European Commission, “Second consumer market study on the functioning of the retail electricity markets for consumers in the EU”, September 2016, p. 368.
\item \textsuperscript{249} ACER/CEER, “Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2014”, November 2015, p 102.
\item \textsuperscript{251} Gleed, A., DJS Research, “Consumer Sentiment Towards Collective Switching”, January 2013, accessed 27 April 2018.
\item \textsuperscript{252} Horne, S., Ofgem, “Protecting consumers in collective switching schemes”, 10 February 2014, accessed 30 April 2018.
\end{itemize}
III.B.6. Information asymmetries

185. As in any market, retailers will know more information about their own customers than their competitors will. However, unlike most other industries, there will be a large number of electricity customers who have a default supplier—either because they have never engaged with the market or because they have not actively chosen a supplier or price plan for a long period of time. These customers are in a sense hidden from the market, or are much harder for competing suppliers to engage with. This can create a large information asymmetry between the customer’s current retailer, which has an incentive to keep them on an above-market price, and competitors, which would like to win the customer over with a better price, but do not have easy access to the customer to inform them of available choices.

186. As previously mentioned, the regulator in Great Britain has plans to create a database of passive customers with a tentative roll-out in 2018, and to make such information available to all retailers to encourage targeted outreach (see Section III.A.1.e). The database is populated by the retailers, who are required to provide details of residential consumers who have been on default tariffs for three years or more. This database has the purpose of reducing information asymmetry between competitive retailers and the incumbent retailers by providing entering retailers information about who the passive customers are. Prior to this database, this information would only be available to the incumbent retailers.

187. Two trials have been carried out to test the effectiveness of outreach to passive customers in the database. In the first trial, each customer was randomly assigned to either: (1) marketing letters from other retailers; (2) a best offer letter from Ofgem; or (3) no letter (control group). This postal offer trial saw significantly higher switching rates for the treatment groups contacted by other retailers (13.4 percent) and the regulator (12.1 percent), than the control group who had no contact at all (6.8 percent). In a second digital trial, where the regulator selected a PCW to calculate the best deals, and offered participants an online switching service, customers had a switching rate of 8.3 percent, 4.6 percent higher than the control group. See paragraph 593 for further details on the trials and results.

IV. Policies to protect customers

188. Broadly speaking, there are two types of consumer protection policies in the electricity market. First, there are the “safety net” policies—those that intend to provide protection to all residential (or mass market) customers. Second, there are


the “targeted” policies—those that are specifically aimed at a set of vulnerable consumers, to minimise the effects of their hardship and disadvantage.

189. We include the design of the default tariff as a significant general customer protection policy. In many jurisdictions, most customers are supplied on the default tariff. Its design is therefore highly significant for the outcome seen by most customers.

190. Consumer safeguards can come at the expense of decreased competition. For example, price regulated default tariffs can act as a low cost alternative for customers over market rates, but may limit competition by decreasing the market size. Other consumer safeguards may raise the cost of entry (for example, mandated call centres) or raise customer acquisition costs (for example, third party verification of new contracts).

191. Below, we describe consumer safeguards including default tariffs, contract rules, and dispute resolution; followed by an in depth analysis of consumer protections targeted to vulnerable customers.

**IV.A. Default Tariff**

192. Each jurisdiction needs to have a procedure in place for determining what would happen if a customer fails to select a contract from a retailer. This could occur for several reasons: (1) the customer never selected a retailer when the market was originally liberalised or when they moved into a new dwelling; (2) their retail contract expired without another contract being signed in its place; or (3) because the retailer they were contracted with ceased operating. In many jurisdictions this role is fulfilled by a default tariff (also known as a "standard offer" or a "regulated tariff") for customers as an alternative to choosing a contract from a competitive retailer.

193. In some jurisdictions the role of the default tariff extends further to act as a low cost alternative that customers can choose over an offer from a competitive supplier in the retail market. In all of the jurisdictions that we examined where the default tariff has this role, the default tariff is covered by some form of price regulation. In contrast, the default price is determined in the market in those jurisdictions where the default tariff has a more limited role.256

194. France, Illinois, Italy, New York and Pennsylvania all have some form of price regulation. In these jurisdictions, the default price is intended to be lower than at least some of the retail offerings. We also observe that these jurisdictions tend to have the majority of their customers on default tariffs. This means that the majority of customers are on prices that are not determined by the market. As we will discuss below, some of the benefits of competition can still be reaped, if the energy for the default tariff is procured competitively and no economic rents are made by

---

256 Even in these jurisdictions, the default offer is an important consumer protection that ensures customers access to electricity supply.
suppliers. However, other non-price benefits of competition, such as innovation, increased customer service and choice, may not be available. 257 This lack of innovation can extend to the retail market for several reasons: retailers may match the structure and terms of the default rate and just try to compete on price; or the smaller size of the competitive market may make innovation uneconomic.

195. In much of the NEM, Germany, Great Britain, the Netherlands, New Zealand and Texas, retailers are obliged to supply customers, but default prices are determined in the market. For the most part, these prices are higher than many other offers in the market. Regulators may see this as unsurprising and reflective of the benefits of engaging with the market and shopping around. However, this means that any customers who remain on the default are relatively worse off. Thus, some jurisdictions also provide some form of customer protection. In Germany, only one retailer per region offers default tariffs and they are required to publish these tariffs, increasing transparency and making them more open to competitive forces.258 In Great Britain, the regulator now allows retailers to roll over customers to a new fixed term contract rather than the default tariff as long as they are better off under the fixed term contract.259

196. The following sections detail the structure and purpose of default tariffs among market price jurisdictions and regulated price jurisdictions.

**IV.A.1. Default tariffs in market price jurisdictions**

197. In the NEM, prices for default offers are set by retailers in all regions of the NEM except for regional Queensland, Tasmania, and the ACT.260 These offers are designed for consumers who have either not been able to access a market offer due to credit reasons, not chosen a competitive offer, fallen off a fixed contract or did not choose their retailer when they moved house.261 The default offers are generally higher than the market retail offers and retailers are not allowed to change the default offer more than once every six months. Default offers cannot include discounts (such as early payments and direct debit discounts), which creates an


260 Default offers are referred to as “Standing Offers” in the NEM. See ACCC, “Retail Electricity Pricing Inquiry – Preliminary report”, 22 September 2017, p. 121.

261 Subject to certain restrictions, retailers may require a security deposit from customers for default offers in the NEM. See AEMC, “National Energy Retail Rules”, 10 April 2018, pp. 30-32.
incentive for customers to switch to a competitive offer. However, this incentive may not apply to some low income or low credit customers, who are not able to access discounts in the competitive retail market anyway. In addition, default offers have additional terms and conditions that may make them attractive relative to market offers, such as no additional fees or charges, amongst other protections.

198. Table 5 summarises some of the major features of default tariffs in market price jurisdictions. In all cases default service is provided by the retailer. In Germany and Great Britain, customers can opt-in to the service, but this is not the case elsewhere. In Germany customers with low creditworthiness may have no choice but to select the default tariff, since they may not qualify for a market offer. Similar to the NEM, many retailers in Germany check a customer’s creditworthiness before offering a contract, but the local default tariff is offered to all customers.

199. Great Britain is the only jurisdiction that has the majority of its customers on default service. Until recently, this default tariff was the SVT, a tariff that was almost always more expensive than other offers in the market. In October 2017, Ofgem modified the retail license conditions to allow retailers to choose to roll customers over to another fixed term contract rather than the SVT, as long as the new fixed term contract does not have a penalty for early termination, is no more expensive than the SVT, or is similar to the customers’ current tariff. Ofgem hoped to give retailers enough flexibility so that they would provide better deals to customers and to phase out the SVT.

200. The SVT has no fixed term (“evergreen”) and customers can stay on it indefinitely unless they actively switch out. The SVT is not regulated, except for

---


263 Many retailers in the NEM run credit checks on potential consumers for market offers applications to minimise potentially “low value” consumers. See ACCC, “Retail Electricity Pricing Inquiry – Preliminary report”, 22 September 2017, p. 143.


265 Stuttgarter Nachrichten, “Trouble to find a new energy provider because of creditworthiness”, 13 January 2013.

266 SVTs (or Standard Variable Tariffs) are supply contracts which do not have a fixed-term or conditions and whose prices can therefore change with market conditions. Customers are moved to an SVT if they do not choose a specific energy plan after their fixed-term tariff ends. Customers can also actively choose to an SVT. See Ofgem, “Key terms and issues explained”, or Which? “Energy Tariffs Explained”, both accessed 13 June 2018.


prepayment customers and customers who receive Warm Home Discounts. For these customers, the regulator applies a cap on their default tariff. 269 Recently, the government also proposed a temporary tariff cap on default tariffs until 2020. 270 While customers can actively choose to be on a default tariff, most customers on such tariffs were there because they failed to make new arrangements after their previous tariff had ended.

Table 5: Default tariffs in market price jurisdictions

<table>
<thead>
<tr>
<th></th>
<th>Percent of customers</th>
<th>Provider</th>
<th>Vulnerable customer discounts</th>
<th>Multiple tariffs on offer</th>
<th>Never selected retailer</th>
<th>Retail contract expired</th>
<th>Opted back in to default</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia (NEM)</td>
<td>9%-26%**</td>
<td>Retailers</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Germany</td>
<td>32% (2015)</td>
<td>Largest local retailer</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Great Britain</td>
<td>62% (2017)</td>
<td>Retailers</td>
<td>Yes***</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Netherlands</td>
<td>.</td>
<td>Retailers</td>
<td>NA</td>
<td>No</td>
<td>Yes</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>New Zealand</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Texas</td>
<td>8%* (2016)</td>
<td>Retailer</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Sources: Detailed jurisdiction summaries in Appendix C.
Notes:
* Only includes customers who have never switched, there may be more on POLR
** Only includes the fully deregulated regions of the NEM of NSW, VIC, SEQ, SA
*** In February 2018, Ofgem extended the “safeguard tariff” to customers who receive Warm Home Discounts.
^ New Zealand does not have default tariffs. See Section IV.A for further details.

201. In Germany, the retailer that serves the most residential customers on a local distribution network is deemed to be the Local Default Supplier (LDS). There are around 800 of these local distribution networks, and the determination of the LDS is reviewed every three years. 271 Default tariffs are not regulated and consequently tend to be more expensive than other available tariffs. 272 However, there are rules to increase transparency of the default tariff. Default suppliers are required to publish their prices (e.g. in the local newspaper and/or on their website). Similarly, default service price changes need to be publicly announced alongside written notification to customers. 273 Default service providers are also required to give a clear

---


breakdown of all the energy price components in their publications and bills, including generation costs, network tariffs, taxes and levies, and changes that were made to each of the components.  

202. Germany’s default tariff enrolment is lower than that of Great Britain because in Germany only the largest supplier offers the default tariff, and because fixed term contracts in Germany are renewed automatically if customers do not cancel them within a given notice period. Approximately 35 percent of customers in Great Britain have never switched, similar to the proportion on the default tariff in Germany.

203. In Texas, the regulator (the Public Utilities Commission of Texas or PUCT) assigns providers of last resort (POLR) as the back-up electricity provider in every area for customers who have not yet chosen a retailer or have had their service discontinued. The PUCT states that the POLR service is relatively high-priced due to the costs associated with serving an uncertain number of customers with uncertain electricity loads. The service is only intended to be temporary. Relatively few customers in Texas (8%) are on default service.

204. In the Netherlands, the responsibility for ensuring electricity supply when a retailer defaults is split among retailers in proportion to the demand each retailer serves. When a retailer defaults, the designated emergency retailer immediately takes over servicing the customer, and applies its own tariff conditions on the provided service. As the emergency retailer incurs additional costs, the new tariffs will typically be higher than ones under the customer’s old contract. Since the customers did not choose their emergency retailer, they are able to switch to a new

---


278 Only includes customers who have never switched, there may be more on POLR. See, Public Utility Commission of Texas, “Scope of Competition in Electric Markets in Texas”, January 2017, p. 1.

retailer without incurring any contract cancellation fees. Although default prices are set by the retailer, there is a form of implicit price regulation in the Netherlands that applies to all prices, not just the default. This occurs because retailers are required to submit any new tariffs to the regulator, at least four weeks before it comes into force, so that the regulator can check if the tariff is excessive. The retailer has to provide a breakdown of the included costs and the regulator uses this information to determine whether the price is excessive. Recognising that publishing its assessment methodology may lead to new tariffs clustering around the maximum allowed price, hindering competition, the regulator does not publish its methodology.

205. The Dutch regulator can require retailers to adjust the price, or directly set the maximum price that the retailer is allowed to charge (i.e. if the supplier is unwilling to revise its prices). In 2016, two retailers had to comply with the regulator’s direction and adjusted their prices downwards. In 2017, the energy regulator had to set a maximum price for the first time. Despite this tariff monitoring, evidence suggests that it is still possible for retailers to differentiate their tariffs, and that the tariff review does not constitute a barrier to entry. Nevertheless, in 2014, the International Energy Agency (IEA) recommended that the tariff review be removed, arguing that it hinders innovation in retail products, although they did not explain why.

206. In New Zealand, there are no system-wide default tariffs. When a retailer goes out of business, the trader default scheme stipulates that the defaulting retailer must assign its customers to another retailer, or the regulator will allocate them automatically. Additionally, when a fixed-price contract expires, some retailers automatically renew the customer per the contract, while other retailers do not specify any course of action.

---


IV.A.2. Default tariffs in regulated price jurisdictions

207. In other jurisdictions, such as New York, Illinois, Pennsylvania, France and Italy, the default tariff is intended to be a low cost option that customers can actively choose, as well as being the supply option for customers who have never chosen a retailer. These jurisdictions either have directly regulated prices or employ procurement auctions to ensure that the wholesale component of the default tariff is competitive. In jurisdictions with a low-priced default tariff, competitive retailers are less motivated or able to innovate and invest in activities that lead to dynamic efficiencies. The presence and popularity of a default tariff can also set the tone for the structure of market offers. Retailers may emulate the structure of the default tariff and then seek to beat it on price. For example in France, most of the offers for residential customers are fixed price offers or fixed discounts to the EDF regulated tariff.²⁸⁷

208. Even though the default tariff may be intended as a low cost option for customers, it may still not be the lowest priced option available for all customers. Some customers may have a lower cost to serve than the average customer, and retailers may be more efficient at procuring energy and billing customers than the networks. A default tariff requires that the regulator determine all the features of the pricing plan which would otherwise be set in the market (for example, the length of time over which prices are fixed and hedged against wholesale price movements, or the availability of different payment methods), and precludes market-led innovation. As such, policymakers and regulators may prefer to keep the competitive market option open, anticipating that it will provide benefits for many customers. Even in jurisdictions with a low-price default tariff, there may be policies in place that push towards retail competition.

209. In these jurisdictions, customers can “switch back” to the default tariff after having been supplied by a competitive retailer.²⁸⁸ Table 6 shows that these jurisdictions have relatively high proportions of customers on the default tariff, ranging from approximately 40 percent in some parts of Illinois to 88 percent in France.²⁸⁹ In parts of Illinois, the proportion of customers on the default tariff is lower, but only because customers have opted in to community led collective bargaining arrangements called Community Choice Aggregation (CCA), which is discussed in Section III.B.5. Table 6 also shows some other major features of default tariffs in regulated price jurisdictions.


²⁸⁸ While the NEM for the most part has unregulated default tariffs, some regions do – notably Tasmania, Australia Capital Territory and Regional Queensland. Customers in these regions may not be able to opt back into default supply after leaving it.

²⁸⁹ France has 88 percent of residential load on standard offer service - we are not sure of the exact customer count.
Table 6: Default tariffs in regulated price jurisdictions

<table>
<thead>
<tr>
<th></th>
<th>Percent of customers</th>
<th>Provider</th>
<th>Price regulated</th>
<th>Vulnerable customer discounts</th>
<th>Multiple tariffs on offer</th>
<th>Never selected retailer</th>
<th>Retail contract expired</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>88% (2016)</td>
<td>Incumbent retailers (mostly EDF)</td>
<td>Regulated price</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Illinois</td>
<td>40%-65% (2016)</td>
<td>Network</td>
<td>Procurement rules</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Italy</td>
<td>61% (2016)</td>
<td>Retailers</td>
<td>Regulated price*</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td>New York</td>
<td>80% (2016)</td>
<td>Network</td>
<td>Procurement rules</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>65% (2016)</td>
<td>Network</td>
<td>Procurement rules</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Sources: Detailed jurisdiction summaries in Appendix C.

Notes: * In Italy the regulated tariff needs to be phased out as per European law. This is set for 2019.

210. For the US states in regulated price jurisdictions, default tariffs are offered by the network company. There are rules for how the network company is to procure energy and pass through the wholesale costs, as well as the structure of the final tariff (for the most part a variable energy charge with a small fixed charge). In these US states, the cost of default service is low because the network purchases energy from the wholesale market and passes along the energy to the retail customer without any mark-up. The other components of the service—the distribution and transmission services—are regulated and provided at cost (including a regulated rate of return to investors). Thus the default tariff is cost-based.

211. This concept of default supply, where energy costs are passed through by the network, is different to that of the other countries reviewed. Default tariffs in the US were intended as a transitory policy on the way to full competition, but have thus far proven to be a lasting market feature, with the exception of Texas. In Illinois and Pennsylvania, default service prices are set several months in advance and any difference between the forecast and actual wholesale costs is passed through to the customer in the next pricing period. In New York, the default tariff is set by each network company on a monthly ex-post basis, after having incurred the actual purchasing and hedging costs.

212. In the US (excluding Texas), there are two primary approaches to wholesale energy procurement for the default tariffs, both involving auctions, although Request for Proposals were used initially and may still be used in some instances. The first approach is referred to as the “block and spot” approach while the second approach is known as “load-slice auctions”. Under the block and spot approach, the network would buy (through an auction or through an RFP) blocks of peak and off-
peak energy in order to meet the forecasted level of demand over a certain time period, which could be one to several years. The network would be responsible for differences between forecasted and actual demand and would either buy (when actual demand is greater than forecasted) or sell (when actual demand is less than forecasted) energy from the spot market. In this sense, the network provider manages the full demand risk, which consists of customers migrating to retail energy providers and overall changes in the demand for electricity. In Illinois the block and spot approach has been the norm for default service.

213. The load-slice auctions approach, also known as the full requirements option, differs from the block and spot approach in that demand (and pricing) risk is taken by the wholesale supplier. Specifically, in providing bids (typically at a fixed price per MWh) to supply a specified percentage of customer demand required by the network provider, the wholesale supplier’s bid would include the additional cost needed to compensate for volumetric and pricing risk. This approach to obtaining wholesale energy supplies for default service customers is common in New Jersey and Pennsylvania.

214. There are programs in place in New York, Pennsylvania and Illinois to encourage customers to shift into the retail market. These programs guarantee customers who switch to a retail provider a set discount compared to the standard offer tariff for a pre-determined period of time. For example, Pennsylvania’s Standard Offer Referral Program was initiated in 2013 to encourage passive customers to switch away from default service. The Standard Offer Referral Program works by having the electric distribution companies refer certain customers (e.g. customers calling to complain about high bills) to a randomly selected participating retailer. The retailer must make a “standard offer”, a fixed rate of seven percent below the current default tariff for a year without cancellation or termination fees. Customers are notified prior to the end of the standard offer period, at which time they can choose to remain with the retailer, switch to another competitive retailer, or return to the default service option. If a customer fails to respond either way, they automatically remain with the retailer on a month-to-month basis without any termination fees. Over the last year, the standard offer program has achieved 4,000 to 15,000 residential enrolments per month.

215. However, in retail markets where the default option is procured at a relatively low cost, it may be more difficult for retailers to compete effectively. In New York, the regulator expressed concern about the fact that the majority of retailers serving

---

293 Pennsylvania Public Utilities Commission, “Innovation and Savings: The PUC’s Standard Offer”.


residential and small commercial customers only offered electricity-related services (i.e. no value adding products), and that retailers could not effectively compete with electricity prices offered by networks. Retailers in New York are finding it hard to compete with the default price for a number of reasons such as customer acquisition costs, greater economies of scale of networks, and the fact that networks cannot profit from the sale of electricity.  

In 2016 the regulator banned retailers from providing service to low income customers unless they can prove to the commission that they could guarantee savings over the network’s default price. The New York Attorney General has a current proceeding that is investigating extending the ban to all mass market customers. In Massachusetts a similar investigation is underway with the Massachusetts Attorney General (AG) calling for an end to retail choice for individual residential customers. The AG has alleged that residential customers on retail offers are paying more than customers on the default rate, with low income customers even worse off in terms of higher prices. The AG also found that low income customers also make up a disproportionately high share of the residential retail market.

216. In Italy, the entire default tariff including wholesale, transmission and distribution services is regulated. However, the default tariff will be abolished from 1 July 2019. In order to incentivise consumers to transfer to market offers, market competition law requires retailers to offer to households and small businesses at least one “standard” fixed-price proposal (in which the price is kept

296 NYPSC, “Order resetting retail energy markets and establishing further process”, p. 2.


298 Mass market customers encompass residential and small commercial and industrial customers.


fixed for a certain period of time) and at least one variable-price proposal. These offers will resemble the default rate, but will have market prices. It is thought that this will make it easier for consumers to compare and transition to a competitive offer.  

217. Similarly, the default tariff in France is fully regulated, including wholesale, transmission, and distribution services. The retail rate has historically been regulated to reflect EDF’s costs to serve. However, between July 2012 and July 2013, the government only allowed the regulated tariffs to increase by a maximum of 2 percent, even though the regulator estimated that the residential tariffs should have increased by 5.7 percent during this period. The cap on tariff increases created a tariff deficit of €422 million as EDF was not able to cover its costs. The cap was also very harmful to competing retailers, who typically offer tariffs that are at a fixed discount to EDF’s regulated tariffs. This meant that, just like EDF, other retailers could not cover their costs. The government has since removed the cap and retroactively increased the regulated tariffs in 2016, 2017 and 2018.

218. France also has policies that push towards retail competition. The regulator estimated that in September of 2017 a low usage customer with an annual consumption of 2400 kWh could save up to €38/year switching away from the default tariff offered by EDF, while a high usage customer with a consumption of 8500 kWh per year, would save up to €117/year. It is worth noting that these


310 CRE, “Regulated electricity sales tariffs: Analysis of the production and commercialization costs of EDF with cost stacking pricing”, October 2014, p.63.

311 Fournisseur Energie, “Should we choose the blue tariff of EDF or the electricity contract?”, accessed 8 March 2018.


cheaper market offers are usually associated with reduced customer service, such as no paper bills and no customer phone support (only online chat). Market offers with a comparable customer service to that of the regulated tariff have smaller savings in comparison to the regulated tariff. To encourage switching to competitive offers, the French authorities have lowered customer risk by allowing customers the right to return to the regulated tariffs after trying a market retailer without restrictions.315

219. In Illinois and France, there are multiple default tariff options that customers can choose from. In France customers have two regulated “Blue” tariff options to choose from: a flat variable tariff or a time-of-use rate.316 In Illinois, customers on default service can choose between a flat variable tariff and a real time pricing program offered by the networks, under which customers pay electricity supply rates that vary by the hour.317

IV.B. CONSUMER SAFEGUARDS

220. In addition to policies discussed above that aim to promote retail competition, regulators have implemented a range of policies that aim to protect customers from adverse outcomes that could otherwise eventuate in a competitive retail market. For example, consumers should be given fair warning before their retailer changes the agreed upon terms and conditions of the contract. Consumers should also be given the option to back out of the contract without penalties, otherwise there may be perverse incentives for retailers to sign customers onto new plans just to increase the prices a couple of months in. Additionally, there needs to be a system for resolving complaints and disputes between customers and retailers.

221. In the NEM, the National Energy Retail Law and National Energy Retail Rules set out specific rights and obligations about energy marketing, payment methods, and arrangements for customers experiencing payment difficulties.318 This covers retailers’ obligations when making changes to tariffs, issuing reminder notices that payment is required, and informing hardship customers of what protections are available. The AER recently revised the Retail Pricing Information Guidelines (RPIG), which provided guidance on how retailers present pricing information.319 Pursuant to that, in May 2018, the AEMC introduced: (1) a rule in the NERR (not

316 Descriptions of the offers can be found on EDF website. EDF, “Electricity offers for you!”, accessed 28 February 2018.
applicable in Victoria) restricting retailers from including discounts in contracts where customers would be worse off under the undiscounted offer than under the default tariff (standing offer); and (2) an AEMC-AER recommendation to the COAG Energy Council to make retailers’ non-compliance with the RPIG’s provisions on the presentation of retail prices subject to a civil penalty (up to $20,000 per breach).320

**IV.B.1. Contracts**

222. Some jurisdictions have guidelines on minimum terms and conditions in retail contracts. For example, in New Zealand the regulator has suggested minimum terms and conditions for residential contracts, which would include providing information on how the consumer can initiate the process to switch to another retailer, the notice period required before the switch can take place, and the timing of notices of disconnection that the consumer will receive in the event of non-payment. Where the retailer transfers the customer to another retailer, the contract must also guarantee that the retailer will provide information on how the customer can contact the gaining retailer and when the transfer will take place.321 Though these terms and conditions are voluntary, the regulator has conducted three alignment reviews of retailers, and published a list of retailers who did well or poorly aligning with the minimum terms.322 Most retailers that were deemed “poorly aligned” have modified their contracts to become better aligned with the regulator’s suggested terms.323

223. When customers sign on to a plan, it is usually expected that the terms and conditions would not change within the contract period. To prevent customers being surprised with contract changes, some jurisdictions require retailers to send notifications related to contract changes.

224. In Pennsylvania, retailers are required to notify customers 45 to 60 days prior to a change in contract terms.324 These notices provide customers with the options of remaining with their retailer on the new tariff, switching to another retailer, or returning to the default offer with the electric distribution company. In Texas, if there’s a change to a contract, retailers must notify customers 14 days in advance of

---


the new terms becoming effective.\textsuperscript{325} In Great Britain, retailers are required to notify customers 30 days before a change in price. If customers decide to terminate their contracts due to the change, they do not incur an exit fee even if they otherwise would.\textsuperscript{326} In France, retailers must send a notice of change in the contract, such as a price change, one month before the change applies.\textsuperscript{327} In Germany, Italy, and the Netherlands, customers must be informed in advance about changes to the contract (three months in advance in Italy’s case) to allow customers to end their contract if they do not accept the changes.\textsuperscript{328,329}

225. In New Zealand, the regulator publishes guidelines pertaining to communication between retailers and consumers, and between distributors and retailers, about price changes. To reduce confusion, as well as improve confidence and engagement in the market, the provisions of the guideline include matters such as: (1) showing tariff levels before and after the price change; (2) identifying different components such as energy charges and network charges; and (3) publishing a representative sample of bills online. This information should be made available each time a retailer or distributor communicates with its customers directly or makes a public statement concerning a price change.\textsuperscript{330}

226. Some jurisdictions also have a third-party verification system to ensure that customers fully understand the terms and conditions of contracts. In the trade-off between ensuring consumer welfare and removing barriers to competition, this is creating some burden on retailers to hopefully achieve greater benefits to consumers. For example, in Illinois, third-party verification is used to authorise a customer’s enrolment with the retailer and requires the customer to acknowledge that they understand the applicable items in the uniform disclosure statement.\textsuperscript{331} Similarly, in New York, all door-to-door or marketing sales over the telephone


\textsuperscript{326} Ofgem, “Notification of Price Changes”, accessed 5 April 2018.

\textsuperscript{327} DGCCRF, “Contracts and invoices”, 2 January 2018, accessed 3 April 2018.


\textsuperscript{329} ARERA, “Resolution ARG/COM 104/10”, 12 July 2010, article 13.


\textsuperscript{331} Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities)”, 1 November 2017, Part 412.120 through Part 412.160.
require independent third party verification. Pennsylvania gives retailers the option to use a third party to verify customer related transactions but this is not mandated.

**IV.B.2. Complaints and disputes**

227. Each jurisdiction has its own requirements with regards to the representation of the offered services. In cases where the retailer has breached the requirements laid down by the regulator (e.g. misrepresentations about affiliation with the network, unauthorised switching and billing errors) consumers should be entitled to a fair and timely complaint resolution process.

228. Customers that have billing or service disputes can first attempt to resolve the dispute with their supplier. To do so, call centres are often the easiest way to get in touch with the retailers. In the NEM, the NERR require all retailers to provide customers with a telephone number for complaints on their bills. In Illinois, there are detailed rules concerning customer complaints and the actions that the retailer must take. Retailers are required to maintain a customer call centre where customers can reach a representative and receive current information, and at least once every 6 months must provide written information to customers explaining how to contact the call centre. In New York and Texas, each retailer must maintain a toll-free phone line and a customer service group to deal with customer inquiries and complaints. In Italy, there is a service managed by the regulator which provides answers to complaints, requests and reports. It can be accessed by

---


334 This would be their retailer, unless they are on default service in any US state except Texas, in which case it would be the network.


phone, mail, or fax. In France, retailers have to include the telephone number of their call centre on all invoices.

If the complaint cannot be resolved with the supplier, it may be possible to file a complaint to a third-party who can act as a mediator, but cannot make binding resolutions. In Illinois, customers would initially file an informal complaint with the Commission’s Consumer Services Division. The retailer must promptly investigate and advise the complainant of the results within 14 calendar days. In Italy, the mechanisms for dealing with complaints and resolving disputes were updated in January 2017. First, a written complaint must be submitted to the retailer. The aim is to solve most complaints in this way. If the answer to the complaint is not satisfactory or no answer is received, consumers can contact the Conciliation Service (Servizio di Conciliazione), a free service established by the regulator that involves a third-party conciliator. In Germany, consumers can contact the Conciliation Board (Schlichtungsstelle Energie) as a mediator to resolve disputes with their retailer or distributor. The service is free of charge and not binding (though parties came to an agreement 86 percent of the time). In New Zealand, there is also the process of an independent arbitrator (Utilities Disputes) holding a conciliation conference between the customer and the retailer, and making a recommendation.

There may also be binding third-party dispute resolutions. In the NEM, the industry funded state and territory ombudsmen are third-party bodies that receive, investigate and facilitate the resolution of consumer complaints. In the Netherlands, if the process cannot be settled between the customer and the retailer, the consumer can contact the corresponding industry organisation (provided that the relevant retailer is a member). Unlike in Italy and Germany, this complaint

341 Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), Subchapter c (Electric Utilities), Section 412.320 (Dispute Resolution)”, 1 November 2017.
344 Tagesspiegel, “Trouble with the energy retailer”, 26 July 2013, accessed 3 April 2018.
resolution service is binding and is not free unless the consumer is proven to be right.\textsuperscript{347} In Italy, New Zealand, Germany, and France, consumers may advance their complaints to the civil courts. In US jurisdictions consumers can file a formal complaint to the regulator when an informal complaint does not yield a satisfactory resolution. A formal complaint is similar to a court case, and may result in a hearing (much like a trial) being scheduled. The decision issued by the Commission administrative law judge is binding.\textsuperscript{348}

\section*{IV.C. Targeted Policies for Vulnerable Customers}

231. The definition of vulnerable customers and the attendant policies to assist them vary by jurisdiction. Usually vulnerable customers are defined by some combination of spending a high proportion of their income on energy; or having difficulty affording sufficient electricity to meet their needs; or customers who have special needs such as medical equipment. All jurisdictions have targeted policies in place to protect those customers that they deem vulnerable. These policies generally focus on preventing disconnections, reducing the payment burden, or increasing home energy efficiency. Generally, the policies reflect the greater social infrastructure that surrounds the electricity sector. For example in Germany, there are no policies prohibiting disconnecting vulnerable customers; however, there is a very active court system that ensures these disconnections are rare. This is further supported by the state's comprehensive social security system, which will help welfare recipients to pay any outstanding electricity arrears.

232. In this section we examine how different jurisdictions define and protect vulnerable customers as well as methods used to help manage bad debts, such as prepayment meters.

\subsection*{IV.C.1. Vulnerable customers defined}

233. In our review of international jurisdictions, we found that not all jurisdictions have an energy-specific legal definition of vulnerable customers. For the ones that do, the definition differs in scope. According to French law, a vulnerable consumer is one who “experiences difficulties in their household to have access to the necessary energy supply to satisfy the basic necessities, because of the inadequacy of the resources or the conditions of their habitat”.\textsuperscript{349} In Great Britain, the regulator’s definition is broader and goes beyond issues of affordability, identifying a vulnerable

\begin{footnote}


\textsuperscript{349} Definition translated in English by the European Commission, “Second consumer market study on the functioning of the retail electricity markets for consumers in the EU: Country fiches”, September 2016, p. 43.
\end{footnote}
customer as one who is less able than a typical consumer to protect or represent their interests in the energy market, or is significantly more likely than a typical consumer to suffer detriment (thereby including issues like energy efficiency and difficulties engaging in the market). 350 The Netherlands’ definition is narrower, and only considers residential consumers for whom a disconnection from electricity would result in serious health risks. 351 Finally, in New Zealand, a vulnerable consumer is someone for whom “for reasons of age, health, or disability, the disconnection of electricity … presents a clear threat to the health or wellbeing of that domestic consumer; and/or it is genuinely difficult for the domestic consumer to pay his or her electricity bills because of severe financial insecurity, whether temporary or permanent.” 352

234. Germany is an example of a jurisdiction that does not clearly define the term “vulnerable customer” or “energy poverty”. At the federal level, low-income customers fall under the social security system and are covered by the Social Code. 353 Unemployed individuals, part-time workers, asylum seekers, minors in low-income families, and the chronically ill are eligible for Social grants paid by the social security office or local job centre. 354

235. Similarly, in the NEM there is no formal definition for vulnerable customers. However, targeted policies are in place for specific groups of customers such as concession card holders, hardship customers and customers requiring life support equipment. Different states apply different definitions for eligibility for their concession schemes, although these schemes generally include concessions for pensioners, those on health care cards, and those with disabilities. 355 Retailers in the NEM are required by the National Energy Retail Laws and the Victorian Retail Code to have policies in place for hardship customers, and they must publish these policies on their websites. 356 A hardship customer is defined as a “residential

---


352 Electricity Authority, “Guideline on arrangements to assist vulnerable consumers”, 1 November 2010, p. B.


customer of a retailer who is identified as a customer experiencing financial payment difficulties due to hardship in accordance with the retailer’s customer hardship policy”.

236. The NERL and Energy Retail Code in Victoria, both define life support equipment. Examples of life support equipment include: an oxygen concentrator or a kidney dialysis, or indeed “in relation to a particular customer – any other equipment (whether fuelled by electricity or gas) that a registered medical practitioner certifies is required for a person residing at the customer’s premises for life support...”

237. Despite the lack of a standard legal definition for vulnerable customers, all the surveyed jurisdictions offer some form of targeted protection for customers viewed as disadvantaged. Table 7 summarises whether international jurisdictions have a definition for vulnerable customers, and which groups of customers have access to targeted protection.

238. Targeted protection is most commonly extended to low income customers. Low income is typically defined as a percentage of the poverty line, or via eligibility for other government-sponsored benefits programs. In France, eligibility for social tariffs is based on whether customers are qualified for government-provided health insurance through the complementary health insurance and universal illness coverage programs. In the US, eligibility for the federally funded Low Income Home Energy Assistance Program (LIHEAP) considers both the applicant’s gross income (must be at or below 150 percent of the Federal Poverty Guideline) and proof that the household is receiving other benefits such as Temporary Assistance for Needy Families (TANF) or Supplemental Nutrition Assistance Program (SNAP). This can in turn determine eligibility into utility-sponsored programs,


362 See, for example, Pennsylvania Department of Human Services, “LIHEAP Brochure”.

for example, customers who receive a LIHEAP benefit are automatically enrolled into National Grid’s Energy Affordability Program to help low income customers manage their bills. In Great Britain, the government gives rebates on energy bills or direct payments to customers who receive certain income supports. For example, customers who receive the Pension Credit Guarantee Credit are qualified for Warm Home Discount (£140 rebate on energy bill per year).

239. Medically dependent safeguards provide special protection for households with a resident who needs specialised electrically operated medical equipment. Many of these safeguards focus on rules for disconnection in the case of non-payment. In Illinois, networks are not allowed to disconnect a residential customer for 60 days upon the receipt of a valid medical certificate for a resident of the household. In Pennsylvania, the “Consumer Rights and Responsibilities” manual specifies that customers with medical devices cannot be disconnected; and in Texas, the retailer may not authorise disconnections for customers who have established that a resident of the household has a “critical medical condition and will become seriously ill or more seriously ill if there is a disconnection of service”. Similarly, in New Zealand, the regulator defines medically dependent consumers as those who are dependent on mains electricity for critical medical support, such that loss of electricity may result in loss of life or serious harm, and prohibits the disconnection of these customers.

240. In the NEM retailers are required to maintain a register of premises requiring life support equipment, and disconnections are not permitted for customers living on those premises. The NERR also require retailers to provide life support customers


Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), Subchapter b (Provisions Applicable to more than One Kind of Utility), Section 280.160 (Medical Certification)”, 1 November 2017.

Pennsylvania Code, “Title 52, Chapter 56 § 56.201”.

To obtain this particular exemption, the customer must enter into a deferred payment plan with the REP and “have the ill person’s attending physician contact the REP and submit a written statement attesting to the necessity of electric service to support life. This exemption from disconnection due to illness or disability shall be in effect for 63 days and may be applied for again after the 63 days has expired and the deferred payment plan has been fulfilled.” See Public Utility Commission of Texas, “Utility Complaints – Know Your Rights”, accessed 8 March 2018.

“For the avoidance of doubt, medical dependence on electricity could be for use of medical or other electrical equipment needed to support the treatment regime.” See Electricity Authority, “Guideline on arrangements to assist medically dependent consumers”, p. 3.
with an emergency telephone contact number for the distributor, as well as a written notice at least four business days before any retailer planned electricity outages.\textsuperscript{370}

241. In Germany and the Netherlands, benefits to medically dependent customers are included in the social grant and services. The German Federal Social Court effectively decided in 1997 that the mandatory public health insurance had to cover any cost related to prescribed medical equipment, including electricity costs.\textsuperscript{371} The Netherlands is less specific, but generally refers to vulnerable customers as customers for whom a disconnection from electricity would result in serious health risks.\textsuperscript{372} In Great Britain, customers who are disabled, have a chronic sickness or other long-term medical condition, or special communication needs, can register with their retailers. They will not be disconnected during winter months.\textsuperscript{373}

242. Fuel poverty relates to whether customers can afford to pay for energy and hence depends both on income levels and energy costs. A customer is fuel poor if they are spending a large percentage of their income on energy consumption. In Germany, the 2012 state-led “Nordrhein-Westfalen fights energy poverty” initiative aimed to help customers who spend a higher proportion of their income than the average on energy.\textsuperscript{374} To assist these customers, the State’s consumer information centre started offering free financial and legal advice. As a result, 80 percent of impending disconnections were prevented and 69 percent of disconnections already scheduled were cancelled.\textsuperscript{375} In Italy, the regulator created a non-binding definition stating that energy poverty occurs when a customer spends more than 5 percent of their income on electricity expenditures. This class of consumers is eligible to receive a discount on their bills, which is offered by the regulator with the cooperation of municipalities.\textsuperscript{376} In Great Britain, fuel poverty was first defined in terms of a fixed percentage of income being spent on energy costs (10 percent), but

\textsuperscript{370} AEMC, “National Energy Retail Rules”, 10 April 2018, p. 90.


\textsuperscript{375} Consumer’s Office Nordrhein-Westfalen, “NRW fights energy poverty”, accessed on 6 May 2018.

\textsuperscript{376} ARERA, “Report on the survey on the state of the implementation of electric and gas bonuses,” 27 February 2014, p.17.
an independent review later found the definition to be problematic. This was because the 10 percent benchmark remained static while fuel prices move, thereby confounding the extent and depth of fuel poverty. In 2012, England revised this definition to a household for which the fuel cost is above the median level, and the income net of fuel cost is below the poverty line; however Wales and Scotland still use the 10 percent income threshold.

Table 7: Definition of vulnerable customers

<table>
<thead>
<tr>
<th>Source</th>
<th>Energy-specific legal definition</th>
<th>Low income</th>
<th>Medically dependent</th>
<th>Fuel poor</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Adverse weather conditions</td>
</tr>
<tr>
<td>New York</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Domestic violence victims</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Extreme weather emergencies</td>
</tr>
<tr>
<td>Texas</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>-</td>
<td>Energy inefficient habitat</td>
</tr>
<tr>
<td>Germany</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Unemployed individuals, part-time workers, asylum seekers</td>
</tr>
<tr>
<td>Great Britain</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Pensioners</td>
</tr>
<tr>
<td>Italy</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>Yes</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td>Oceania</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia (NEM)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
<td>Pensioners, customers facing payment difficulties</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Pensioners, young parents, job seekers, independent youths (age 16-19)</td>
</tr>
</tbody>
</table>

Sources: Detailed jurisdiction summaries in Appendix C.

In addition to targeted protection for low income, medically dependent, or fuel poor customers, there is also targeted protection for other specific groups of customers depending on the jurisdiction. For example, Pennsylvania offers protection to victims of domestic violence, guarding those with a Protection from Abuse (PFA) order from disconnections in the winters, weekends, or public holidays, and from being held responsible for someone else’s bill. In France, the official definition also defines vulnerability in terms of energy inefficient housing. As mentioned above, in Germany, unemployed individuals, part-time workers,

21°C in the living room and 18°C in the other occupied rooms according to WHO standard.


asylum seekers, minors in low-income families, and the chronically ill are eligible for the social grants that include energy payment support.\textsuperscript{381} In Great Britain, pensioners are eligible for the Warm Home Discount, the Cold Weather Payment, and the Winter Fuel Payment, which are all forms of payment support in the winter months.\textsuperscript{382,383}

244. In the NEM, concessions are offered to customers on a range of additional grounds, and these vary between states. For example, Victoria, Queensland and South Australia have a “Medical Cooling Concession” which provides discounts for consumers with medical conditions that could be aggravated due to changes in temperature.\textsuperscript{384} Victoria also has an “Excess Energy Concession” which provides discounts to customers who consume energy over a “trigger level”.\textsuperscript{385}

245. Finally, New Zealand announced in December 2017 a “Winter Energy Program,” which assists those on social benefits such as pensioners, young parents, job seekers, and independent youths, through automatic payments of NZ$20-30 every week during the winter, starting in 2018.\textsuperscript{386}

246. Support for vulnerable customers is discussed in the next section. As can be seen, it is very much embedded in the other institutional arrangements within a country, such as the social security system. Another major factor is whether or not customers have prepaid meters. Vulnerable customers on prepaid meters are not subject to disconnection and will not have issues with accumulating debt. Prepaid meters are prevalent in the UK, Netherlands and New Zealand and are discussed in more detail in Section IV.C.3.

\textbf{IV.C.2. Support for vulnerable customers}

247. Through our review of international jurisdictions, we identify five main types of support that the government, network company, or competitive retailer may


\textsuperscript{382} Customers are eligible for WHD if they or their partner receive a Guarantee Credit element of the Pension Credit (the Core Group). See GOV.UK, “Pension Credit”, accessed 9 March 2018. Other customer could receive WHD if they meet certain criteria. See Ofgem, “Warm Home Discount: Guidance for Retailers”, 1 September 2016.


\textsuperscript{384} Eligibility requirements for these concessions differ between states. See Simply Energy, “Concessions & Grants”, accessed 7 June 2018.


offer to vulnerable customers. These are shown in Table 8. Four of the five types of support for vulnerable customers are focused on helping customers to pay their bills and to avoid disconnections. While any customer who fails to pay their bill risks disconnection, vulnerable customers are likely, by definition, to be disproportionately affected. As a safeguard, in Illinois, network companies are also not allowed to charge late payment fees to low-income customers. 387 Being disconnected not only disrupts day-to-day household activities, but may also pose a severe health risk during extreme weather or for customers with medical devices. Disconnection may also entail additional fees, such as a security deposit, when the customer is ready to be reconnected.

248. The fifth type of support, prepayment meters, are used by retailers in some jurisdictions as part of the debt recovery process and as an alternative to disconnection. Prepayment meters reduce the risk to retailers of bad debt, and mean that retailers do not need to collect a deposit from customers who have been previously disconnected or who have poor creditworthiness. It also means that if customers are disconnected for non-payment, there are no reconnection fees. However, there is the risk that customers can self-disconnect. Increased smart meter penetration in many jurisdictions has made prepayment plans more attractive and viable. Smart meters can be used as prepayment meters, at no additional cost (older meters needed to be replaced at additional cost to the retailer). Payments can be made digitally with no special payment system needed (some older systems ran on tokens or payment cards). Smart meters can also remotely monitor self-disconnections. We discuss prepayment meters in more detail in Section IV.C.3 below.

249. As mentioned in Section IV.C.1, retailers in the NEM are required to have policies in place for hardship customers and they must publish these policies on their websites. 388 Examples of support for hardship customers include AGL’s ‘Fairer Way’ program which provides consumers on hardship programs guaranteed discounts; or Origin Energy’s initiative to freeze prices for hardship consumers in South Australia, Queensland and NSW for 12 months. 389 The NERL requires hardship policies to meet a set of minimum requirements, which subsequently have to be approved by the AER. 390 For example, hardship policies must have processes to

---

387 The LIHEAP statute establishes 150 percent of the poverty level as the maximum income level allowed in determining LIHEAP income eligibility, except where 60 percent of state median income is higher. Income eligibility criteria for LIHEAP may not be set lower than 110 percent of the poverty.


identify customers experiencing payment difficulties; flexible payment options; processes to identify, and to notify customers of, appropriate government concession programs and appropriate financial counselling services; processes or programs to assist customers with strategies to improve their energy efficiency; and others.\textsuperscript{391}

250. We note that minimal service is used in some jurisdictions for customers as an intermediate step before disconnection (and is also a service choice for all customers).

<table>
<thead>
<tr>
<th>Table 8: Types of support given to vulnerable customers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
</tr>
<tr>
<td>Illinois</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>New York</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>France</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>Germany</td>
</tr>
<tr>
<td>*</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Financial and legal advice</td>
</tr>
<tr>
<td>Great Britain</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Price cap</td>
</tr>
<tr>
<td>Italy</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>The Netherlands</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
</tr>
<tr>
<td><strong>Australia (NEM)</strong></td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes**</td>
</tr>
<tr>
<td>Education program to improve information access</td>
</tr>
<tr>
<td><strong>New Zealand</strong></td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Redirection of income, bonds</td>
</tr>
</tbody>
</table>

Sources: Detailed jurisdiction summaries in Appendix C.

Notes: EE means energy efficiency.

*In Germany there are no rules surrounding disconnections, but the court system effectively prohibits disconnections if the consequences of the interruption would be disproportionate to the severity of the default.

**In the NEM, prepayment meters are currently available only in Tasmania, South Australia and Queensland.\textsuperscript{392} In Queensland, pre-payment meters are used exclusively in Aboriginal and Torres Strait Islander communities.\textsuperscript{393}

IV.C.2.a. No disconnections

251. All of the reviewed jurisdictions grant vulnerable customers exemption from disconnection under different circumstances, although the extent of these exemptions varies. In general, customers who need electricity for medical purposes may be exempt from disconnections for the duration of their need, while customers


\textsuperscript{392} AER, “Energy contracts”, accessed 5 May 2018.

who rely on heating during cold seasons may also be exempt from disconnections during the winter. Disconnections are discussed in more detail in Section IV.C.5 below.

**IV.C.2.b. Payment support**

252. Payment supports are subsidies extended to vulnerable customers, particularly to low income customers, to reduce the out-of-pocket expense of their electricity bills. For example, in the US, there is the federally funded Low-Income Home Energy Assistance Program (LIHEAP), which helps low income households pay for their heating and cooling bills. As LIHEAP is a block grant, each state and territory may operate the program as it sees fit within the statutory parameters.\(^{394}\) We discuss the various forms payment support can take in the ten jurisdictions in Section IV.C.4 below.

**IV.C.2.c. Payment plans/bill smoothing**

253. Payment plans, as opposed to payment support, are not subsidies. Payment plans may be offered to customers who are in debt, to allow them to smooth out their repayments over a longer period of time. Some jurisdictions such as the NEM, Texas and New Zealand require retailers to offer payment plans to customers before they are allowed to disconnect them.\(^{395, 396, 397}\)

254. Bill smoothing is a type of payment plan in which monthly bills are determined based upon the previous year’s annual usage. Assuming similar levels of consumption, customers pay the same amount they would have paid otherwise but at a constant rate throughout the year. Thus they smooth out spikes in costs due to high prices or high consumption by increasing payments during months of low prices or low consumption. This makes budgeting for energy easier to manage for low income customers. In New York, "budget billing" spreads energy costs over 12 months, and is available to all customers who are on the network company’s default tariff.\(^{398}\) The network companies may also offer their own programs; for example,

---

\(^{394}\) LIHEAP, "[State programs](https:)", accessed 3 April 2018.


\(^{396}\) Electricity Authority, “Guideline on arrangements to assist vulnerable consumers”, 1 November 2010, pp. 6, 10.


\(^{398}\) While this is open to all customers, it is intended as a tool for low income customers. See National Grid, "[Help Making Payments](https://)".
FirstEnergy in Pennsylvania offers Customer Assistance Programs customers automatic enrolment into the Equal Payment Plan.399

**IV.C.2.d. Energy efficiency**

255. Energy efficiency is relevant to the discussion of vulnerable customers because upgrades to more energy efficient appliances or more insulated housing can lead to significant savings in the long run, savings that these customers may not be in a position to capitalise on due to their lack of knowledge, or access to funding to invest in improved energy efficiency. In the US, the Department of Energy’s Weatherization Assistance Program provides funding for reducing energy consumption and costs, for example through the Illinois Home Weatherization Assistance Program and the Texas Weatherization Assistance Program.400, 401 It is also up to each state’s discretion to spend (up to 15 percent) of LIHEAP funds on energy conservation measures.402 Network companies may also provide assistance to customers. In Pennsylvania, the commission has mandated the Low-Income Usage Reduction Program, which is a network-sponsored program that helps low-income residential customers lower their bills by installing measures intended to reduce household energy consumption and repairing existing housing for eligible low-income families.403 Some utilities offer additional consumer education programs, for example, Pennsylvania’s FirstEnergy WARM program that provides in-home energy usage evaluations, energy saving plans, and energy efficiency improvements to low-income customers.404

256. In Germany, the “Energy Saving-Check” program (Stromspar-Check) focuses on training long-term unemployed individuals to advise low income households on energy savings techniques and energy efficient products.405 On average, each household saved about €130 per year during the first phase of the project.406 In

399 FirstEnergy Companies, “Pennsylvania Customer Assistance Program”.


France, the National Housing Agency manages the “Habiter Mieux” (Live Better) scheme, which provides funds to consumers for energy-efficient housing works.407 Since its introduction, more than 191,000 homes have benefitted from the scheme.408

257. In Great Britain, the most prominent government-led energy efficiency measure is the Energy Company Obligation (ECO), which requires retailers with more than 250,000 customers to deliver energy efficiency measures to their residential customers. As of March 2016, there had been 1.8 million installations under this Ofgem-administered scheme. We discuss the competitive implications of ECO in Appendix C.IV.5.

258. In the Netherlands, the Energy Saving Covenant requires landlords of social housing to improve the energy efficiency of their properties as a pre-condition to raising the rent. Moreover, landlords are only allowed to raise the rent by the maximum amount that their tenant’s energy bill is expected to decrease as a result of the energy efficiency measures, so that there is no net increase in housing costs to customers.409 Another Dutch program, the Stroomversnelling initiative, focuses on retrofitting social housing. The idea is that tenants of selected social housing would pay the amount due in their bills to housing associations that would then use the capital to retrofit the houses with energy efficiency measures. Under this scheme, 1,300 Net Zero Energy buildings have been created, 500 are in progress, and another 15,000 are in planning.410

259. In New Zealand, the Energy Efficiency and Conservation Authority runs the “Warm Up New Zealand” program, which provides funding for residential insulation retrofitting for low-income households or those with special medical needs.411

260. In Australia, the Greenhouse and Energy Minimum Standards (GEMS) Regulator oversees the national program on equipment and appliance energy efficiency standards and energy labelling.412 In addition, in the NEM, under the National Energy Retail Law, retailers have an obligation to provide consumers in


411 EECA, “Warm Up New Zealand: Funding for insulation”.

hardship with information on how to be more energy efficient.\textsuperscript{413} However, the ACCC notes that information provided by retailers on energy efficiency has largely been limited to electricity audits and general information on government energy efficiency schemes and how to use energy more efficiently.\textsuperscript{414} The ACCC further notes that governments are exploring programs to improve energy efficiency in vulnerable households through state based schemes and the National Energy Productivity Plan.\textsuperscript{415} For further details on the range of programs and policies undertaken in the NEM to support vulnerable customers, see Sections IV.C.4 and IV.C.5.

261. The jurisdictions we have surveyed also offer other types of support, such as the New York Heating Equipment Repair and Replacement benefit for low-income customers to repair or replace their furnace, boiler or any other direct heating equipment necessary to keep their home heated.\textsuperscript{416} The Texas Comprehensive Energy Assistance Program (CEAP) is designed to assist low-income households with their energy needs and to encourage consumers to control energy costs through education. Similarly, Germany’s consumer information and advocacy office started offering free financial and legal advice to energy poor customers, customers threatened with disconnection, and disconnected customers through the 2012 “Nordrhein-Westfalen fights energy poverty” project (NRW bekämpft Energiearmut). As a result of this education initiative, 80 percent of impending disconnections were prevented and 69 percent of disconnections already in place were cancelled after initiation.\textsuperscript{417}

IV.C.2.e. Price Caps

262. In Great Britain, the regulator applies a price cap on the price paid by customers with prepayment meters or who receive Warm Home Discounts.\textsuperscript{418} However, since the price cap became effective, Ofgem has observed that many of the mid-tier retailers (who were offering prepayment tariffs below the cap) chose to increase their tariffs to match the cap. In addition, the number of retailers offering

\textsuperscript{413} ACCC, “Retail Electricity Pricing Inquiry – Preliminary report”, 22 September 2017, p. 149.

\textsuperscript{414} ACCC, “Retail Electricity Pricing Inquiry – Preliminary report”, 22 September 2017, p. 149.

\textsuperscript{415} ACCC, “Retail Electricity Pricing Inquiry – Preliminary report”, 22 September 2017, p. 145.

\textsuperscript{416} Office of Temporary and Disability Assistance, New York State, “Home Energy Assistance Program (HEAP)”.

\textsuperscript{417} Consumer’s Office Nordrhein-Westfalen, “NRW fights energy poverty”, accessed on 6 May 2018.

\textsuperscript{418} Ofgem, “Safeguard Tariff (or ‘Price Cap’)”, accessed 5 April 2018.
zero-standing charge tariffs targeted towards low income customers fell from four to two, thus lowering choice and increasing prices for some prepaid customers.419

263. Another form of price regulation similar to a price cap occurs in New York, where the regulator banned retailers from providing service to low income customers unless they can prove to the commission that they can guarantee savings over the network’s default price (as discussed in Section IV.A.2). 420 Families/households whose income is 60 percent or less than the state median income are considered low-income customers by the NYPSC.421 It is estimated that low-income customers represent approximately 25 percent of all electric customers in New York State.422 In most cases, retailers demonstrate compliance by comparing historical retail bills to what the default tariff would have been. Retailers can also demonstrate compliance by providing value-added services designed to reduce energy bills.423 Since 2016, several retailers have been approved to start serving low income customers again, but others have had their applications denied.424 New York Attorney General (NYAG) has a current proceeding that is investigating extending the ban to all mass market customers. Testimony from various parties varies in their opinion of the efficacy of this policy.425

IV.C.3. Prepayment meters

264. Prepayment customers may overlap significantly with vulnerable customers, and may have the same barriers, if not more, to shop around and switch to a better market offer. In Germany, if the local default supplier has any reason to believe that the customer will fail to pay on time, it can install a prepayment meter or demand a deposit. The prepayment terms are to be reasonable compared to previous billing


421 Governor Andrew M. Cuomo, “Governor Cuomo announces moratorium on competitive energy service company sales to low-income customers”, 15 July 2016, pp. 1.

422 Governor Andrew M. Cuomo, “Governor Cuomo announces moratorium on competitive energy service company sales to low-income customers”, 15 July 2016, pp. 2.


425 Mass market customers encompass residential and small commercial and industrial customers. Also in the US, Massachusetts is calling for an end to competitive electricity retailing. See boston.com, “Massachusetts AG: Ban competitive electricity suppliers”, 21 March 2018, accessed 4 March 2018.
periods, or to the bill of “comparable customers”; however these measures can only be taken once the local default supplier has informed the customer about what is going to happen, when, what the prepayment/deposit amounts will be, and how to exit from the prepayment terms. By 2015, 19,400 prepayment systems have been installed in Germany, or 0.04 percent of all metering connections.

265. In Great Britain, the regulator found that there are fewer price plans available for prepaid customers than for post-paid customers and that this could act as barrier to switching. See Section III.B.4.e for more detail.

266. Since prepayment meters are a pay-as-you-use scheme, concerns arose in Great Britain and New Zealand that customers would effectively self-disconnect if they could not afford to top up their meters. In Great Britain, Citizens Advice, a consumer advice organisation, found that 15 percent of the prepayment customers have at one point or another cut off their energy supply. The CMA retail markets investigation recommended that a cap on prepayment meter tariffs should be introduced as a transitional measure until the roll-out of smart meters was completed, scheduled for the end of 2020. It is envisaged that by then all prepayment customers will have “fully interoperable” smart meters that will lower retailers’ costs, and lead to a whole host of other benefits such as a wider choice of tariffs, easier customer switching, more flexible credit arrangements, and provide customers with opportunities to monitor and top up whenever necessary.

267. Ofgem duly implemented a cap in April 2017. Ofgem estimated that the price cap reduced prepayment customers’ dual fuel bills by an average of £60 per year. As a result of this cap, prepayment customers now pay less than customers on SVT paying by direct debit (£57 less for a typical consumer); however, the prepayment tariff is still higher than equivalent fixed-term tariffs.


431 Direct debit tariffs are typically the lowest cost form of each tariff type i.e. SVT or fixed cost. See Ofgem, “State of the Energy Market, 2017 Report”, 31 October 2017, p. 32.

268. In New Zealand, the regulator suggested that retailers strongly discourage prepayment meters due to the risk of self-disconnection. Instead, retailers should recommend bill smoothing and/or redirected payments, or as a final option, the use of bonds. If the consumer chooses to use bill smoothing, the regulator recommended that the consumer remains entitled to any prompt payment discounts from the retailer. These options should be communicated to all consumers at least once a year.

269. The Residential Electricity Market Performance report of 2015 noted that a number of retailers in New Zealand introduced new payment options, especially those that allow bill smoothing. For example, Genesis, one of the biggest retailers in New Zealand, offers bill smoothing through a “Control a bill” payment plan where consumers pay a constant amount throughout the year. Similarly, Contact Energy has a payment plan called “SmoothPay” which allows consumer to pay a constant amount throughout the year based on a frequency of their preference (e.g. monthly, fortnightly, and weekly). However, it should also be noted that prepayment meters are still offered by retailers, which remains an issue as prepayment customers do not have any specific customer protections and there is limited monitoring of the service.

IV.C.4. Payment support

270. Payment support is a subsidy extended to vulnerable customers, particularly to low income customers, to reduce the out-of-pocket expense of their electricity bills. We identified five main forms of payment support across the various jurisdictions: (1) discounts on bills; (2) lower prices for vulnerable customers (sometimes called social tariffs); (3) assistance in times of crisis; (4) one-off payments of outstanding arrears; and (5) support bundled within social security grants. These are shown in Table 9 and discussed in more detail below.

---

433 Electricity Authority, “Guideline on arrangements to assist medically dependent consumers”, p. 11.

434 Electricity Authority, “Guideline on arrangements to assist medically dependent consumers”, pp. 9-10.


438 Stuff.co.nz, Edmunds, S., “Power companies cut off more customers due to unpaid bills”, 2 June 2017.
Table 9: Types of payment support

<table>
<thead>
<tr>
<th>Source</th>
<th>Discount on bills</th>
<th>Lower prices/social tariff</th>
<th>Crisis assistance</th>
<th>Outstanding arrears paid</th>
<th>Social security grants</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>New York</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Texas</td>
<td>Yes</td>
<td>Yes*</td>
<td>Yes</td>
<td>-</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>No</td>
<td>Yes*</td>
<td>-</td>
<td>No</td>
<td>-</td>
<td>Energy voucher</td>
</tr>
<tr>
<td>Germany</td>
<td>No</td>
<td>Yes*</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td>Great Britain</td>
<td>Yes</td>
<td>No</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Cold weather, winter fuel payment</td>
</tr>
<tr>
<td>Italy</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>Grants for shared living space</td>
</tr>
<tr>
<td>Oceania</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia (NEM)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>New Zealand</td>
<td>No</td>
<td>No</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
</tbody>
</table>

Sources: Detailed jurisdiction summaries in Appendix C.

Notes: * For Texas, the LITE-UP program was offering lower prices for eligible low-income and elderly customers, however, this program ended in August 2016 due to insufficient funding. For France, social tariffs existed until December 2017 and were replaced by the energy voucher. German retailers offered social tariffs in 2008 but they were not competitive enough to persist.

IV.C.4.a. Discounts on bills

271. Discounts on bills are the most common form of payment support across the reviewed jurisdictions, either on a one-off or ongoing basis. As mentioned previously, there is the Low Income Home Energy Assistance Program (LIHEAP), in the US, that offers a one-time direct supplier payment based on the applicant’s gross income (no more than 150 percent of federal poverty guideline) and participation in other government-funded benefits programs. For Texas see, Benefits.gov, “Texas Comprehensive Energy Assistance Program (CEAP)”, accessed 9 March 2018. The program is administered differently across states, and is state and federally funded. In Illinois, participants in the program are given the option to participate in the Percentage of Income Payment Plan, where they would pay a fixed percentage of their income towards their energy bills and have the rest subsidised by the state. Customers also have their debt to the utility reduced with every on-time payment they make. In


Texas, the Comprehensive Energy Assistance Program (CEAP) provides financial assistance by paying up to eight of the highest bills during the year.442

272. Many network companies also have their own assistance programs for vulnerable customers. For example, National Grid in New York has an Energy Affordability Program to help low income customers manage their bills, where participants receive a credit on their bill and are automatically enrolled in the company’s budget billing plan.443 In Pennsylvania, Customer Assistance Programs (CAPs) are offered by the network companies to provide help to low-income, payment-troubled customers on default tariffs. Customers enrolled in a CAP receive a monthly credit towards their electric bill.444

273. As mentioned previously in Section IV.C.1, in the NEM, each state and territory government operates concession schemes targeted at vulnerable consumers.445 Most concessions are a set dollar figure off of the total bill, with the exception of Victoria, where the discounts are a percentage of the total bill.446

274. In Great Britain, the government provides the Warm Home Discount (WHD), which is a fixed rebate for energy bills between the months of September and March, for those who are in fuel poverty or are at risk of it.447 It also provides direct cash payments to low income customers and pensioners through the Cold Weather Payment, which gives eligible customers £25 for each week of very cold weather during winter.448 Pensioners receive an additional £100 to £300 for each winter through the Winter Fuel Payment.449 However the Winter Fuel Payment has been controversial in the past since it is not means tested. Elsewhere, in Italy, the regulator offers a social bonus, which provides an annual discount on a customer’s electricity bill.450

---


443 See: National Grid, Upstate New York, “Manage your utility bills with our Energy Affordability Program”.


445 States in the NEM offer more multiple concession schemes. For details, see Simply Energy, “Concessions & Grants”, accessed 7 June 2018.


IV.C.4.b. Lower prices

Lower prices (or social tariffs as they are referred to in Europe) are special tariffs that are offered to low-income customers. LITE-UP Texas was a program established in 1999 which allowed eligible low-income and elderly customers to avoid paying a certain proportion of their regular price of electricity, which was a set amount in cents per kilowatt-hours off of the tariff they would otherwise have paid.\(^\text{451}\) However due to insufficient funding, this program ended in August 2016.\(^\text{452}\)

France also offered social tariffs from 2005 through 2017.\(^\text{453}\) When the social tariff program ended in December of 2017, the program had reached about 3.2 million out of the 4 million targeted households.\(^\text{454}\) In January 2018, France replaced the social tariff with an energy voucher system, based on a pilot study that found that the voucher system achieved a greater penetration than social tariffs.\(^\text{455,456}\) In addition to paying for energy bills, these vouchers can be saved to be used for larger expenses, such as energy efficiency upgrades.

In Germany, social tariffs have been the subject of significant debate (especially around 2008, when the Minister for the Environment postulated that every energy retailer should offer a social tariff). Matthias Kurth, president of the regulator at the time, criticised social tariffs for distorting competition by lowering retail prices and thereby creating a barrier to new entry.\(^\text{457}\) There is currently low take-up for social tariffs, as there are many lower priced offers from competing retailers.\(^\text{458}\)


\(^\text{453}\) National Energy Ombudsman, “2016 Activity Report”, p. 79. Social tariffs are respectively called “Tarif de Première Nécessité” for electricity, and “Tarif Special de Solidarité” for gas.

\(^\text{454}\) Extract from the CRE’s 2016 Monitoring Report.

\(^\text{455}\) The French Government provides information on how to use the voucher on an official website. “Le Chèque Energie”, accessed 27 February 2018.


IV.C.4.c. Crisis assistance and outstanding arrears paid

278. Crisis assistance in times of emergency provides temporary relief. Most states within the NEM have crisis support systems, whereby the respective state governments provide financial assistance to retail customers in the event of an emergency or crisis.459

279. In the US, LIHEAP funds may be used for emergency situations where customers are in danger of having their electricity disconnected or running out of heating fuel. Network companies may offer their own programs; for example, Ameren Illinois has a “Warm Neighbors Cool Friends” initiative, which funds energy assistance for those who need temporary relief through donations.460

280. Outstanding arrears have compounding adverse effects and may worsen the future outcomes for vulnerable customers. In Germany, social welfare recipients can apply to have any outstanding electricity arrears paid by the social security system or job centre. This can be implemented via either a direct payment to the retailer or a social loan to the social welfare recipient.461 The effort can also be led by network companies; for example, FirstEnergy in Pennsylvania offers CAP customers a one-time opportunity to have their current account balance removed.462 In Illinois, the PIPP program offers low-income customers the opportunity to receive a reduction in the outstanding balance for every payment they make on time.463 In New Zealand, residential customers who have an “immediate and essential need” and have an outstanding payment on their electricity bill can apply for a grant from the Work and Income department of the Ministry of Social Development. The department may provide up to NZ$200 towards the outstanding bill, or to cover reconnection fees. To be eligible, consumers need to be at least 16 years old, reside


461 In 2014 a job centre denied a social welfare recipient a loan to cover his outstanding debt, even though his retailer threatened to disconnect. The responsible state social court decided that this was illegal and forced the job centre to grant a loan to the recipient. The court argued that the recipient had tried everything to avert the disconnection by offering the provider a payment scheme and, hence, the loan was the only possibility to avoid a disconnection. NRW Social court, L 7 AS 1289/14 B ER and L 7 AS 1290/14 B, 28 August 2014.

462 FirstEnergy Companies, “Pennsylvania Customer Assistance Program”.

463 Illinois Legal Aid Online, “Low Income Home Energy Assistance Program (LIHEAP) Benefits”.
in New Zealand, be a citizen or a permanent resident, and be under the income and asset limits.464

281. In Great Britain, a number of charity organisations administered on behalf of some retailers have been established to assist vulnerable consumers (e.g. EDF Energy Trust, E.on Energy Fund, Npower Energy Fund). These energy trusts or funds aim to help individuals or families in need, and can include benefits such as helping customers to get out of debt, purchasing energy efficient household items, and subsidising insulation costs.465 These schemes are run in conjunction with government grants such as the Warm Home Discount, Winter Fuel Payment, and the Cold Weather Payment.

IV.C.4.d. Social security grants and other off-bill payments

282. Social security grants are payments provided by governments with the understanding that the grant will be put towards housing and heating. In Germany, unemployed individuals, part-time workers, asylum seekers, minors in low-income families, and the chronically ill are eligible for social grants paid by the social security office or local job centre.466 The average social welfare recipient spends about €34 per household per month on energy, or eight percent of their total monthly income grant.467 In the Netherlands, social security grants also cover housing costs, supposedly including electricity costs.468 There are also Housing Allowance Service Grants for low-income workers who share a living space. These grants are intended to cover the energy costs of common living areas.469 New Zealand announced in December 2017 a “Winter Energy Payment” program, which targets pensioners, young parents, job seekers, independent youths, and those on the Emergency Benefit470 program, amounting to nearly one-fifth of the population. The

---


469 Insight Energy, “Energy poverty and vulnerable consumers in the energy sector across the EU: analysis of policies and measures”, p. 95.

program will begin in the winter of 2018 and will pay NZ$20-30 per week during the winter for the recipients to keep their home warm.471

283. As mentioned above, France gives customers energy vouchers which can be used for paying bills, or saved for up to two years to be used on larger energy efficiency upgrades. Vouchers can only be used with pre-approved vendors. In France, there is the Solidarity Fund for Housing (FSL), a government fund that provides financial relief for customers who cannot afford housing and energy expenses.472

IV.C.5. Protection from disconnection

284. In addition to receiving payment support, vulnerable customers may be exempt from disconnections in special circumstances (shown in Table 10); however, the customer still remains responsible for paying their bills. As a safeguard against adverse competitive outcomes, the New York Public Service Commission passed an order in 2014 requiring that, if a retail customer is facing disconnection for non-payment and the customer’s retail supply charges are greater than that which the customer would owe under the default tariff, the customer only needs to pay the comparable default tariff charges to avoid disconnection.473

285. In the NEM, the National Energy Retail Law prohibits retailers from disconnecting consumers for non-payment where the outstanding amount is less than the AER approved amount (currently $300) and the consumer has agreed to repay the amount. In addition, irrespective of the amount owed, retailers cannot disconnect consumers if they are adhering to a payment plan or participating in a retailer’s hardship program.474 Consumers are also protected from disconnections during business days before 8am or after 3pm; Fridays or the day before a public holiday; weekends or public holidays; and the days between 20 December and 31 December in any year.475 Disconnections are also not permitted for households that have life support equipment.476


472 Fonds de solidarité pour le logement (FSL), (Solidary Fund for Housing).


475 National Energy Retail Laws, “De-energisation (or disconnection) of premises – small customers”, pp. 77-78.

Table 10: Protection from disconnections

<table>
<thead>
<tr>
<th></th>
<th>Medical reasons</th>
<th>Weather conditions</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>Yes</td>
<td>Yes</td>
<td>Low-income customers</td>
</tr>
<tr>
<td>New York</td>
<td>No</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Yes</td>
<td>Only for low income customers and victims of domestic violence</td>
<td>Domestic violence victims the day before a weekend or holiday</td>
</tr>
<tr>
<td>Texas</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>-</td>
<td>Yes</td>
<td>Reducing capacity before disconnections</td>
</tr>
<tr>
<td>Germany</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Great Britain</td>
<td>Yes</td>
<td>Yes</td>
<td>Prohibition during winter months</td>
</tr>
<tr>
<td>Italy</td>
<td>Yes</td>
<td>-</td>
<td>Minimum service before disconnections</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td><strong>Oceania</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia (NEM)</td>
<td>Yes</td>
<td>-</td>
<td>Customers facing payment difficulties (&quot;Hardship customers&quot;), customers on payment plans, protected periods**</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Yes</td>
<td>Yes</td>
<td>On Fridays, the day before a public holiday, during civil emergency</td>
</tr>
</tbody>
</table>

Sources: Detailed jurisdiction summaries in Appendix C.

Notes:
* In Germany there are no rules surrounding disconnections, but the court system effectively prohibits disconnections on the basis of medical reasons, weather conditions, and if the consequences of the interruption would be disproportionate to the severity of the default.

** Protected Period: Business day before 8am or after 3pm; on a Friday or the day before a public holiday; a weekend or a public holiday and; the days between 20 December and 31 December in any year.

**Medical reasons**

286. Medically dependent customers are exempt from disconnections in many jurisdictions as discussed previously. In Italy, electricity customers who are dependent on medical equipment cannot be disconnected; however they can be placed on minimum service if this is sufficient capacity to power their medical equipment. In the Netherlands, the Ministerial Decree regarding disconnections for small electricity and gas consumers prohibits the disconnection of medically dependent (vulnerable) consumers. In Pennsylvania, networks are not allowed to disconnect households facing a medical emergency. However, the customer must not have any unpaid bills to qualify for this protection. In Illinois, networks are not allowed to disconnect a residential customer for 60 days upon the receipt of a valid


478 Ministerial Decree regarding disconnections for small electricity and gas consumers, article 5.
medical certificate for a resident of the household. In Texas, if a customer establishes with a retailer that a resident on their premise has a “critical medical condition and will become seriously ill or more seriously ill if there is a disconnection of service”, then the retailer may not authorise a disconnection.\textsuperscript{479} In Great Britain, customers who are disabled, have a chronic sickness or other long-term medical condition, or special communication needs, can register with their retailers. They will not be disconnected during winter months.\textsuperscript{480}

IV.C.5.b. Weather conditions

287. Extreme weather conditions may also warrant exemptions to disconnections. In Illinois, network companies are not allowed to disconnect residential customers on any day (or a day immediately preceding a weekend or public holiday) when the National Weather Service forecast is below zero degrees (32 degrees Fahrenheit), or above 35 degrees (95 degrees Fahrenheit).\textsuperscript{481} Similarly, in Texas retailers are not allowed to disconnect customers from electric services in extreme weather emergencies. In addition, in Texas, the retailer must offer the customer a deferred payment plan for bills due during the emergency, if requested.\textsuperscript{482}

288. In New Zealand, disconnection of vulnerable consumers must not take place when reconnection on the same day would be difficult. This includes Fridays, the day before a public holiday, during extreme weather conditions, and during a civil emergency.\textsuperscript{483}

289. More generally, there are exemptions for customers during the winter months (sometimes called the winter truce). For example, in Illinois, networks are not allowed to disconnect any residential low-income customer who is a participant of

\begin{flushleft}
\textsuperscript{482} Further detail on extreme weather is provided by the PUCT: “An electric utility cannot disconnect a customer anywhere in its service territory on a day when: (1) the previous day’s highest temperature did not exceed 32 degrees Fahrenheit, and the temperature is predicted to remain at or below that level for the next 24 hours, according to the nearest National Weather Service (NWS) reports; or (2) the NWS issues a heat advisory for any county in the electric utility’s service territory, or when such advisory has been issued on any one of the preceding two calendar days.”, see PUCT, “Chapter 25, Substantive Rules Applicable to Electric Service Providers”, p. 92, accessed March 12, 2018.
\textsuperscript{483} Electricity Authority, “Guideline on arrangements to assist vulnerable consumers”, 1 November 2010, p. 11.
\end{flushleft}
the Energy Assistance Act of 1989 between December 1 and March 31. In Pennsylvania, if a household’s income level is below 250 percent of the federal poverty level or if the customer is a victim of domestic violence, they cannot be disconnected between 1 December 1 and 31 March. In France, retailers cannot disconnect customers from November to March. In Great Britain, customers who are eligible for the Priority Service Register, including pensioners, customers with medical conditions, or customers in a vulnerable situation, are not allowed to be disconnected during the winter months. In the Netherlands, the Ministerial Decree bans disconnections between October and April for all residential consumers.

IV.C.5.c. Further safeguards

As a further safeguard, some jurisdictions have moved to a hybrid solution where non-paying customers are not disconnected completely, but see the amount of electricity they can receive cut down to a bare minimum level such that multiple appliances may not be able to run at the same time. For example, in France, the Energy Ombudsman advocates reducing the capacity of supply as an initial step before disconnecting customers. In Italy, the roll out of smart meters has enabled further safeguards to be provided for customers who are in arrears. Instead of being disconnected immediately, they are left with a minimum service, equal to 0.5 kW, for two weeks before they are completely disconnected.

---


485 The PUC notes that the poverty levels can change each year, see Pennsylvania Public Utilities Commission, “Your Rights and Responsibilities as a Utility Consumer,” p.16.


487 It is a system designed and managed by Ofgem to ensure individuals with special requirements get additional support from their energy retailers. Customers who can sign up to the Priority Services Register are those who are either of pensionable age, are disabled or chronically sick, have a long-term medical condition, have a hearing or visual impairment, or are in a vulnerable condition. Customers will receive free services such as advanced notice of planned power cuts or meter reading services.


489 Dutch Legislation, “Ministerial Decree regarding disconnections for small electricity and gas consumers”, 1 August 2013, article 5.


In the absence of targeted disconnection protections, network companies may resort to disconnections to cut off electricity supply in cases of non-payment. To prevent this from happening without the customer’s knowledge, there are rules around how much notice the networks have to give customers before carrying out the disconnection.

In the NEM, the retailer is required to send consumers “reminder notices” and “disconnection warning notices” before disconnection. The reminder notice must be sent at least one business day after the pay-by date and must specify a period by which the consumer has to pay the outstanding amount (which must be at least six days after the reminder notice was issued). If the consumer does not pay the amount during this specified time period, then the retailer must send a disconnection warning notice. This notice must also specify a period (minimum six days after the issued disconnection warning notice) by which the customer must pay or get disconnected.492,493

In October 2017, the Victorian government established a new “Payment difficulty framework”, which places additional obligations on retailers prior to disconnections. Under this new framework, customers must receive “tailored assistance” which gives customers entitlement to: repay debt monthly for no more than two years, receive advice about payment options, place debt repayment on hold for at least six months; and others.494 Retailers that wrongfully disconnect customers will have to pay $500 per day back to the customer and in addition to that, they may also be charged with a $5,000 penalty.495

In France, retailers have to send two notices, one 14 days after the invoice due date and a second 15 days after the first letter, clearly indicating the availability of support programs such as the Housing Solidarity Fund. Retailers must wait 20 days from sending the second letter before disconnecting the consumer.496 In Great Britain, customers have 28 days to contact their energy retailers to repay their outstanding debt, or risk getting disconnected.497 In the Netherlands, the disconnection process usually takes up to 60 working days. The retailer has to first send a notice of non-payment, then a reminder, or outsource the debt collection


493 National Energy Retail Rules, “De-energisation (or disconnection) of premises – small customers”, pp 77-78.


process to a third party. Twenty working days later, if the payment is still outstanding, the retailer may disconnect the customer.498

V. Policies that could be relevant in the NEM

295. In this section we highlight policies that have been adopted in the jurisdictions we surveyed and which address issues that may be relevant in the NEM based on issues raised in the ACCC’s preliminary report.

A. Learnings on price regulation and targeted support for vulnerable consumers

296. **Price regulation of default tariffs.** The clearest and most significant policy choice revealed by comparing the design of retail markets across the ten jurisdictions covered in this report concerns the nature of the default tariff and its impact on consumers. In some jurisdictions, customers who do not actively choose a retail offer will be defaulted onto an unregulated offer provided by one or other of the retailers in the market. Although there is no regulatory control over the price of the default tariff, the default tariff is itself competitive, in the sense that suppliers are free to change the price of the default tariff (subject to general customer protections such as notice periods), and the price is presumably limited by the prospect that if prices are too high, customers will be prompted to seek an alternative in the market. In stark contrast, in other jurisdictions the structure, price level, and other design features of the default tariff are determined by the regulator. In these jurisdictions, the default service is seen as a low cost alternative to competitive supply and customers can opt-in to it. Even though customers are eligible to participate in a retail market, many or most customers remain on the default tariff and are paying a regulated price for a regulated service offering.

297. Some price regulated default service offerings (notably in the US) use competitive auctions to procure wholesale power. In this way the regulator can ensure that customers on the default tariff secure service at a competitive price, at least as regards the wholesale power purchase cost element of the final bill, with the other elements of the bill being controlled via cost-based regulation of the network utility. However, there are several drawbacks: (1) since the service is regulated, it will be “one size fits all” by definition, leaving little room for innovation, including in relation to the structure of the price; (2) if the default service is highly subscribed, it may limit the size of the competitive market; and (3) removing customers from the market may make the retail market less attractive than it could otherwise be, thereby increasing prices for the remaining customers. In New York, for example, only about 20 percent of customers are on competitive offers. While an efficiently set default tariff can approximate a competitive outcome in one dimension—average

price—there are other services that retailers could compete on that would add value to customers, such as different pricing structures and demand management.

298. In markets where the default price is set in the market, default tariffs typically play a more limited role.\textsuperscript{499} Prices are generally higher than other offers available in the market and customers do not typically opt-in to the default, but land up there if they are disengaged (ie, by default). Regulators may wish to shield these customers from high prices through a price ceiling on default service. However, such a policy may backfire by acting as a pricing focal point. In Great Britain, the regulator introduced a tariff ceiling (safeguard) for prepayment service. While this lowered prepayment prices overall, some mid-tier retailers were already offering prepayment prices below the safeguard level. Since the price cap became effective, the regulator has observed that many of the mid-tier retailers chose to increase their prices to match the cap.\textsuperscript{500} In the Netherlands any new service offering or change has to be submitted to the regulator at least four weeks before it comes into force. The retailer has to provide a breakdown of the costs and the regulator uses this information to determine whether the price is excessive. The regulator does not publish its assessment methodology since it believes that doing so would lead to new tariffs clustering around the maximum allowed price, hindering competition.\textsuperscript{501}

299. Where regulators are concerned about the impacts of default service prices on customers, policy responses could include: concessions or income support; regulating the price of the default tariff generally; regulating the price of the default tariff for specific customer groups (e.g., vulnerable customers); or intervening to create switching away from the default tariff (for example, through group buying). If interventions to regulate prices or create switching were to be introduced in the NEM, we would suggest that steps should be taken to limit the number of customers involved, so as to maintain the benefits of a competitive market for the majority of customers. The right to supply customers eligible for a regulated default tariff could be granted through a competitive price setting process, and “add on” services such as demand side management and energy efficiency could be included. Eligibility could be limited to vulnerable passive customers who failed to engage with the market (eg, who had remained on the standing offer for some period of time). By having a well-defined and limited group that other customers cannot easily opt into, the low price resulting from an auction should have less of an impact on retail competition for customers generally. We note that our review does not provide any examples of a regulated default tariff that successfully provides protections for a targeted group

\textsuperscript{499} Although default service will still act as a valuable consumer protection as it ensures that all customers have access to electricity supply.


of customers without either having unintended adverse consequences for that group, or undermining the retail market generally.

B. Reducing barriers to new retailer entry

300. **Obligations placed on retailers can constitute entry barriers.** In Great Britain, retailers are responsible for operating a scheme to improve home energy efficiency. Small retailers are relieved of the obligation to participate until they reach a certain size threshold (the obligation starts at 250,000 customers).\(^{502}\) The idea is to reduce the cost base of smaller retailers in order to encourage entry and promote competition. It is likely that there are significant economies of scale in energy retailing (e.g. due to fixed costs of developing software to manage billing and customer contact). Requiring entrant retailers to comply with the full suite of regulations applied to existing retailers with millions of customers adds to these fixed costs. This may be particularly the case for prospective “start-up” retailers that want to bring new services and/or a completely new approach to market. Creating a simpler or reduced set of rules and obligations for new retailers below a certain size threshold could lower entry barriers, and allow for greater competition and innovation in the market. However, there will be a trade-off with reduced consumer protections.

C. Better access to data and enabling third-parties

301. **Multi-party access to electricity data can reduce switching costs and promote competition.** Metering data usually belongs to the customer, but access is often effectively controlled by their retailer. Data can only be shared with third-parties at the customer’s request, but there are often barriers to doing so, whereas the retailer can easily access the data at any time. This asymmetry may give the customer’s retailer a competitive advantage and increase customer switching costs. Granting data access to customer-sanctioned third-parties may intensify competition, since they can more easily compete to provide services such as customised usage information and analysis and bill alerts. In addition, they can provide other services that help facilitate retail competition, such as automatic customer switching. For example, Flipper, a third-party switching service in Great Britain, automatically identifies the best deals for its customers and handles the switching process on the customers’ behalf.\(^{503}\) Voltz similarly provides smartphone-based switching and advisory services in Great Britain.\(^{504}\) In New Zealand, Frank is a service where

---


503 Michael, R., BBC News, "*Can smart switching cur your energy bills?*", 1 July 2016.

504 See Voltz website, accessed 1 June 2018.
customers upload a photo of their bill to a smartphone app which then automatically switches them when a better deal arises.\textsuperscript{505}

302. Customers in the NEM do not own their usage data, but do have a right to access it.\textsuperscript{506} As access to data is expanded to third-parties, privacy concerns need to be addressed and consumer safeguards put in place. Work is currently underway on these issues in the NEM and abroad. In New Zealand, the regulator is currently conducting a consultation into how smart meter data can be shared among multiple partners to the household, besides the retailer.\textsuperscript{507} In the NEM, the COAG Energy Council published a consultation paper on facilitating third party access to energy consumption data in March 2018. The Treasury is also working on developing a national consumer data right that will cover many sectors, including energy.\textsuperscript{508} In addition, as part of the 2018 Federal Budget, a $28 million plan was announced to collect energy data and make it available for consumer groups and service providers.\textsuperscript{509}

D. Energy efficiency is an important part of protecting vulnerable customers

303. **Energy efficiency mandates and funding will reduce customer bills.** Energy efficiency is relevant to the discussion of vulnerable customers because upgrades to more energy efficient appliances or more insulated housing can lead to significant savings in the long run.

304. In the US, federal funding is provided for reducing energy consumption. States have the discretion to allocate a share of their federal low income energy assistance funding to energy efficiency.

305. In Germany, the “Energy Saving-Check” program focuses on training long-term unemployed individuals to advise low income households on energy savings

\textsuperscript{505} Saveawatt, “Meet Frank – your personal power assistant,” accessed 1 April 2018.

\textsuperscript{506} AEMC, “National Energy Retail Rules”, 10 April 2018, p. 45.


\textsuperscript{509} Potter, B., “Federal Budget 2018: A better deal on power for consumers”, AFR, 8 May 2018.
techniques and energy efficient products. On average, each household saved about €130 per year during the first phase of the project.

306. In France, the National Housing Agency has been managing a scheme which provides funds for energy-efficient housing works. French customers who receive payment support in the form of energy vouchers can save these vouchers and use them for energy efficiency investments through pre-approved providers.

307. In Great Britain, larger retailers have an obligation to deliver energy efficiency measures to their residential customers. As of March 2016, there had been 1.8 million installations under this scheme.

308. In the Netherlands, the Energy Saving Covenant requires landlords of social housing to improve the energy efficiency of their properties as a pre-condition to raising the rent. Moreover, landlords are only allowed to raise the rent by the amount that their tenant's energy bill is expected to decrease as a result of the energy efficiency measures, so that there is no net increase in housing costs to customers.

309. In New Zealand, the Energy Efficiency and Conservation Authority runs the “Warm Up New Zealand” program, which provides funding for residential insulation retrofitting for low-income households or those with special medical needs.

310. In Australia, there are no national energy efficiency mandates or funding programs. However there are national equipment and labelling standards; state energy efficiency funding schemes; and obligations for retailers to provide energy efficiency information to consumers in hardship. The ACCC notes that information provided by retailers on energy efficiency has largely been limited to electricity audits and general information on government energy efficiency schemes.

---


514 EECA, “Warm Up New Zealand: Funding for insulation”.


and how to use energy more efficiently. The ACCC further notes that governments are exploring programs to improve energy efficiency in vulnerable households through state based schemes and the National Energy Productivity Plan.

E. Kick starting competition for passive consumers

311. **Increase the visibility to the market of passive customers.** Customers on default supply have either never engaged with the market or have not actively chosen a supplier or price plan for a long period of time. Although these customers are on a default rate that is market determined, they are also in a sense “hidden” from the market, or are much harder for competing suppliers to engage with. This can create a large information asymmetry between the customer’s current retailer, which has an incentive to keep them on an above-market price, and competitors, which would like to win the customer over with a better price, but do not have easy access to the customer to inform them of available choices.

312. In Great Britain, the regulator has plans to create a database of passive customers with a tentative roll-out in 2018, and to make such information available to all retailers to encourage targeted outreach. The database is being populated by the retailers, who are required to provide details of residential consumers who have been on default tariffs for three years or more. This database has the purpose of reducing information asymmetry between competitive retailers and the incumbent retailers by providing entering retailers information about who the passive customers are.

313. Two trials have been carried out to test the effectiveness of outreach to passive customers in the database. Treatment customers were sent information on alternative retailers and offers. Interestingly, qualitative interviews suggested that few of the customers contacted switched to the retailers they received information about. Customers were more likely to be prompted to look at information on the PCWs or to negotiate with their current retailers for a better tariff, using the new information.

314. This policy aims to assist passive customers to engage with the market and obtain market contracts at lower prices than default service. However there may be consequences for other customers in the market. Where passive customers pay higher prices than more engaged customers for otherwise similar services, this could be viewed as an example of price discrimination. Policies that have the effect of

reducing price discrimination are beneficial for those customers who were paying the higher price, but may result in price increases for other customers. Since not all passive customers are vulnerable and not all vulnerable customers are passive, it is not clear to what extent this policy may impact vulnerable customers.

315. **Official price comparison websites are complemented by active marketing.** It is not clear whether customers are well aware that price comparison websites (PCWs) exist and whether they are able to effectively distinguish between an official PCW and an “independent” commercial PCW in a web search. Promoting the official PCWs through multiple channels can educate customers about the advantages of PCWs and steer them to the most useful resources. There is a risk that vulnerable customers with language and computer access barriers may be left behind, but this can be countered with sufficient effort in different forms of engagement. As with any policy aimed at influencing customer behavior, extensive testing is necessary to maximise impacts and reduce the risk of unintended consequences.

316. New Zealand has the highest annual switching rate out of all of the jurisdictions we surveyed. This is likely attributable to the NZ$11 million “What’s My Number” campaign that ran alongside its price comparison website of the same name, as well as an NGO-run switching tool. Launched in 2011, the 3.5-year campaign involved multi-media advertisements that educated consumers regarding their retail options and the simplicity of the switching process. The New Zealand regulator worked with various community groups, such as budget advisory services and public libraries, to promote the switching tool in an effort to reach lower income and vulnerable consumers.\(^521\) The regulator has concluded that the campaign had “an immediate and ongoing impact”,\(^522\) with two-thirds of customers now believing it was worthwhile to switch retailers.\(^523\) In the Netherlands, the competition commission ran a media campaign in 2013 alongside their price comparison website. Entitled “If you snooze, you lose” (Niets doen kost je poen), the campaign aimed to raise awareness around the benefits of switching. In a recent trial of price comparison websites in the UK, “Check Your Energy Deal”, the regulator used a digital agency to raise service awareness of its PCW through social media. While the trial was effective at inducing switching, it is not clear how much was attributable to the social media campaign and how much to the price comparison website.\(^524\)


\(^524\) Ofgem, “[Private Beta Digital Trial, Early Findings and Insight](https://www.ofgem.gov.uk/Private-Beta-Digital-Trial-Early-Findings-and-Insight)”, February 2018.
Appendix A. Consumer satisfaction

317. In the section below, we examine consumer outcomes from the market by looking at customer satisfaction surveys to assess how retail competition is doing from the consumers’ point of view. In all jurisdictions, customer satisfaction surveys give us insights into the customer experience in the retail electricity market. However, these studies differ in their research questions and methodologies, making it difficult to compare rates of customer satisfaction across jurisdictions. More feasible to extract is a region-wide comparison of customer satisfaction, such as in the US or Europe. Below, we discuss the results of the studies we reviewed.

318. In the US, market research firm, J.D. Power, conducted consumer surveys between August 2015 and June 2016 relating to customer satisfaction in the retail electricity market. For nine US states, including the four that we study in this report, the survey aggregated a total of 20,000 online interviews to assess customer satisfaction relating to price, communications, corporate citizenship, enrolment and renewals, and customer service. For Texas, the study also considered billing and payment. The report shows that Texas had the highest satisfaction rate in the study, with a score of 730 out of 1,000, while New York came in second at 680. This is followed by Pennsylvania (669 points) and Illinois (second-lowest in the study at 627 points, and lower than the overall average of 666 points).525,526

319. In Europe, the European Commission publishes every year a Customer Market Survey of all of its Member States, which asks customers: (1) how much they trust retailers; (2) how easily they can compare offers; and (3) how satisfied they are with their options. The most recent 2016 survey, which measures satisfaction on a scale of 100 points, showed a wide dispersion of scores across the Member States. While France and Germany performed well above the EU average of 75.3 points, Great Britain and the Netherlands were just above the average, and Italy was below the average.527

320. In New Zealand, the Electricity Authority conducts annual surveys to gauge consumers’ satisfaction with the electricity market, in comparison with other industries. The latest survey, from December 2016, found that 69 percent of customers were either “very satisfied” or “somewhat satisfied”, while 9 percent were “somewhat dissatisfied” or “very dissatisfied,” with the rest being neutral or unsure. These scores were lower than industries such as banking, but higher than industries

525  Overall average: 671 (Connecticut) + 627 (Illinois) + 662 (Maryland) + 656 (Massachusetts) + 676 (New Jersey) + 680 (New York) + 620 (Ohio) + 669 (Pennsylvania) + 730 (Texas), divided by 9 states, yields 666 points out of 1000.


such as insurance, and overall the retail electricity market came close to the average of the five industries studied.

321. In Australia, the AEMC’s Retail Energy Competition Review reports on customer satisfaction for all regions of NEM except regional Queensland and Tasmania. According to Newgate’s 2017 survey as reported in the AEMC’s review, residential satisfaction with electricity retailers was 73% in 2017. In addition, the survey also found that: residential satisfaction with value for money for products and services received from electricity retailers was 61%; and residential satisfaction with customer service was 71%.

Table 11: Customer satisfaction in 2016 by region

<table>
<thead>
<tr>
<th>Region</th>
<th>J.D. Power survey</th>
<th>EU survey</th>
<th>Other surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>627/1000</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>New York</td>
<td>680/1000</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>669/1000</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Texas</td>
<td>730/1000</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>NA</td>
<td>84.6/100</td>
<td>NA</td>
</tr>
<tr>
<td>Germany</td>
<td>NA</td>
<td>83.2/100</td>
<td>NA</td>
</tr>
<tr>
<td>Great Britain</td>
<td>NA</td>
<td>76.9/100</td>
<td>NA</td>
</tr>
<tr>
<td>Italy</td>
<td>NA</td>
<td>71.8/100</td>
<td>NA</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>NA</td>
<td>77.0/100</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Oceania</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia (NEM)</td>
<td>NA</td>
<td>NA</td>
<td>73%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>NA</td>
<td>NA</td>
<td>69%</td>
</tr>
</tbody>
</table>

Sources: Detailed jurisdiction summaries in Appendix C.
Notes:
* J.D. Power survey average was 666 points out of 1,000, across nine states.
** EU survey average was 75.3 points out of 100, across 28 Member States.

322. It is difficult to draw any conclusions that link these customer satisfaction indices to competitive outcomes. Many factors may influence customer satisfaction: price levels and changes, service quality, political beliefs, and social support services. For example, while Texas has the highest customer satisfaction scores for a US state and is the most competitive market in the US, the same cannot be said of France,

---


which tops the EU survey on customer satisfaction, but lags on competitiveness with one retailer serving more than 90 percent of the residential market.  

Appendix B. Introduction to detailed jurisdiction summaries

We began our research by setting out questions to be answered for each of the ten jurisdictions we cover, forming a common research template that we followed for each jurisdiction. Our research can be grouped into seven main areas: (1) overview of retail competition; (2) consumer engagement; (3) smart meters and access to consumption data; (4) consumer safeguards; (5) targeted protection of vulnerable customers; (6) promotion of competition; and (7) outcome of retail competition. Due to availability of information and differences in policies and focus between jurisdictions, the actual detailed summaries may differ in their focus and content, although they are built on a common frame. We examined the following questions for each jurisdiction:

B.I. Overview of retail competition

- What was the process for deregulation in the retail electricity market?
- Which electricity subservices, such as billing and metering, are competitive?
- Is there regulation of retail prices? Are there many customers on the regulated option?
- Who monitors the competitive market (energy authority, competition authority, any recent inquiry)?
- Who are the major players in the market?
- Is collective bargaining allowed?

B.II. Consumer engagement

- What policies are in place to increase customer engagement in the market? Are there rules around how and when retailers can contact customers?
- Are there official price comparison websites (PCWs)? What standards govern commercial PCWs?
- Are there policies to ensure transparency and ameliorate choice? What are the requirements pertaining to disclosing and formatting information on contracts, bills, and notices? To what extent do these rules dampen or promote competition?

B.III. Smart meters

- What is the plan for smart meter roll-out?
- Who has access to customers’ smart meter data?
- Do smart meters allow remote reading? What has been the impact on switching?

B.IV. Consumer safeguards

- What characteristics does the default tariff have, and what types of consumers end up on these plans? To what extent does the default tariff limit the customer base available to the market?
- What consumer safeguards are in place to ensure that consumers are protected from misleading business practices (e.g. standard contracts, obligation to disclose offers on the web)?
B.V. Targeted Protection of Vulnerable Customers

- How does the jurisdiction define vulnerability in residential consumers, and what measures are in place to protect such consumers? How effective have these policies been?
- What are the rules surrounding electricity disconnections for non-payment?
- What system is in place to ensure that customer complaints are resolved satisfactorily?

B.VI. Promotion of Competition

- How do customer acquisition costs and cost of entry affect the scope of retail competition?
- What are some barriers to switching? Is the switching process cumbersome? Are customers penalised for terminating their contract early or for changing their mind? How are barriers to switching, such as language barriers and internet literacy, addressed?

B.VII. Outcome of Retail Competition

- How competitive are the surveyed jurisdictions? How many suppliers are there? What market shares do they hold? What is the share of incumbent supplier? How has that evolved?
- How diverse are the products and tariffs offered? What are some innovative technologies (e.g. energy efficiency measures, embedded generation, bundled with non-energy services, consumption data on smart phones)?
- How satisfied are consumers from the retail service based on consumer satisfaction surveys?

Our answers to these questions are recorded in detailed write-ups for each jurisdiction below.
Appendix C. Detailed summary of each jurisdiction

C.I. ILLINOIS, USA

C.I.1. Overview of retail competition

325. The Illinois electricity retail market has an HHI of 1,322. This includes all customer classes and may not account for those customers who are on default service.\(^{531}\) Four investor-owned public utilities (networks)\(^{532}\) deliver electricity to retail customers in Illinois: Ameren Illinois Company (“Ameren Illinois”), Commonwealth Edison Company (“ComEd”), MidAmerican Energy (“MidAmerican”), and Mt. Carmel Public Utility Company (“Mt. Carmel”). ComEd and Ameren Illinois are the state’s two largest networks. Municipal systems and electric cooperatives also deliver electric service in Illinois, but are not subject to regulation by the Illinois Commerce Commission (“ICC”), which regulates electric distribution networks, amongst other activities.

326. Up until 1997, all electric service in Illinois was provided by vertically integrated electric providers, each of whom had a monopoly in their geographic service territory (e.g. ComEd, Ameren Illinois). Retail electricity competition in Illinois was codified with the enactment of House Bill 362: the Electric Service Customer Choice and Rate Relief Act of 1997 (“the Act”).\(^{533}\) The market became fully competitive for all customer classes in May 1, 2002.\(^{534}\) Those customers who decided not to switch to retailers were able to remain with their distribution company and obtain service through a default tariff whereby the distribution company purchased energy on behalf of the remaining customers.

327. The Act did not require a divestiture (ownership) separation of generation and distribution assets but it did provide the ICC with the authority to investigate the need for such regulations as well as the need for functional separation between a network’s competitive and non-competitive services.\(^{535}\) All of the major utilities in Illinois chose to transfer generation assets to affiliates where any business transactions must be at arms-length and are governed by a series of standards of

\(^{531}\) London Economics, “Energy Retail Markets Comparability Study”, April 2012, Figure 50.

\(^{532}\) Distribution companies are typically referred to as utilities in Illinois. To maintain consistency with the remainder of the report, we will use the term networks or distribution companies throughout this memo. Similarly, we will use the term retailer rather than retail electric provider (REP), which is the common term used in the US.


conduct and functional separation. ComEd divested its fossil fuel generation plants to unaffiliated third parties, but through mergers and acquisitions is now part of the Exelon Corporation which owns generation assets.

In addition to the default tariff, the incumbent distribution companies (e.g., ComEd and Ameren Illinois) can also offer competitive retail services by setting up a separate retailer subsidiary (also known as an affiliated interest). There are, however, a number of non-discrimination provisions that deal with items such as: restrictions on joint marketing and advertising; tying of any delivery service to the taking of goods and services of the affiliated interest; release, assignment, and brokering of capacity of electric transmission to affiliated interests or their customers; provision of information related to the network’s transmission or distribution systems to affiliated interests; confidential treatment of unaffiliated competitive retailers’ information; restrictions on the joint employment of staff between the network and the affiliated interest, with the exception of corporate support; maintaining separate books, accounts and records.

The ICC is the authority that oversees and regulates public utility services in Illinois. Additionally, the Office of Retail Market Development (“ORMD”) “actively seeks input from all interested parties and develops a thorough understanding and critical analyses of the tools and techniques used to promote retail competition in other states.” The ORMD monitors existing competitive conditions in Illinois, identifies barriers to retail competition for all customer classes, and explores and proposes to the ICC and to the General Assembly solutions to overcome identified barriers. Although the ORMD can ask competitive retailers for information on their rates and terms, retailers are under no obligation to comply.

C.1.1.i. Default tariff

In Illinois, networks must provide customers who either never selected a retailer or decided to terminate a competitive retail service, with a default offer service, which is a bundled service consisting of generation, transmission and distribution. The Illinois Power Agency (“IPA”) is an independent agency established in 2007 to ensure that ratepayers who take service from the network’s bundled rate (“eligible retail customers”) benefit from retail and wholesale competition. Eligible retail customers are those who purchase power from the distribution company under fixed-price bundled service tariffs, excluding those


retail customers whose service is declared competitive, self-generating customers, and customers electing hourly pricing. Illinois legislation requires that the IPA procures electricity commodity and associated transmission services to meet the needs of eligible retail customers in the service territory of the incumbent networks: ComEd, Ameren Illinois, and MidAmerican. These companies do not earn a profit from selling energy to default offer customers; the energy costs are a pass through to customers. Approximately 65 percent and 40 percent of ComEd’s and Ameren Illinois’ residential customers, respectively, were on default service in 2017. These numbers have stayed relatively constant for Ameren Illinois since 2014, but have increased to 65 percent from 31 percent in 2014 for ComEd. The uptick in default enrolment for ComEd was due to the fact that the City of Chicago decided to end its customer aggregation programs. Customer aggregation is discussed in more detail below.

Default service customers also have the option to participate in a real time pricing program (“RTPP”) option in which customers pay electricity supply rates that vary by the hour. Specifically, the networks charge residential real-time pricing customers for the electricity they consume each hour based on the corresponding wholesale hourly market price of electricity. Ameren’s RTPP hourly prices for the next day are set and communicated to customers the night before, so they can determine the best time of day to use major appliances. ComEd’s residential RTPP prices are based on the actual real-time hourly market price of electricity during the day and customers are notified when real-time prices are high or are expected to be high so they can respond in real-time and shift the use of major appliances to lower priced hours.

The IPA procures electricity commodity through annual auctions, and to date, there have been 9 such auctions. The IPA develops an annual electricity procurement plan to “ensure adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the lowest total cost over time.” The IPA hedges load by procuring on- and off-peak blocks of forward energy in a three-year laddered approach, and holds two block energy procurement events every year.

in the spring and in the fall. The three-year laddered approach consists of hedging a fraction of the forecast two years ahead, another fraction one year ahead, and a third fraction shortly before the beginning of the delivery year. Networks (specifically ComEd and Ameren Illinois) track the incremental costs incurred by load-following and customer switching, and charge them back to the customers using the default service through a monthly Purchased Electricity Adjustment (“PEA”), which is added or subtracted from the seasonal default price, so that default service customers (rather than wholesale providers) pay for the risk of unpredictable load.

### C.I.1.ii. Community aggregation

Illinois allows for the aggregation of electric load by municipalities and counties in competitive retail areas. That is, it allows a municipality or county to negotiate for the purchase of combined electric supply of its residential and small commercial customers. Customers served by electric cooperatives or by a municipality that owns and operates its own electric distribution system do not qualify for aggregation. Illinois offers two types of aggregation programs: opt-in and opt-out. Municipalities that choose aggregation are responsible for negotiating the price of power from the retailer through a bidding process.

### C.I.1.iii. Billing and metering

Retailers have a choice on whether to send a bill directly to the customer or have the bill be a part of the distribution company’s bill. Arrangements are flexible, the retailer can send one consolidated bill, the network can send one consolidated bill, or both companies can each send a bill. In practice, no retailers send their own bills to residential customers. ComEd and Ameren Illinois are required to offer network consolidated billing and the purchase of receivables. In this case, the retailer has to submit its monthly customer charges for power and energy to the network electronically, which then places those charges, along with its delivery charges, on one single bill to the customer.

Networks are responsible for metering and meter reading, and are obligated to send retail customers’ usage information to their respective retailers.

---


548 Plug In Illinois, “Frequently Asked Questions – How will I be billed?”.


providing real-time pricing install a meter capable of recording hourly interval energy use at the service location of each customer who elects real-time pricing. Only networks (and not retailers) offer RTP in Illinois. ComEd and Ameren Illinois own, install, read, control, and maintain metering equipment. The meter reading cycle is the same for a customer whether the customer is taking delivery services from a retailer or from the default offer service.551

C.I.2. Consumer engagement

C.I.2.i. Price comparison tools

336. PlugInIllinois.org is the Commission’s electric choice education website aimed at providing residential and small commercial customers with a better understanding of their electric supply options. Public Act 97-0222 requires all retailers and networks to include the PlugInIllinois.org internet address on bills for residential and small business customers. Apart from providing consumer information about retail electricity choice in Illinois, the website also provides a description of the services offered by retailers. The offer information on the website is provided and maintained by retailers. While they have no obligation to post all offers, they do have an obligation to honour any price plan posted on the PCW. 552 Additionally, the website has “Price to Compare” information for residential customers under default service in ComEd and Ameren Illinois, so that customers can compare default service offers with competitive retail supply offers. The website also has a table with historical “Prices to Compare” for ComEd and Ameren Illinois customers, including the PEA. Customers are also able to see a matrix with the residential retail supply offers by network service area. The matrix displays the retailer’s logo (linked to the retailer’s website), the price in cents per kilowatt-hour, any potential additional monthly fees, the term in months, any possible early termination fees, a brief description of the offer, and the offer’s cost for monthly usage levels of 500, 1,000, and 1,500 kilowatt-hours. This information can be sorted by retailer, price, and length of term.

337. There is no limit to the number of customers that can be enrolled in the default offer service as long as they qualify as an eligible customer.

C.I.2.ii. Billing

338. Regarding customer billing, there are detailed rules regarding the information that retailers must provide on their bills, including:553


553 Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities), Part 410.210 (Standards of Service For Electric Utilities and Alternative Retail Electric Suppliers: Information to Customers)”
339. The date of the meter reading, the number of days in the billing period, the energy used, the meter constant if applicable, the type of service rendered, a complete description of the service or rate classification under which the customer receives service, and the type of reading that was used in the bill calculation (such as actual, estimated or customer reading), and, for meters for which beginning and ending meter readings are used as billing determinants, the reading of the meter at the beginning and the reading of the meter at the end of the period for which the bill is rendered.

340. The total amount of the bill and, when applicable, the following portions that make it up, listed vertically for easy readability: (A) the monthly customer charge or portion thereof; (B) the demand charges; (C) the cost of energy detailed by the energy used and the price per unit for each change in the unit price; (D) the cost of fuel adjustment; (E) any other applicable adjustments (other charges not under categories of charges but relating to services, energy, or other programs provided to customers by the entity); (F) State and municipal tax; (G) infrastructure maintenance fee; (H) transition charge; and (I) optional services listed separately.

341. The average use per day for the period over which the bill is rendered and for the comparable period one year earlier, and an indication of the difference in temperatures between the two periods. If this information is not available for a customer, the bill shall state so.

C.I.3. Smart meters

342. In 2011, the General Assembly enacted the Energy Infrastructure Modernization Act, which consisted of a 10-year, $2.6 billion program to modernise the power system while adding new technologies, including smart meters. In 2015, Illinois had 2.3 million smart meters, compared to 150,000 in 2010. As of March 2016, ComEd reached 2.1 million smart meter installations, while Ameren Illinois has installed more than 330,000 smart meters, a move towards its goal of installing advanced metering systems across its entire service territory, representing 1.2 million customers, by the end of 2019.

343. ComEd smart meters are compatible with a variety of smart devices, such as in-home displays, controllable thermostats, range extenders, and internet gateways. Ameren Illinois’s smart meters come with online features that allow customers to see their hourly usage and develop energy-savings plans, usage and cost alerts, rewards for reducing usage during peak demand, and the possibility to connect to a Home Area Network, which connects household appliances to the meter for smarter usage and savings.
C.I.4. Consumer safeguards

344. There are a number of customer contract provisions, marketing practices, deposits and early termination provisions and regulations applicable to retailers.\(^{554}\) In October 2017, the ICC amended the section of its rules pertaining to the obligations of retailers to strengthen customer protection requirements and increase transparency. The rules standardise contract requirements, require a uniform disclosure statement for all retailers, and extend disclosure and verification of sales requirements to all in-person marketing.

C.I.4.i. Termination fee

345. The retailer can charge a termination fee and shall disclose the amount or formula used to calculate the termination fee. This needs to be disclosed in the retailer's contract and verbally stated to a customer during in-person sales. However, the retailer must allow a customer to terminate a contract within 10 days of the first bill issued to the customer without a termination fee. A customer relying on this provision will be precluded from using this provision for 12 months following the date the customer terminated his or her contract.\(^{555}\) Early termination fees cannot exceed $50 for residential customers and $150 for small commercial retail customers.

C.I.4.ii. Contract provisions

346. With respect to contract provisions, among the most important we believe are the following:

1. The charges for the service for the length of the contract and, if any charges are variable during the term of the contract, an explanation of how the variable charges are determined.

2. The length of the contract, including any possible automatic renewal clause. Automatic renewal requires that the retailer notify the customer 30 to 60 days before the renewal date, where notification is separate to the customer bill.

3. The presence or absence of early termination fees or penalties, applicable amounts or the formula pursuant to which they are calculated.

4. Any requirement to pay a deposit for power and energy service, the estimated amount of the deposit or basis on which it is calculated, when the deposit will be returned, and if the deposit will accrue interest;

5. Any fees assessed by the retailer to a customer for switching to the retailer;

\(^{554}\) Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities), Part 412 (Obligations of Retail Electric Suppliers)”.

\(^{555}\) Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities), Part 412.230”
6. A statement that the customer may rescind the contract, by contacting the retailer, before the retailer submits the enrolment request to the network;

7. A statement that the customer may rescind the contract and the pending enrolment within 10 calendar days after the network processes the enrolment request by contacting the retailer. Residential customers may rescind the contract and the pending enrolment by contacting either the retailer or the network. The statement shall provide both toll-free phone numbers;

8. A statement that the network remains responsible for the delivery of power and energy to the customer’s premises and will continue to respond to any service calls and emergencies and that switching to a retailer will not impact the customer’s electric service reliability;

347. If savings are guaranteed under certain circumstances, the retailer must provide a written statement, in plain language, describing the conditions that must be present in order for the savings to occur. In the case of telemarketing and inbound enrolment calls, the statement shall be provided in accordance with Sections 412.130(e) and 412.140(c); and

348. A price per kilowatt hour (kWh) for the power and energy service. If a product is being offered at a fixed monthly charge that does not change with the customer’s usage and the fixed monthly charge does not include delivery service charges, the retailer must provide a statement to the customer that the fixed monthly charge is for supply charges only and that it does not include delivery service charges and applicable taxes; therefore, the fixed monthly charge is not the total monthly amount for electric service. For any product that includes a fixed monthly charge that does not change with the customer’s usage and does not include delivery service charges, the retailer must provide an estimated price per kWh for the power and energy service using sample monthly usage levels of 500, 1000 and 1,500 kWh.556

C.I.4.iii. Marketing

349. There are rules governing different marketing channels, such as door-to-door solicitation, telemarketing, inbound enrolment calls, direct mail, and online marketing.557 Among the most relevant provisions we believe are the following:

1. A retailer agent shall not state or otherwise imply that he or she is employed by, representing, endorsed by or acting on behalf of the network, a governmental body (unless the retailer has entered into a contractual

556 Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities), Part 412.110 (Minimum Contract Terms and Conditions)”.

557 Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities), Part 412.120 through Part 412.160”.
arrangement with the governmental body and has been authorised by the governmental body to make the statements), or a consumer group.

2. The retailer agent shall ensure that, during the sales presentation to the customer, all the relevant items of the contract (as embodied in the uniform disclosure statement and summarised in the section above), are verbally disclosed to the customer.

3. An retailer agent may disclose the items in any order as long as all applicable items are explained to the customer during the sales presentation and a copy of the uniform disclosure statement is to be left with the customer at the conclusion of the visit or, if the marketing solicitation is something other than door-to-door, the uniform disclosure statement is to be sent to the customer within three business days after the network's confirmation to the retailer of an accepted enrolment.

4. Use of third-party verification to authorise a customer's enrolment with the retailer. The third party verification requires the customer to verbally acknowledge that he or she understands the applicable items in the uniform disclosure statement.

5. Upon a customer's request, the retailer shall refrain from any further marketing to that customer.

6. Each retailer offering power and energy service to customers online shall display the items of the uniform disclosure statement (Section 412.110) for any services offered through online enrolment before requiring the customer to enter any personal information other than zip code, network service territory, and/or type of service sought.

7. The enrolment website of the retailer shall, at a minimum, include: (1) All items within the uniform disclosure statement; (2) A statement that electronic acceptance of the terms is an agreement to initiate service and begin enrolment; (3) A statement that the customer should review the contract and/or contact the current supplier to learn if any early termination fees are applicable; and (4) An e-mail address and toll-free phone number of the retailer where the customer can express a decision to rescind the contract.

**C.I.4.iv. Termination and rescission of the contract**

There are rules that apply to rescission of the sales contract, deposits and early termination and automatic contract renewal. Among the most relevant provisions we believe are the following:

1. The customer has the ability to rescind the contract with the retailer before the retailer submits the enrolment request to the network. Within one business day

---

558 Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities), Part 412.200 through Part 412.250”.
after processing a valid electronic enrolment request from the retailer, the network shall notify the customer in writing of the scheduled enrolment and provide the name of the retailer that will be providing power and energy service. The written enrolment notice from the network shall state the last day to make a request rescinding the enrolment and provide contact information for the retailer.

2. A residential customer wishing to rescind the pending enrolment with the retailer will not incur any early termination fees if the customer contacts either the network or the retailer within 10 calendar days after the network processes the enrolment request.

3. A retailer shall not require a customer deposit if the retailer is selling the receivables for power and energy for that customer to the network pursuant to Section 16-118(c) of the Act.

4. Any contract between a retailer and a customer that contains an early termination fee shall disclose the amount of the early termination fee or the formula used to calculate the termination fee. Any contract containing an early termination fee shall provide the customer the opportunity to contact the retailer to terminate the contract without any termination fee or penalty within 10 business days after the date of the first bill issued to the customer for products or services provided by the retailer. A customer relying on this provision to avoid an early termination fee shall be precluded from relying upon this provision for 12 months following the date the customer terminated his or her sales contract. The contract shall disclose the opportunity and provide a toll-free phone number that the customer may call in order to terminate the contract. This requirement does not relieve the customer of obligations to pay for services rendered under the contract until service is terminated.

5. **Non-Automatic Renewal.** The retailer shall clearly disclose any renewal terms in its contracts, including any cancellation procedures. For contracts with an initial term of six months or more, the retailer shall send a notice of contract expiration separate from the bill at least 30 but no more than 60 days prior to the date of contract expiration. Nothing in this Section shall preclude a retailer from offering a new contract to the customer at any other time during the contract period. If the customer enters into a new contract prior to the end of the contract expiration notice period, the notice of contract expiration under this Section is not required.

6. **Automatic Renewal.** In addition to complying with the Illinois Automatic Renewal Act [815 ILCS 601], the retailer shall clearly disclose any renewal terms in its contracts, including any cancellation procedures. For contracts with an initial term of six months or more, and when the contract automatically renews for a specified term of more than one month, the retailer shall send a notice of contract renewal separately from the bill at least 30 days, but no more than 60 days prior to the end of the initial contract term. Nothing in this Section shall preclude a retailer from offering a new contract to the customer at any other time during the contract period. If the customer enters into a new
contract prior to the end of the contract expiration notice period, the notice of contract expiration under this Section is not required.

C.I.4.v. Complaints and dispute resolution

351. There are additional provisions that fall within general consumer protection requirements on the retailers. There are detailed rules concerning customer complaints and the actions that the retailer must take. Retailers are required to maintain a customer call centre where customers can reach a representative and receive current information, and at least once every 6 months provide written information to customers explaining how to contact the call centre. There are provisions dealing with the average answer time for calls, abandon rate for calls, and reports on such data to be filed with the Commission.

352. There are also several dispute resolution and customer complaint rules and regulations applicable to retailers. Prior to marketing to residential and small commercial retail customers, the retailers must provide information to the Commission’s Consumer Services Division such as a copy of its bill formats, standard customer contract, customer complaint and resolution procedures, and contact information. Dispute resolution regulations provide customers with the right to make formal and informal complaints to the Commission without fear of reprisal from the retailer. The retailer must promptly investigate and advise the complainant of the results within 14 calendar days. The dispute resolution process also provides customers with the right to use the Commission’s Consumer Services Division for assistance with the retailer as part of the informal process. During the informal complaint process the retailer may not initiate collection activities for any disputed portion of the bill. There are rules in place for formal complaints and the Commission will on a quarterly basis prepare summaries of all formal and informal complaints received and publish those summaries on its website.

C.I.4.vi. Customer usage data

353. Regarding customer information such as historical energy usage and real-time energy usage available as a result of smart meters, Illinois law specifies that the distribution company can only share that information with retailers or third-parties with the customer’s consent. The customer authorisation language must be located on a separate and discrete form.

559 Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities), Part 410.40 (Standards of Service For Electric Utilities and Alternative Retail Electric Suppliers: Complaints)”.

560 Illinois Administrative Code, “Title 83 (Public Utilities), Chapter I (Illinois Commerce Commission), subchapter c (Electric Utilities), Part 412 (Obligations of Retail Electric Suppliers)”.


C.I.4.7. **Other provisions**

354. Each retailer shall provide to all residential and small commercial customers, at least annually, a disclosure statement with the following information: (1) the average monthly prices; and (2) the terms and conditions of the products and services sold to the customer.

355. There are a number of consumer protection rules and regulations promulgated by the Commission that apply to the retailers and that are distinct from the general consumer protection and anti-fraud provisions in Illinois laws and that are generally applicable to all companies conducting business in Illinois. Of particular importance is the general requirement that an independent third-party must confirm the customer’s decision to switch providers and select the retailer.

C.I.5. **Targeted protection of vulnerable customers**

C.I.5.i. **Medical reasons**

356. Networks are not allowed to disconnect electric service to a residential customer for 60 days upon the receipt of a valid medical certificate for a resident of the household. Accounts that have received a prior valid medical certificate are eligible for new certification any time after either (i) the total account balance has been brought current or (ii) 12 months from the beginning date of the prior certificate have passed.

C.I.5.ii. **Adverse weather conditions**

357. Networks are not allowed to terminate electric service to a residential customer (i) on any day when the National Weather Service forecast for the following 24 hours covering the area of the network in which the residence is located includes a forecast that the temperature will be 32 degrees Fahrenheit or lower, or (ii) on any day preceding a holiday or weekend when the National Weather Service forecast covering the area of the network in which the residence is located includes a forecast that the temperature will be 32 degrees Fahrenheit or lower at any time during the holiday or weekend.

358. If electricity or gas is the only source of space cooling for the residential customer, distribution companies with over 100,000 residential customers are not allowed to terminate service (i) on a day when National Weather Service forecast for the following 24 hours covering the area of the network in which the residence is located includes a forecast that the temperature will be 95 degrees Fahrenheit or lower.

---


higher, or (ii) on any day preceding a holiday or weekend when the National Weather Service forecast covering the area of the network in which the residence is located includes a forecast that the temperature will be 95 degrees Fahrenheit or higher at any time during the holiday or weekend.\textsuperscript{565}

### C.1.5.iii. Low-income customers

359. Networks are not allowed to disconnect service to any residential low-income customer who is a participant of the Energy Assistance Act of 1989\textsuperscript{566} for non-payment of a bill where gas or electricity is the only source of space heating between December 1 and March 31.\textsuperscript{567} Networks are also not allowed to charge late payment fees to low-income customers while they qualify as low-income customers.\textsuperscript{568}

360. In addition to low income customers, seniors and people with disabilities may qualify for Illinois’ Low-Income Home Energy Assistance Program (LIHEAP), a state and federally funded energy assistance program for low-income households. Funding is limited and applications are assessed on a first-come, first-served basis, and consider the applicant’s gross income, and proof that the household is receiving other benefits such as Temporary Assistance for Needy Families (TANF) or Supplemental Nutrition Assistance Program (SNAP). \textsuperscript{569} If the application is successful, the applicant may receive one of the following types of assistance: (1) a one-time direct vendor payment; (2) crisis assistance as related to reconnections or furnaces; and (3) participation in the Percentage of Income Payment Plan (PIPP). Under PIPP, customers on default supply will pay a predetermined percentage of their income to the state, who will then enrol them in a budget billing plan. Under this program customers pay a fixed percent of their income to their monthly utility

\textsuperscript{565} Illinois General Assembly, “Illinois Compiled Statutes - 220 ILCS 5/8-205(b) Public Utilities Act”.

\textsuperscript{566} Illinois General Assembly, “Illinois Compiled Statutes - 305 ILCS 20/6 Energy Assistance Act”.


\textsuperscript{568} The LIHEAP statute establishes 150 percent of the poverty level as the maximum income level allowed in determining LIHEAP income eligibility, except where 60 percent of state median income is higher. Income eligibility criteria for LIHEAP may not be set lower than 110 percent of the poverty.

bill (6 percent) and the state pays the rest.570 Customers will also have their debt to the network reduced with every on-time payment they make.571

361. In addition to the LIHEAP, Illinois offers funding for energy efficiency upgrades, through the Illinois Home Weatherization Assistance Program (IHWAP), to help low-income households better conserve energy.572 The networks may also offer their own programs, for example Ameren Illinois has a “Warm Neighbors Cool Friends” initiative, which funds energy assistance for those who need temporary relief through donations.573

C.I.6. Promotion of competition

362. The prices that retailers charge customers are liberalized and not regulated. In Illinois retailers can set any price (per kWh) that the market can bear. There is no regulatory requirement that the energy charges from the retailer be no higher than those the customer could have gotten under the default offer. With the exception of a minor regulation of the termination fee discussed in Section C.I.3 and a requirement to procure some amount of renewable energy supplies, other terms and conditions of the retailer service are also not regulated, such as type of offer (fixed vs. variable), term of offer, monthly fees, and bundling with other types of services.

363. In 2006, the General Assembly of Illinois passed the Retail Electric Competition Act, which established the ORMD, removed certain barriers to competition, and encouraged residential and small commercial customers to switch to a retailer.574 This Act was passed in response to the escalating residential and small commercial power bills, and as part of the state’s mission to promote the development of an effectively competitive retail electricity market. The Act gave the ICC authority to establish retail choice and referral programs to be administered by a distribution company or the state in which residential and small commercial customers receive incentives, including but not limited to, discounted rate introductory offers for switching to participating retailers. The Act also encouraged customers to switch to a retailer by providing temporary, fixed-discount and retail choice programs. As part of the fixed-discount program, retailers offer customers a fixed percentage discount off of the network’s supply rate for a set number of billing


periods. For the retail choice program, networks offer customers initiating new electric service a choice of offers from participating electric retailers. The costs associated with the implementation and operation of these programs could be recovered through the network’s distribution rates, except for the costs associated with any introductory discount for switching to a retailer, which were assumed by the retailer.

**C.1.6.i. Utility consolidated billing and purchase of receivables**

In addition, Illinois law requires ComEd and Ameren Illinois to offer utility consolidated billing (UCB), which allows the retailer to submit its monthly charges for power and energy to the distribution company which then places those charges, along with its delivery charges, on one single bill to the customer. All retailers use UCB for their residential customers. The law also requires ComEd and Ameren Illinois to purchase the receivables (POR) — the amount that customers owe to their retailer — at a discount. Retailers are also able to provide a single bill to customers that include the retailer’s energy and power charges as well as the delivery service charges. Alternatively, retailers can bill the customer only for the portion of the energy and power charge, with the distribution company sending a separate bill. Only customers with a demand of less than 400 kilowatts qualify for the POR provision. As of May 31, 2017, almost all suppliers were using Ameren’s UCB/POR service for residential customers. In the ComEd territory, almost all suppliers were using ComEd’s UCB/POR service for residential customers.

**C.1.6.ii. Requirements to open up a retail business**

In Illinois, all retailers are required to obtain a certificate (license) to provide retail electric service to consumers. In order to obtain a certificate the retailer must provide different pieces of information to the Commission, including general information and information on technical, managerial and financial qualifications to provide electric service in Illinois. The Commission has 45 days from receiving a complete application to grant or deny the application and the ability to extend the deadline up to 90 days, and can schedule a hearing on the application.

---


579 24 suppliers were using UCB/POR for non-residential customers.

580 58 suppliers were using UCB/POR service for non-residential customers.
C.I.7. **Outcome of retail competition**

366.

C.I.7.i. **Customer switching**

367. The ICC is required to file an annual report on the status of retail electricity competition. The most recent report was issued in 2017 and it summarises the status of competition as of mid-2017. Information on electric switching statistics can also be obtained from the ICC website, where the ICC publishes a report showing the number of customers and their associated consumption broken down by hourly supply or fixed supply service from the network or supply from a retailer, and by customer class. The data comes from a monthly report that networks are required to file showing the supply options chosen by their customers.

368. Data on customer switching is provided by distribution company region, with ComEd and Ameren Illinois being the two major providers, and with Ameren Illinois further divided into three regions. As of mid-2017, there were 98 retailers with ICC certification to provide service to retail customers and 367 licensed Agents, Brokers and Consultants (“ABCs”). Eighty-nine retailers have certification to serve residential and small commercial customers. As of May 2017, 55 retailers actively serve residential customers in the ComEd service territory, compared to 57 in May 2016. 27 retailers serve residential customers in the Ameren Illinois service territory, up from 25 in May 2016.

369. In the ComEd territory retailers provide approximately 73 percent of the total electric usage of customers, which was slightly down from 75 percent in 2016, across all customer segments. The comparable figure for the three Ameren Illinois territories is approximately 80 percent.

370. With respect to the residential customers, as of May 31, 2017 slightly less than 1.9 million residential customers across the state receive their power from a competitive retailer. In the ComEd territory 35 percent of its residential customers receive service from an retailer while the comparable figure for the three areas served by Ameren Illinois were 56 percent, 67 percent and 60 percent, respectively. For the ComEd territory, the 35 percent of residential customers selecting a retailer was a significant decline from 2015’s figure of 61.5 percent. This was due to the fact that the City of Chicago decided to end its customer aggregation programs. Municipal customer aggregation services can be provided by the default offer or by a retailer and as such this type of customer switching option counts as a form of retail competition. As of May 2017, 746 communities have passed an opt-out aggregation referendum and 56 percent of residential retail customers were part of a government aggregation program.

---


With respect to non-residential load, as of May 31, 2017 in the ComEd territory 85 percent were provided by a retailer. The larger the load, the greater the percentage of retailer supply, with 97 percent of customers with a demand exceeding 1MW receiving service from a retailer. The Ameren territories had about 86 percent of non-residential load being served by retailers.

**C.1.7.ii. Product diversity**

In terms of products offered by retailers, information on products offered is available through a website developed by the ICC (PlugInIllinois.org). As of April 2017, the ComEd and Ameren Illinois territories had 106 and 36 different residential offers, respectively, on PlugInIllinois.org. A search on the site shows that retailers provide a number of different types of services for residential customers including:

1. Fixed price in cents per kWh – with or without monthly fees (ranging from $3.99 to $12.99); with different term (month) lengths ranging from 1 month to 36 months; with or without early termination fees (ranging from $49/$50 to $10/each remaining month of term); with option to purchase energy based on renewable sources; with option to receive gift cards.

2. Variable price in cents per kWh – with or without monthly fees (ranging from $3.75 to $14.95); with different term (month) lengths ranging from 1 month to 24 months; with or without early termination fees $10 to $50; with option to purchase energy based on renewable sources; with option to receive gift cards.

3. Custom prices specific to customer’s energy needs based upon customer’s energy characteristics.

4. Unlimited gas and electric offer starting from $109/month with 20 percent renewable included at no extra charge and a possible $250 rebate.

5. Offers where 100 percent of the electricity provided is generated from renewable resources.

**C.1.7.iii. Complaints and customer satisfaction**

PlugInIllinois.org website has a Complaint Scorecard, which ranks retailers by their rate of complaints compared to the average rate of complaints for the entire residential market, and a Complaint Summary, which shows the total number and type of complaints received for each retailer over the last two years. While PlugInIllinois.org does show a Price to Compare, which allows customers to compare the price of retail offering to default supply, they are unable to compare quality of service since the website only ranks complaints data for retailers, not default supply.
J.D. Power annually performs an Electric Retail Provider Residential Customer Satisfaction Study, which ranks the top providers by state. The study measures customer satisfaction with competitive retailers by analysing price, communications, corporate citizenship, enrolment/renewal, and customer service. Satisfaction is calculated on a 1,000-point scale. The average for Illinois is 627. Customers in Illinois report lower levels of satisfaction than other US jurisdictions we analyse, such as New York, Texas and Pennsylvania.

C.II. NEW YORK, USA

C.II.1. Overview of retail competition

The state of New York is served by six large investor-owned utilities ("IOUs"), one large municipal utility, and many smaller utilities. Only the IOUs are open to retail competition. The six large IOUs are Consolidated Edison ("ConEd"), Orange and Rockland Utilities ("O&R"), Central Hudson Gas and Electric ("Central Hudson"), Rochester Gas & Electric ("RG&E"), New York State Electric and Gas ("NYSEG"), and National Grid ("NGrid"). The large municipal network is called the Long Island Power Authority ("LIPA").

The New York State Public Service Commission ("NYPSC") ordered the restructuring of New York electricity sector. The NYPSC’s ruling is unusual because in most states restructuring is begun by the state legislature. The NYPSC published the Competitive Opportunities Case ("COC") Order in May 1996 with the goal to created competition in all sectors of the electricity market, wholesale and retail. On the wholesale side, entities were required to cede market power and divest energy generation facilities. Retail electricity competition began with pilot programs for large power users in 1997 and for residential customers in 1998. In 2001 the NYPSC published uniform business standards which defined practices for management and sharing of customer data. The standards also set up billing and payment processes which allow Retail Choice customers to receive a single bill (discussed further below). By 2002 retail choice was available to all customers.


584 Networks are typically referred to as utilities in New York. To maintain consistency with the remainder of the report, we will use the term networks or distribution companies throughout the rest of this memo.


Currently, New York Retail Choice customers are served by a retailer or are part of an aggregation of consumers that obtain electric power from a retailer. Consumers that do not sign up with a retailer will continue to receive default service from the local distribution company.

The NYPSC is in charge of regulating and monitoring the state of the retail energy market and following the retailers’ and networks’ progress in developing a competitive market.

**C.II.1.i. Default tariff**

Customers who have never chosen a retail supplier, or who have chosen to leave their retail supplier can get default service from their local distribution network. In the state of New York, the default service offer price is set by each network on a monthly ex-post basis. This is unlike other US states that set the price of default tariffs on a fixed basis several months in advance. Networks publish the established rate on their websites a week or two into the following month, after having incurred the actual purchasing and hedging costs. The networks purchase a percentage of the needed power through long-term contracts and competitive bids and the remainder is purchased through the spot market and hedging contracts. This ex-post true up of rates makes it difficult for customers to compare the default service price with the prices offered in the retail market and may to an extent undermine competition.

Default networks still deliver electricity through existing transmission and distribution systems and bill customers for delivery charges. The distribution company may bill customers on behalf of the retailer and include the retailer’s charges in its bill. There are currently 6 networks offering default service in New York: Central Hudson, Consolidated Edison, Niagara Mohawk, New York State Electric & Gas, Orange & Rockland, and Rochester Gas & Electric.

**C.II.1.ii. Community aggregation**

New York State first passed legislation allowing Community Choice Aggregation (“CCA”) as part of the 2014 Reforming the Energy Vision (“REV”) process. CCA allows communities to procure energy supply services on behalf of local residents and businesses. The local governments request bids for the amount...
and type (e.g., wind, solar, hydro) of electricity or gas demanded and any energy efficiency programs or goals required, and select the winning energy provider. In some cases communities will also construct community scale generation projects. CCAs allow let customers within the municipality have more control over the types of generation resources used to meet their demand as well as their energy costs.  

In February 2015, the NYPSC authorised a CCA to cover twenty communities within Westchester County, and offers two types of service: 100 percent renewable power and a “basic “supply”. The NYPSC issued a new order in April 2016 which defined specific rules for CCA creation. As of March 15, 2018 the NYPSC has approved four CCA programs, two of which were approved in 2018, showing the increasing popularity of these programs.

C.II.1.iii. Billing and metering

Since 2000, retailers have a choice to use the network’s billing and payment service, bill customers for only energy sales (customers will still receive a bill from the network for distribution services), or provide a consolidated bill with energy and distribution charges. Customers have the right to choose from the billing options offered by retailers. The billing entity that is responsible for mailing the bill, receiving and processing payments, and providing payment details to the non-billing entity. A retailer is allocated payments from the bill only after all the network charges have been satisfied. This policy was proposed to “minimize the chance that customers’ services would be disconnected by the network for non-payment”. Retailers are allowed to use any billing format for consolidated bills as long as the network portion of the bill contains the required information in an understandable manner and is consistent with the uniform business practices (“UBP”) requirements. Additionally, bills are required to indicate energy supply and delivery costs separately to provide price transparency.

In 1999, the NYPSC opened electric metering services for customers with load of 50 kW or higher. This policy allowed qualified customers to procure meters

\[592\] New York State Senate, “Assembly Bill A08883”.


\[598\] NYPSC, “Competitive Metering Proceeding Staff Report”, pp 4-5.
and meter data services from retail providers. However, for residential and small commercial customers, metering service is always provided by the network and its cost is included in the network’s electric delivery costs.

C.II.2. Consumer engagement

C.II.2.i. Price comparison tools

The NYPSC introduced the “Power to Choose” website in 2005. This website was designed to allow customers interested in retail choice to enter their postal code and compare their current network rate to offers from retailers. However, initially there was no obligation for retailers to report offer information and so the information on the website was often out of date or inaccurate. In 2006, the NYPSC issued an Order requiring retailers to report offers, but allowing retailers to make additional offers to those they reported. Therefore, the listed prices did not reflect the offers actually available to customers at any given time. The website was modified again in 2010 to allow retailers to input their own prices as frequently as they wanted. In 2011, the Retail Energy Supply Association (“RESA”), a nationwide advocacy group for retailers, criticised the website for “confusing, inaccurate, and misleading” price reporting. According to the RESA, the reporting varied by network; some prices were outdated and price forecasts were inaccurate.

In 2014, an updated decision by the NYPSC required retailers to update their pricing information on the website at least once every 30 days, but retailers were still allowed to make additional offers to those posted on the website. However, the decision required retailers to guarantee residential and small commercial customers an offer with rates at least as low as the offer posted on Power to Choose at the time of purchase.

---

599 See for example Orange & Rockland, “How to read your bill?” All other utilities have a similar structure.


The six networks provide general information on Retail Choice, as well as detailed rate shopping information on their websites. For instance, O&R, ConEd, and NGrid, provide a list of competitive retailers and a link to the “Power to Choose” website. NYSEG and RG&E provide a breakdown of default service price components, including the delivery and supply charge which can be used to compare with retailers. N. Central Hudson and Consolidated Edison provide general information on retailers and retail electricity competition and have links to a list of all retailers on their websites. As the default service price in New York is set on an ex-post basis, there cannot be a “price to compare” benchmark that compares default service prices to offers made by retailers. This dampens competition by making it complicated for customers to evaluate whether retail prices or the default service is a better option, since the price of the default service does not yet exist when the retail offers are made and accepted.

Since 2014, networks are required to provide customers with a historic bill calculator. The calculator allows customer who receive service from a retailer to compare what they paid each month against what they would have paid for each month of the past 12 months what the customers would have paid on a distribution network tariff. However, these calculators do not help customers who are looking to switch to compare the default service rate to current offers.

NYPSC’s 2014 Order also required retailers to report average pricing information to NYPSC every quarter. The NYPSC staff defined reporting categories and standard reporting templates.

### C.II.2.ii. Price discounts

Several networks have offered retailer referral programs that encourage customers to switch to a competitive retailer. O&R temporarily offered a “Switch

---


and Save Program”, where participating retailers offered customers a 7 percent discount on the regulated network rate for the first two months. At the end of the two-month period, the customer could continue receiving service from the retailer or return to the default service without penalty. ConEd, NGrid, and Central Hudson have also offered similar referral programs.

C.II.3. Smart meters

Networks in New York State are phasing in smart meter deployments. At the start of 2015, ConEd filed a rate case including “a six-year smart meter implementation schedule”. In October 2015, it filed an updated business plan and expects to deploy 4.7 million meters to gas and electric customers. On November 2017, the NYPSC published a notice approving O&R to install smart meters. O&R’s smart meter installation began in June 2017 and it expects to replace 116,500 meters in Rockland County and 113,000 meters in Orange and Sullivan Counties in the 3rd quarter of 2018.614

C.II.4. Consumer safeguards

C.II.4.i. Customer enrolment

A retailer must obtain authorisation before enrolling a new customer or releasing customer information. Authorisation can be obtained through one of the following ways:

- Telephone agreement and authorisation, preceded, or followed within three business days, by the provision of a sales agreement
- Electronic agreement and authorisation, attached to an electronic version of the sales agreement
- Written agreement bearing a customer’s signature on a sales agreement (original or fax copy of a signed document)615

In December 2007, the New York State and city governments requested the NYPSC to adopt a voluntary Statement of Principles for the training of the retailer’s representatives, door-to-door and telephone marketing practices, and the retailer’s general conduct.616

---


394. All door-to-door or marketing sales over the telephone require independent third party verification. Retailers allow customers to cancel a sales agreement within three business days after a receipt is issued.617

395. When contacting customers at a location other than the retailer’s place of business to sell the retailer’s products or service, retail agents must do the following before making any other statements or representations to the customer:618

- Introduce themselves with a statement that identifies the retailer they represent, followed by a statement identifying themselves as a representative of that specific retailer. The agent then must explain that they do not represent the network and also explain the purpose of the solicitation.
- Produce identification that contains their name, photograph, phone number, etc. This identification must be visible at all times.
- Marketing agents must also state that if a customer purchases natural gas and/or electricity from the retailer, that the network will still be the body to deliver energy and will respond to any leaks or emergencies.
- Retailers should conduct marketing in language that customers can fully understand.
- A retailer’s marketing representative must leave the premises of a customer when instructed by the customer.

396. If a retailer guarantees a customer savings compared to the default service rate, the retailer must provide a clear written description of the conditions under which savings are guaranteed.619

C.II.4.ii. Termination

397. Termination fees must be less than or equal to $100 for contracts with 12 months or less remaining. For contracts with more 12 months remaining, the termination fee may be up to $200 or twice the estimated bill for energy services for an average month, provided that an estimate of an average monthly bill was provided to the customer when the offer was made by the retailer.620

398. If a retailer chooses to terminate a contract the retailer is required to restore customers back to the network service and notify the customer 15 days before the planned termination. The notice to the customer must include:621

- The effective date of the discontinuance, established by the distribution network;

---


619 Ibid, p. 35.

620 Ibid, p. 27.

621 Ibid, pp. 31.
• A statement explaining the different options the customer has to select another retailer, receive service from the distribution company, or, if available in the distribution network’s service area and the customer is eligible, accept random assignment by the network to a retailer.
• A statement disclosing that the customer shall receive full network service until the customer selects a new retailer and the change in providers is effective, unless the distribution company notified the customer that it will terminate its delivery service on or before the discontinuance date.

C.II.4.iii. Customer usage data

399. The network will only provide the retailer with specific customer data after the retailer has gained customer’s authorization. When the retailer enrolls a customer, the distribution company will automatically receive the customer’s current usage data and any adjustments to previously supplied data. If the retailer will be issuing consolidated bills, the network will also provide the customer’s billing information. All historical data that a retailer receives from the network must be kept confidential, and cannot be released publicly without the customer’s written authorization. The retailer cannot engage in selling or providing the data to its affiliates.

C.II.4.iv. Complaints and dispute resolution

400. The PSC is responsible for reviewing complaints from residential customers on unauthorised switching and pricing issues, as well as media reports about misrepresentations concerning retailer affiliation with the distribution company. As a result of these reviews, the PSC set new marketing standards in 2008. In 2010, the Legislature created a Bill of Rights for customers of energy services companies (ESCOs). The Bill of Rights states that retail energy consumers are entitled to, among others:

• A clear description of the services;
• Clear procedures for switching energy suppliers;
• Disclosure of the terms and conditions of the agreement with the retailer;
• A fair and timely complaint resolution process.

401. Every year, networks are required to send customers a summary of their rights and obligations. The summary, among other things, has to include:

622 Ibid, Section 4.
624 NYPSC, “ESCO Consumer Bill of Rights”.
625 NYDPS, “Final Notice of Termination”, accessed 20 March 2018
• A description of the complaint-handling procedures available at the network and the NYPSC;
• The rights and obligations of residential customers relating to payment of bills, termination, disconnection and suspension of service and reconnection of service;
• A request that residential customers notify the networks if they receive social benefits from the state and thereby qualify for additional protections from the networks (including over disconnections).

402. Retailers are subject to penalty by NYPSC if they fail to reply to a consumer complaint filed with the New York Department of Public Service (“DPS”) within the timeframe established by the Office of Consumer Service (“OCS”). The UBP also states that retailers must remain consistent and fair to customer complaints and reply within two days. Each retailer must maintain a toll-free phone line and a customer service group to deal with customer inquiries and complaints.

C.I.II.5. Targeted protection of vulnerable customers

C.I.II.5.i. Low-income customers

403. The state of New York runs the Home Energy Assistance Program (HEAP), a federally funded program that assists eligible households in meeting their home energy needs. The program is targeted at assisting customers to meet their home heating needs through a once annual subsidy paid to the vendor that supplies their primary heating fuel (not necessarily electricity). Customers are eligible based on their income or participation in other federal assistance programs. Customers need to apply every year to receive a HEAP benefit. There is also an emergency HEAP program for customers in danger of having their electricity disconnected or running out of heating fuel. Finally, there is a Heating Equipment Repair and Replacement benefit for eligible homeowners to repair or replace their furnace.

627 Ibid, p. 42.
628 Ibid.
629 New York State – Office of Temporary and Disability Assistance, “Home Energy Assistance Program (HEAP) – Overview”.
630 New York State – Office of Temporary and Disability Assistance, “Home Energy Assistance Program (HEAP) – Overview”.
631 New York State – Office of Temporary and Disability Assistance, “Home Energy Assistance Program (HEAP) – Overview”.
632 New York State – Office of Temporary and Disability Assistance, “Home Energy Assistance Program (HEAP) – Overview”.
boiler or any other direct heating equipment necessary to keep their home heated. 633

404. Many networks also have their own assistance programs for vulnerable customers. For example National Grid has an Energy Affordability Program to help low income customers manage their bills. 634 The program is open to all income-eligible default customers. Participating customers will receive a credit on their bill and will be automatically enrolled in the network’s budget billing program. The size of the credit will be largest for customers with low income and high bills, but will also take account of family size and the presence of a vulnerable household member. 635 Customers who receive a HEAP benefit are automatically enrolled. 636

405. Budget billing is available to all customers who are on the network’s default tariff service. Budget billing allows customers to pay a uniform bill over the course of the year. Customers still pay the same total amount that they would have otherwise. Monthly bills are determined based upon the previous year’s annual usage. 637 While this is open to all customers, it is intended as a tool for low income customers.

406. In 2016, in response to the growing criticism towards retail choice, the NYPSC banned retailers from providing service to low income customers unless they can prove to the commission that they can guarantee savings over the network’s default price. 638 Families/households with an income level of 60 percent or less of the state median income are considered low-income customers by the NYPSC. 639 It is estimated that low-income customers represent approximately 25 percent of all electric customers in New York State. 640 Retailers were required to contact

633 New York State – Office of Temporary and Disability Assistance, “Home Energy Assistance Program (HEAP) – Overview”.

634 Upstate New York – National Grid, “Manage your utility bills with our Energy Affordability Program”.

635 Upstate New York – National Grid, “Manage your utility bills with our Energy Affordability Program”.

636 Upstate New York – National Grid, “Manage your utility bills with our Energy Affordability Program”.


639 Governor Andrew M. Cuomo, “Governor Cuomo announces moratorium on competitive energy service company sales to low-income customers”, 15 July 2016, p. 1.

customers that they were not long eligible to serve within 60 days of the effective date of NYPSC’s “Low Income Moratorium” Order. Additionally, the network informed customers within 14 days of the Order that they were now enrolled in default service.\footnote{NYPSC, “Order adopting a prohibition on service to low-income customers by energy service companies”, 16 December 2016, p. 20.}

407. In most cases retailers demonstrate compliance by comparing historical retail bills to what the network would have charged. Retailers can also demonstrate compliance by providing value-added services designed to reduce energy bills.\footnote{NYPSC, “Order Taking Actions to Improve the Residential and Small Non-Residential Retail Access Markets - Case 12-M-0476”, 25 February, 2014.} Since 2016 several retailers have been approved to start serving low income customer’s again, but others have had their applications denied.\footnote{NYPSC, “PSC Rules Against Three ESCOs, OKs 4th ESCO to Serve Low-Income Customers”, 15 March 2018.} The New York Attorney General (NYAG) has a current proceeding that is investigating extending this program for all mass market customers. Testimony from various parties varies in their opinion of the efficacy of this policy (more detail below).\footnote{Mass market customers encompass residential and small commercial and industrial customers}

C.II.5.ii. Disconnections

408. Before disconnecting a customer from service, a final notice must be sent to customer stating:\footnote{NYDPS, “Final Notice of Termination”, accessed 20 March 2018.}

- The earliest date that termination and disconnection can occur;
- Reasons for the termination or disconnection including the total outstanding bill quantity and the manner in which termination or disconnection can be avoided;
- The address and phone number of the network’s office that the customer can contact in reference to his account;
- Availability of network procedures for handling complaints.

409. In 2014 NYPSC passed an order requiring that if a retail customer is facing termination for non-payment and the customer’s retail supply charges are greater than that which the customer would owe the network under default supply, the customer only needs to pay the comparable default service charges to avoid termination.\footnote{NYPSC, “Order taking actions to improve the residential and small nonresidential retail access markets”, 25 February 2014, pp. 19-20.}
C.II.6. **Promotion of competition**

C.II.6.i. **Retailer requirements**

410. To become an eligible retailer, all applicants must submit to NYDPS an application package containing but not limited to the following:647

- A completed Retail Access Eligibility Form
- A sample standard Sales Agreement for each customer class that meets the requirements set forth in NYPUC’s Uniform Business Practice
- Sample forms of the notices sent upon assignment of sales agreements, discontinuance of service, or transfer of customers to other providers.
- A sample retailer bill used when dual billing is in effect and, if applicable, a sample retailer consolidated bill, with terms stated in clear, plain language
- Procedures used to obtain customer authorisation for retailer access to a customers’ historic usage or credit information
- Sample copies of informational and promotional materials that the retailer uses for mass marketing purposes”

C.II.6.ii. **Network requirements**

411. To prevent networks from remaining as the monopoly provider and undermining competitive retailers, networks are required to set their rates based solely on their costs and are not allowed to make any profit on electricity sales.648 Furthermore, networks must give retailers the option to use the network for billing and payment processing.649

412. In 2004, the NYPSC issued the Competition Policy Statement, where it laid out policies on the development of competition and the guidelines for the pricing of network default services.650 Many policies were focused on creating incentives for customers to switch to retailers (like temporary discounts in network fees), or in reducing network incentives to want to hold on to customers (by making energy sales a pass through).651

---


C.II.6.iii. Customer switching

413. Customers are only allowed to switch retailers once between meter reads (called a “switching cycle”). This may differ from the billing cycle. For example, Central Hudson sends monthly bills, but only reads meters every second month. If the network receives multiple enrolment requests for the same customer during a switching cycle, it only accepts the first request. If meter reading is infrequent, this may limit the switching frequency of New York customers and adversely affect retailers.

414. If the network receives a notice of customer enrolment, it must send a verification letter to the customer within a day to notify the customer and confirm the enrolment. If the enrolment is unauthorised or the customer decides to cancel, the customer needs to notify the network and the retailer as soon as possible. When the retailer receives such notification from customer, it must send a customer’s drop request to network within a day.

415. In December 2014, the NYPSC modified the UBP to speed up the process for changing energy providers, by placing narrower timeline obligations on retailers and networks.

C.II.7. Outcome of retail competition

416. The New York electricity retail market has an HHI of 790. This includes all customer classes and may not account for those customers who are on default service.

417. There are currently 149 retailers serving residential and non-residential customers in New York State. In December 2016, 20 percent of residential customers (1,210,374 out of 5,912,868) were using retailers as their electricity provider, down 13.9 percent from 2015.

653 Ibid.
654 Ibid, p. 29.
656 London Economics, “Energy Retail Markets Comparability Study”, April 2012, Figure 50.
C.II.7.i. Customer satisfaction and complaints

According to the J.D. Power survey, the customer satisfaction score towards retail electricity market competition for New York was 680 out of 1000 in 2016. Retailers offer a variety of products in New York State, which can be seen on the “NYS Power to Choose” website:

- Fixed-rate plans with term lengths ranging from 6 months to 2 years.
- Variable-rate plans with no long-term contracts or cancellation fees, but with the monthly rate subject to change from month to month.
- Pre-paid plans, where customers pay in advance for a certain amount of electricity. Not all suppliers require credit checks or deposits for these plans, making them more accessible to customers.
- Green energy plans, where some suppliers offer up to 100 percent of electricity from renewable sources. Most of these plans have fixed rates.
- Home services and value-added services, such as smart thermostats, HVAC installation, furnace and roof repairs, frequent flyer miles, or telephone service bundled with energy bill.
- Renewable energy credits.

The OCS publishes a monthly report on consumer complaint activity. The report contains information on the volume of complaints received against networks and retailers (separately), and the level of customer service and responsiveness delivered by service providers (including retailers and default service). Although the OCS reports on retailers and networks, it does so separately, so comparisons are difficult.

C.II.7.ii. Product diversity

On February 2014, the NYPSC expressed severe concerns about the nature and outcome of retail competition in New York State. The NYPSC pointed out that competitive retail energy markets were functioning well for large commercial and industrial customers but not for residential and small commercial customers. It considered the market was not providing sufficient competition or innovation for customers, given the scarcity of energy-related value-added products and services available in the residential and small commercial electricity markets, and the high complaint rates about unexpectedly high bills. On 23 February 2016, the NYPSC published its Reset Order, where it restated that residential and small commercial customers were not benefitting from the competitive electricity retail market. The

NYPSC expressed concern about the fact that the majority of retailers serving residential and small commercial customers only offered electricity-related services, and that retailers could not effectively compete with electricity prices offered by networks, for a number of reasons such as customer acquisition costs, greater economies of scale of networks, and the fact that networks did not profit from the sale of electricity (making their tariff hard to beat). The New York Attorney General (NYAG) also launched an investigation on general retailer practices. Testimony in this proceeding was filed in the fall of 2017, and final post hearing briefs are due at the end of April 2018. The NYAG is seeking to restrict retailers from serving any type of mass-market customer because the original intention of Retail Choice in New York “was to create, through increased competition, lower-priced energy or more valuable energy products than utilities were able to provide”. However, the NYPSC found that retailers were “generating revenues by offering consumers little more than higher prices”.

C.III. PENNSYLVANIA, USA

C.III.1. Overview of retail competition

In 1996, the Electricity Generation Customer Choice and Competition Act restructured Pennsylvania’s wholesale and retail electricity markets. It required the divestiture of generating facilities by electric distribution companies, authorised rate caps to ease the transition to competitive markets, allowed for recovery of stranded costs, and established the requirements of service for retail electricity providers. Certain distribution companies agreed to reduce rates in the first year of Retail Choice, which was phased out over a 2-3 year period. Retail Choice was introduced in three stages: one third of customers could choose among competitive providers in 1999, expanding to two-thirds in 2000, and finally to all customers in 2001. However, full state-wide retail restructuring was not achieved until 2011 when generation rate caps expired across the state.

---


663 Mass market customers encompass residential and small commercial and industrial customers


666 Pennsylvania General Assembly, “Title 66, Section 2807 Duties of electric distribution companies”.

Currently, Pennsylvania has 11 investor-owned utilities (IOUs) and multiple cooperatives and municipal electric systems. The Pennsylvania Public Utility Commission (“PUC”) is the regulatory body that oversees public utility and services while protecting the public interest. On 10 December 2009, the PUC announced that the Office of Competitive Market Oversight (“OCMO”) will serve as the Commission’s electric retail choice ombudsman. In this capacity, the OCMO will oversee the development and functioning of the competitive retail electric supply market.

C.III.1.i. Default tariff

Under state law, incumbent electric distribution companies serve as the provider of last resort and the provider of default service, unless the distribution company is relieved of its default service obligation. In cases where the incumbent utility provides default service, the service charges must be listed separately. The network must submit a plan to acquire generation supply by competitive means, and must do so by obtaining a prudent mix of contracts at least cost on a long-term, short-term, and spot market basis. The statute endorses a variety of competitive acquisition approaches, including auctions, requests for proposals, and bilateral agreements. To reflect the changing costs of the underlying contracts, the default service rate is updated at least quarterly. Default service rates are subject to the PUC’s review, but the default provider is allowed “recovery of its reasonable costs for purchases made pursuant to an approved competitive procurement process”.

Unique to Pennsylvania, distribution companies may offer large customers with a peak demand of 15 megawatts or greater any negotiated rate for service at all of the customer’s locations within the network business’ service territory. The offer would cover any duration agreed upon by the network and the customer – the only

---

668 Distribution companies are typically referred to as “utilities” or “electric distribution companies” (EDC) in Pennsylvania. To maintain consistency with the remainder of the report, we will use the term “networks” or “distribution companies” throughout this memo. Similarly, we will use the term “retailer” rather than “retail electric provider” (REP) or “electric generation service” (EGS).


671 Pennsylvania Code, “Title 52 Subchapter G: Default Service”.

672 Long term is defined as between 4 and 20 years.

673 Pennsylvania Code, “Title 52 Subchapter G: Default Service § 54.187”.

674 Pennsylvania Code, “Title 52 Subchapter G: Default Service § 54.188”.
stipulation being that the Commission can review the contracted rate to ensure that all costs are borne by parties to the contract, and not borne by other customers.675

**C.III.1.ii. Municipal aggregation**

425. In 2011, the PUC clarified that municipal aggregation would not be allowed without explicit approval from the PUC, stating that it “may actually hinder competition by allowing a single supplier to lock in large groups of customers at a single point in time”.676 The PUC would only approve programs where it is clearly in the public interest to have municipal aggregation. In 2015, a bill was introduced in the Pennsylvania House of Representatives to allow municipal aggregation on an opt-out basis for customers with less than 50 kW of demand.677 The proposal did not advance from the House committee.

**C.III.1.iii. Billing and credit risk**

426. With regards to customer billing, the customer has the right to choose whether to receive separate bills from the retailer and the network, or to receive one consolidated bill from the network.678 Only 3.2 percent of customer accounts in Pennsylvania received separate bills from retailers in 2016, of which 98 percent were non-residential customers.679 When a customer applies for default offer service, the network has the right to check the customer’s credit history and risk to determine whether a security deposit is necessary.680 The network may require a security deposit from an existing customer if the customer is late paying at least two bills in a row or three bills in the last year.681

427. While consolidated billing by the retailer is currently not an option in Pennsylvania, there is an open docket before the Pennsylvania PUC considering the implementation of retailer consolidated billing, brought forth by a petition from a coalition of retailers in December 2016.682 While multiple comments were received in the first three months, no documents have been filed since 23 February 2017.683

---

675 Pennsylvania Code, “Title 52 Subchapter G: Default Service § 54.188”.
678 Pennsylvania General Assembly, “Title 66, Section 2807 Duties of electric distribution companies”.
682 Pennsylvania PUC, “Docket No. 2016-2579249”.
C.III.2. Consumer engagement

C.III.2.i. Default Tariff

428. In August 2013, the PUC launched the Standard Offer Referral Program to encourage non-shoppers to switch away from default service. The Standard Offer Referral Program was voluntary, and worked by having the electric distribution companies refer certain customers (e.g. customers calling to complain about high bills) to a randomly selected participating retailer. The retailer must make a “standard offer” – a fixed rate of 7 percent below the current network’s rate for a year without cancellation or termination fees. Customers were notified prior to the end of the default offer period, at which time they could choose to remain with the retailer, switch to another competitive retailer, or return to the default service option. If a customer failed to respond either way, they would automatically remain with the retailer on a month-to-month basis without any termination fees. Since program implementation, the Standard Offer Program has achieved approximately 850,000 residential and 28,000 small commercial enrolments through August 2017.

C.III.2.ii. Price comparison tools

429. PUC requires standardised formats of billing that helps customers make informed decisions about electricity purchase and allows them to easily compare prices across energy providers (whether it is a distribution company’s default offer, or a distribution company and a retailer’s combined bill). The Pennsylvania Code states that distribution company charges must appear separately from retailer charges, and charges for basic and non-basic services must appear distinctly separate, with basic charges appearing first: generation, transmission, distribution and customer charges, advanced metering charges, transition charges, taxes, late payment charges, security deposits, reconnection fees, and itemisation of any non-basic charges.

430. There are many resources for customers to compare retailers and offers. The Pennsylvania Power Switch, managed by the PUC, has a “Price to Compare” tool that allows customers to compare retailers by filtering by type of plan (fixed or variable), term length, offer discounts, special programs (e.g. net metering), and terms and conditions (e.g. no cancellation fee). Even though it is not mandatory for retailers to list their product and prices on the Pennsylvania Power Switch, the PUC...

---

684 Pennsylvania PUC, “Innovation and Savings: The PUC’s Standard Offer”.


686 In 2016, Pennsylvania had approximately 5 million eligible residential customers and 500,000 commercial and industrial customers. See EIA Form 861.

687 Pennsylvania Code, “Title 52 Chapter 54. Electricity Generation Customer Choice”.
highly encourages them to do so.\footnote{PA PowerSwitch, “Understanding Fixed & Variable Rates”, accessed 21 March 2018.} The “Price to Compare” tool price breakdown includes charges from generation and transmission, state tax, and charges for the implementation of Alternative Energy Portfolio Standards (AEPS). The website also allows customers to compare offers based on zip code, and background information for understanding switching, terms, rates, and bills.\footnote{Pennsylvania PUC, “PA PowerSwitch”, accessed November 27, 2017.}

There are third party price comparison websites, not necessarily specific to Pennsylvania, which also provide similar information. For example, ChooseEnergy allows customers to compare offers in a given area and estimate the associated savings based on the customer’s consumption. Additionally, the Office of Consumer Advocate publishes the Electric Shopping Guide, with a price and offer comparison of competitive retailers in Pennsylvania by network distribution area.\footnote{Pennsylvania Office of Consumer Advocate, “Office of Consumer Advocate – Annual Report for Fiscal Year 2016-2017”, 2017.}

\section*{C.III.3. Smart meters}

The PUC amended Section 2807 of Public Utility Code through Act 219 of 2008 to require electric distribution companies of more than 100,000 customers to submit smart meter technology procurement and installation plans. Currently 7 distribution companies (PECO Energy, PPL Electric, Duquesne Light, Met-Ed, Penelec, Penn Power, and West Penn Power) have PUC approved smart meter plans. The deployment schedule as well as procurement and implementation plans for all distribution companies can be found on the PUC website.\footnote{Pennsylvania PUC, “Smart Meter Technology Procurement and Installation”.}

FirstEnergy’s Pennsylvania networks, composed of Metropolitan Edison Company (Met-Ed), Pennsylvania Electric Company (Penelec), Pennsylvania Power Company (Penn Power) and West Penn Power Company (West Penn), serve approximately two million customers in Pennsylvania.\footnote{FirstEnergy Companies, “FirstEnergy’s Pennsylvania Utilities Smart Meter Communications Plan”, 6 May 2014, p. 22.} These networks are planning a full-scale deployment of smart meter technology between 2016 and 2022, installing 98.5 percent of all meters by mid-2019 and the remaining 1.5 percent by 2022 (e.g. installations that involve remote locations).\footnote{Ibid.} As of 30 June 2016, around 463,000 smart meters have been deployed by First Energy Utilities: 35,520 by Met-
Ed, 157,140 by Penelec, 171,750 by Penn Power, and 98,800 by West Penn Power. The project was on schedule with the deployment plan.

Additionally, smart meters are being installed in new housing, and at individual customers’ request. The PUC aims to achieve complete smart meter utilisation by 2023. Charges related to smart meters are listed as a separate line item in a customer’s electric utility bill.

**C.III.4. Consumer safeguards**

**C.III.4.i. Marketing practices**

Retailers are required to use common and consistent terms, established in the state’s Glossary of terms, in all marketing materials. The use of general, unsubstantiated and unqualified claims of environmental benefits, such as “green” and “environmentally friendly,” is prohibited. Advertised prices must reflect prices in disclosure statements and billed prices. Marketing materials that offer terms of service must include a table showing what the price will be for an average customer using 500, 1,000 or 2,000 kWh of electricity, and clearly show the effective date of the prices. Retailers must also provide the PUC with copies of marketing materials upon request.

Pennsylvania introduced additional standards for residential energy sales and marketing activities in 2013. These standards govern areas such as retailer liability for its agents, agent qualification and training, door-to-door sales and telemarketing, customer authorisation to transfer accounts, consumer protections, customer complaints, and public notification when commencing marketing or sales activity. For example, retailers and their agents that engage in door-to-door marketing must comply with the Federal cooling-off period requirement and the state’s 3-business-

---


696 Pennsylvania PUC, “Smart Meter Q&A”.


698 Pennsylvania PUC, “Glossary”.

699 Pennsylvania Code, “Title 52 Chapter 54. Electricity Generation Customer Choice”.


day cooling-off period requirement. That is, the seller must inform the buyer of his right to cancel the contract within three business days of the transaction.\textsuperscript{702}

\textbf{C.III.4.ii. Contract expiration}

437. Retailers are required to notify customers 45-60 days prior to the expiration of fixed term contract or prior to a change in contract terms.\textsuperscript{703} These supplier renewal notices provide customers with the options of remaining with their retailer, switching to another retailer, or returning to the default offer with the electric distribution company.

\textbf{C.III.4.iii. Customer usage data}

438. Retailers may not release private customer information to a third party unless the customer has been notified of the intent and has given permission for the release of the private information. The customer may elect to restrict access to part of their information, such as their telephone number and historical billing data through written, oral, or electronic communication.\textsuperscript{704}

\textbf{C.III.4.iv. Complaints and dispute resolution}

439. Customers that have billing or service disputes must first attempt to resolve the dispute with their network or retailer first, and then can file informal or formal complaints with the PUC.\textsuperscript{705} When a network receives a customer complaint, it is required to investigate the matter and provide the customer with a report within 30 days.\textsuperscript{706} The report must provide the necessary information for the customer to make an informed decision about whether to proceed further with the matter. The network must be able to produce the report in writing upon customer request. Additionally, the network must inform the customer about their right to register a further complaint with the PUC and explain how to do it.

440. If the customer is not satisfied with the network’s report, they can file an informal complaint with the PUC. Customers with a pending disconnection or termination notice must file the complaint to the PUC within 10 days of receiving the network’s report in order to keep the right to service while the dispute is pending. The Bureau of Consumer Services (BCS)\textsuperscript{707} will review the dispute, notify

\textsuperscript{702} Ibid, §111.9.

\textsuperscript{703} Pennsylvania Code, “Title 52 Chapter 54. Electricity Generation Customer Choice §54.10”.

\textsuperscript{704} Pennsylvania Code, “Title 52 Chapter 54. Electricity Generation Customer Choice”.

\textsuperscript{705} Pennsylvania PUC, “Your Rights and Responsibilities as a Utility Consumer”, p. 12.

\textsuperscript{706} Pennsylvania Code, “Title 52, Chapter 56 § 56.151”.

\textsuperscript{707} The Bureau of Consumer Services is the division of the PUC responsible for answering questions and handling complaints about issues related to electric companies.
the customer of its decision, and explain how to appeal the decision to the PUC if the customer disagrees with it.\footnote{Pennsylvania Public Utilities Commission, “Your Rights and Responsibilities as a Utility Consumer”, p. 17.}

If a customer disagrees with the decision from the BCS, the customer may appeal the decision by filing a formal complaint with the PUC. Customers with a pending disconnection or termination notice must do this within 20 days of receiving the BCS in order to keep the right to service while the dispute is pending.\footnote{\textit{Ibid.}, p. 13} Then, a hearing may be scheduled and a PUC judge will issue a decision about the dispute.

\textbf{C.III.5. Targeted protection of vulnerable customers}

In Pennsylvania, a customer qualifies for additional protections if they are a victim of domestic violence with a Protection from Abuse ("PDA") Order, if they live in a low-income household, or if they (or a member of the household) are seriously ill. These protections can be found in the “Consumer Rights and Responsibilities” manual, which is available on the PUC’s website. Networks are required to have the manual available on their websites and at all network office locations open to the general public.\footnote{Pennsylvania Code, “Title 52, Chapter 56 § 56.201”.} Service for low income customers and victims of domestic violence cannot be turned off during the winter months. Customers with medical devices cannot be disconnected. Further information regarding targeted protection of vulnerable customers is discussed below.

\textbf{C.III.5.i. Disconnections}\footnote{The PUC refers to disconnections as “Shutoffs” or “Terminations”. See Pennsylvania PUC “Your Rights and Responsibilities as a Utility Consumer”, pp. 14-17.}

Prior to disconnecting a service, networks are required to provide a written notice of the disconnection to the customer at least 10 days prior to the date of the proposed disconnection. The disconnection notice shall remain effective for 60 days. This notice must include in clear print, among other items, the reason for disconnection, the date when service will be disconnected (unless payment in full is received); the networks contact information, and information on protection against vulnerable customers (see Section C.III.5). Networks are not allowed to send a customer a notice of disconnection if a complaint has been filed and remains unresolved and if the subject matter of the dispute is related to the proposed disconnection. Three days prior to disconnecting, the network must attempt to make personal contact by phone on two separate occasions or, in person at least once. Customers can participate in a third-party notification program, where
another person or agency is authorised to receive copies of the disconnection notices. This program protects individuals who are away from home or who may not understand the network’s practices against service disconnections.

C.III.5.ii. Victims of domestic violence

If a customer is a victim of domestic violence and has a PFA Order issued by the courts, there are special protections in place to handle their electric service, such as: the service cannot be disconnected during the winter months without approval from the PUC, the service cannot be disconnected the day before a weekend or holiday, the customer may not be held responsible for a bill in someone else’s name, the customer may not be required to pay a security deposit, and if required, they may qualify to spread the security amount due over three payments, and depending on the income level, a special payment arrangement may be available.712

C.III.5.iii. Low-income households

Low-income consumers may qualify for the federally funded Low Income Home Energy Assistance Program (LIHEAP). The program is administered by Pennsylvania’s Department of Public Welfare and consists of three components: (i) cash benefits to help eligible customers to pay for home-heating fuel, (ii) crisis grants to resolve weather-related, supply shortage, or other household energy-related emergencies, and (iii) energy conservation measures to address home-heating problems in low-income households. To qualify for the program, a household must have a gross income at or below 150 percent of the Federal Poverty Income Guidelines. The LIHEAP program helps approximately 345,000 (6.9 percent) households each year, 35 percent of which have an elderly person and 20 percent of which are families with children younger than 6.714 During the 2015-16 season, 345,246 households received cash benefits, and 89,735 households received crisis benefits state-wide. These households received an average of $462 each.

Customer Assistance Programs (CAPs) are offered by the networks to provide help to low-income, payment-troubled customers on default services. To qualify for the program, a household must have a gross income at or below 150 percent of the Federal Poverty Income Guidelines. Customers enrolled in a CAP receive a monthly credit towards their electric bill.715 The credit applied to each customer is calculated based on gross household income and energy consumption. Some networks may

---


713 Pennsylvania Department of Human Services, “LIHEAP Brochure”.


offer additional benefits as part of the program. For instance, FirstEnergy companies offer the following benefits to low-income customers participating in CAPs:

- Automatic enrolment in the Equal Payment Plan, which protects customers from seasonal high and low bills;
- A one-time opportunity to have their current account balance removed.
- The opportunity to participate in the WARM program, which provides energy conservation improvements and education to help low-income customers save money by reducing their electricity consumption.

Approximately 13 percent of FirstEnergy’s eligible population, or 40,727 customers, participated in FirstEnergy’s CAP in 2015.

Low-income customers may also qualify for additional savings programs, such as the Low-Income Usage Reduction Program (LIURP), a network-sponsored program which helps low-income residential customers lower their bills by installing measures intended to reduce household energy consumption and repairing existing housing for eligible low-income families. The 15 major electric and gas companies that are required to participate in LIURP have provided treatments to more than 496,894 low-income household from 1998 to 2014.

As a safeguard measure, if a household’s income level is below 250 percent of the federal poverty level and the bill is not paid, the network cannot shut off service during winter months (December 1 through March 31).

C.III.5.iv. Medical conditions

Households with a member in a medical emergency (seriously ill or have a medical condition that will be worsened in the absence of electric service) can avoid shutoff or obtain restoration of electric service. The customer must not have any unpaid bills to qualify for this protection. The shutoff can be postponed for a maximum of 30 days and renewed for additional 30-day periods. However, the customer still has the responsibility to pay for their bills during the postponement.

---

716 FirstEnergy Companies, “Pennsylvania Customer Assistance Program”.
718 Penn State College of Agricultural Sciences, “Pennsylvania Low-Income Usage Reduction Program”.
719 Ibid.
720 The PUC notes that the poverty levels can change each year, see Pennsylvania PUC, “Your Rights and Responsibilities as a Utility Consumer”, p. 16.
If service has already been shut off, a customer may provide a medical certification to the network to have service restored within 24 hours.

C.III.6. Promotion of competition

C.III.6.i. Retailer entry requirements

451. To be licensed to operate, a retailer must file an application to the PUC. 722 This application must show that the retailer can demonstrate certain requirements, for example:

- Letter of credit or proof of bonding to the Commission in the amount of $250,000
- Evidence of ability to comply with Commission’s requirements concerning customer billing, customer education, billing and terms of service, and customer information
- Proposed marketing methods and oversight to ensure compliance
- Proof of registration as a PJM load-serving entity filed within 120 days of receiving a license

452. In addition, the retailer must assent to the following reporting requirements:

- Annual reporting for customer groups defined by annual usage for PUC’s Retail Electricity Choice Activity Reports
- Intrastate gross receipts to the Commission on a quarterly and year to date basis no later than 30 days following the end of the quarter
- Annual report, under oath or affirmation, of the amount of gross receipts received by an applicant during the prior calendar year to the Department of Revenue by March 15
- Net Metering reporting standards723
- Annual breakdown by percentages of total electricity supplied by each fuel source
- Periodic reporting requirements issued by the Commission pertaining to reliability and to inform the Governor and Legislature of the progress of the transition to a fully competitive electric market

C.III.6.ii. Default service price cap

453. Pennsylvania’s default service increases barriers to entry for retailers by creating consumer inertia in regards to switching service from the default provider to retailers. Under the 1997 Electricity Generation Choice and Competition Act, electricity rates for networks were capped at their 1996 levels.724 However the

---

722 Pennsylvania PUC, “Application Form for Parties Wishing to Offer, Render, Furnish, or Supply Electricity or Electric Generation Services to the Public in the Commonwealth of Pennsylvania”.

723 Pennsylvania PUC, “Alternative Energy”.

724 Pennsylvania PUC, “The Expiration of Electric Generation Rate Caps”.
increasing price of energy in the market made it hard for retailers to compete against network suppliers.\textsuperscript{725}

\textbf{454.} Price caps were gradually eliminated and by 1 January 2011 all price caps had expired. This led to an increase in default service prices. For example, PPL’s price cap was eliminated in January 2010 and rates increased by 30 percent for customers remaining on default service. In the first nine months after the PPL rate caps expired, over 450,000 residential customers switched to competitive suppliers, accounting for slightly over 35 percent of the PPL residential load.\textsuperscript{726}

\textbf{C.III.6.iii. Customer switching}

\textbf{455.} The PUC has provided specific regulation regarding customer switching. When a customer requests to switch to a new retailer, the selected retailer must give the customer a 3-day period before notifying the distribution company of the customer’s request. After the 3-day period, the retailer must contact the network by the end of the following business day.\textsuperscript{727} Then, the network shall switch the customer to the new retailer within 3 business day. Authorised individuals can also act on behalf of the customer and switch suppliers on the customer’s behalf. If termination fees apply when cancelling service from the current supplier, the network must notify the customer about the cancellation fee before enrolling the customer with the new supplier. Networks are not allowed to charge fees to a retail customer for changing its retailer.\textsuperscript{728}

\textbf{456.} In addition to the marketing practices in Section C.III.4.i that promote customer switching, electric retailers must provide easy-to-read contract summaries with each offer. The contract must consist of a clear and concise one page explaining the terms of contract in simple language so that customers can easily compare across contracts when choosing a new retailer. On the contract summary, retailers are required to provide information including:

- Basic information of the retailer such as name, website, phone number
- Contract information such as length, price structure, start date
- Generation/Supply price
- Statement on potential savings

\textsuperscript{725} Kleit, Andrew N., Anastasia V. Shcherbakova, and Xu Chen, Energy policy 46, "Restructuring and the retail residential market for power in Pennsylvania", 2012, p. 4.

\textsuperscript{726} Kleit, Andrew N., Anastasia V. Shcherbakova, and Xu Chen. Energy policy 46, "Restructuring and the retail residential market for power in Pennsylvania", 2012, pp. 5-6.

\textsuperscript{727} Pennsylvania Code, Title 52 Chapter 57 Subchapter M: Standards for changing a customer’s electricity generation supplier.

\textsuperscript{728} Pennsylvania Code, Title 52 Chapter 54 § 54.190
• Deposit requirements

In addition, the retailer advertised price must reflect prices in the disclosure statements. If retailer is using fixed price, it should show in table format the price per kWh for an average customer using 500, 1,000 or 2,000 kWh of electricity.

C.III.6.iv. Other factors

Default service customers are only offered a single rate option. Given the wide range of offers promoting energy savings and value-added products offered by competitive retailers (see Section C.III.7), the single rate option may incentivise customers to switch to a competitive retailer.

Networks have voluntary purchase of receivables ("POR") programs for residential customers, where the network buys the accounts receivables associated with retailer sales of electricity supply. This can be comprised of electric energy, capacity, transmission, and ancillary services. This program reduces the amount of risk a retailer takes when participating in the competitive market by providing retailers the option to have networks recover their outstanding receivables.

C.III.7. Outcome of retail competition

The Pennsylvania electricity retail market has an HHI of 1,200. This includes all customer classes and may not account for those customers who are on default service.

C.III.7.i. Retail sales activity

Electric distribution companies and retail electricity providers are required to file quarterly reports on retail sales activity, which the PUC packages into annual “electric choice reports”. In 2016, there were 113 active retailers in Pennsylvania, a 7 percent increase from 2015. Competitive suppliers served approximately 68 percent of Pennsylvania’s load. Retailers supplied 34 percent of the residential load and 87 percent of the non-residential load. In terms of customer accounts, 36 percent were served by competitive suppliers. Retailers supplied 35 percent of residential accounts and 48 percent of non-residential accounts. Retailers served less than 1 percent of total load under residential TOU, but 39 percent of total load

729 PA PowerSwitch, “About Switching Electric Suppliers in PA”.
730 Pennsylvania Code, “Title 52 Chapter 54 § 54.5”.
731 Pennsylvania Code, “Title 52 Chapter 54 § 54.187”.
732 London Economics, “Energy Retail Markets Comparability Study”, April 2012, Figure 50.
under non-residential RTP ("Real-Time Pricing") load. According to J.D. Power survey, the customer satisfaction score towards retail electricity market competition for PA was 669 out of 1000 in 2016.

C.III.7.ii. Product and Service Diversity

Retailers offer a variety of programs customers can participate in. As of 31 December, 2016, flat rates had the most customer accounts (75 percent), compared to time-varied rate programs (25 percent), including TOU, hourly/real-time, seasonal, hybrid, and others. The residential class accounted for 86 percent of the flat-rate accounts. One-year, fixed-term contracts had the most customer accounts (33 percent), and the residential class accounted for 91 percent of these contracts. Fourteen percent of customer accounts participated in green power programs, and the residential class accounted for 90 percent of these accounts.

In 2016, the Kleinman Center for Energy Policy (University of Pennsylvania) surveyed retail offerings to residential electricity customers that have been made possible through restructuring. The study found that residential customers in Pennsylvania had access to between 57 and 138 competitive offers per network service area. The lower-priced plans would give customers savings ranging from 10-36 percent when compared to the network’s default service. Of these, most were fixed or variable or variable rate plans. Of the remaining plans, renewable energy plans were most common. Interestingly, the study found that there have been limited options for innovative rates and plans, stating that “many innovations that were expected (e.g. time of use, energy efficiency and conservation) are either not available or not listed on the [state price comparison website]”. However, the Retail Energy Supply Association (RESA) noted the availability of innovative offerings, such as smart programmable thermostats (to help with energy efficiency), travel rewards, and different fixed-price terms.

---

738 Retail Energy Supply Association, "RESA talking points addressing the University of Pennsylvania's Kleinman Center study on the benefits of 20 years of energy competition in Pennsylvania", 28 October 2016, accessed 22 March 2018.
C.IV. TEXAS, USA

C.IV.1. Overview of retail competition

464. Texas passed Senate Bill 7 (SB7) in June 1999, which took full effect on January 1, 2002, introducing retail competition in much of ERCOT, the interstate grid that serves about 90 percent of the Texas load. Utility providers were allowed to remain involved in both competitive and regulated activities, but by January 2002 had to unbundle their services into separate legal entities. As a result, most Texas power customers can choose their electricity service from retailers.

C.IV.1.i. Price to Beat

465. In January 2002, networks were required to freeze their rates to the regulated amount as of September 1, 1999 (adjusted by fuel prices). Customers were then defaulted onto the retailer that was affiliated with their incumbent distribution company, which in turn was required to charge a price that was six percent lower than this default rate. This new rate (known as the “Price to Beat”) was set by the Public Utility Commission of Texas (PUCT) and until January 2005 was the only rate that the network-affiliated retailers were allowed to charge residential and small commercial customers in the service area. The Price to Beat (PTB) was designed to protect non-switching customers against excessive price hikes. It was also intended to promote competition by ensuring that incumbents could not cut their prices in response to competition, thereby allowing new firms room to enter. However, it could also be argued that setting a price 6 percent below the

---

739 Public Utility Commission of Texas, “Retail Competition in Texas: A Success Story”, 8 June 2011, p. 3.


744 Competitive subsidiary companies of the vertically integrated investor owned utilities are also called “affiliated” companies.

previous default rate made it difficult for new entrants to compete. The PTB rate was to be in effect until December 2006. However, network-affiliated retailers could offer plans with alternative prices after Jan. 1, 2005, if they could demonstrate that more than 40 percent of their customer base had switched to alternate retailers since the introduction of retail competition.746

C.IV.1.ii. Provider of last resort

466. The PUCT assigns providers of last resort (POLR) as the back-up electricity providers in every area for circumstances in which the customer has not yet identified a retailer or have had their service discontinued. The price that the POLR charges is relatively expensive, which is designed to push customers into the retail market. In addition, if the incumbent network continues to be the POLR, a relatively high regulated price allows the incumbent network to endure price shocks from the wholesale market. 747

C.IV.1.iii. ERCOT and PUCT

467. The Energy Reliability Council of Texas (ERCOT) and the Public Utility Commission of Texas (PUCT) are the two major institutions involved in the Texas electricity retail market. ERCOT is the interstate grid and the independent system operator in Texas. ERCOT’s responsibilities include (i) maintaining reliability of the bulk electric system, (ii) maintaining registration database, and (iii) settling the wholesale markets. Oversight of the electricity system in Texas is provided by the PUCT and the state legislature.748 To support retail competition, SB7 also gave the PUCT additional responsibilities to regulate distribution companies. These include:749

- Establishing and enforcing rules to protect retail customers from fraudulent, unfair, misleading, deceptive or anticompetitive practices
- Overseeing every retailers and assessing civil and administrative penalties for violations
- Conducting customer education programs.


C.IV.1.iv. Retailer responsibilities

The PUCT also lists a range of responsibilities for retailers, such as: 750

- “Buying electricity at wholesale.
- Buying delivery service and paying the charges for transmission and distribution service to the Transmission and Distribution Utilities (TDUs).
- Serving as the direct contact with the customer for electric service issues.
- Billing the customer and collecting for the REP’s charges.
- Providing a 24-hour toll free telephone number for customer calls.
- Developing electronic interface system to communicate with the Independent System Operator (ERCOT) and other Market Participants relating to customer switches and meter information.
- Testing the electronic interface system with ERCOT.
- Understanding and following the Commission’s rules, including customer protection rules. PUC Substantive Rules, Subchapter R”

C.IV.2. Consumer engagement

The PUCT engages residential and small electric customers through two ongoing campaigns: “Texas Electric Choice” and “Power to Save”.

C.IV.2.i. Price comparison websites and consumer education programs

The Texas Electric Choice campaign began in February 2001 and aims to engage and educate residential and small commercial electric customers about electric retail competition. As part of the campaign, the commission developed the PowerToChoose.org website, which provides Texans living in service areas open to retail competition with the ability to go through the various plans that are offered by the retailers via a portal. 751 The website has standardised details on the plans offered including plan type (fixed, variable or indexed), contract duration, amount of renewable energy used, price per kilowatt-hour and cancellation fees. Each offer has a standardised “Fact Sheet” included which consists of information relating to price and other disclosures, and a “Terms of Service” attachment. Retailers are not required to list their tariffs on the website and do so on a voluntary basis. 752 Lastly, the website has a rating system for each company providing an offer which is based on the number of complaints the company received compared to other companies in the last 6 months. The PUCT has conducted a number of activities to promote this


website through social media, community events, trade shows and expos. Between September 1, 2015 and August 31, 2016, the PowerToChoose.org had close to a million customers visiting the website.\(^{753}\) The website also has a Spanish-language counterpart, PoderDeEscoger.org.

471. The Power to Save Texas is a state-wide initiative which educates Texans about energy conservation, especially during peak times. The accompanying website, ThePowerToSaveTexas.org,\(^{754}\) provides Texans with tips to save energy in their homes and businesses. In addition, as part of the program, the PUCT contracted with Resource Action Programs to implement a “middle school energy conservation outreach program” in four Texas counties.\(^{755,756}\)

C.IV.2.ii. Standardised information requirements

472. Retailers are also required to provide standardised information relating to pricing, contract terms and emission levels.\(^{757}\) While it is up to each retailer to design its bills, there are many components of the bills that the retailers must show, including:\(^{758}\)

- Billing period
- Amount due
- Payment made since last bill
- Toll-free number for billing questions
- Toll-free number for outage report
- Kilowatt-hour reading and kilowatt-hour total
- Note if billed usage is based on non-estimated usage

473. The PUCT provides additional educational materials on their website, including brochures and fact sheets.\(^{759}\)


\(^{754}\) The website also has a Spanish-language counterpart, PoderDeAhorrarTexas.org.


\(^{756}\) Middle School includes Grades 6-8.


C.IV.3. **Smart meters**

474. In 2005, the Texas Legislature passed HB2129, which encouraged and created incentives for networks to begin a mass rollout of smart meters. The intention of the legislation was to “increase the reliability of the regional electrical network, encourage dynamic pricing and demand response and provide more choices for consumers”.

**C.IV.3.i. Smart meter data portal**

475. After the legislation was introduced, the electricity networks in Texas hired IBM to build a “Smart Meter Texas” (SMT) portal. The portal was set up in 2007 and allows customers in the competitive portions of the state to access their energy data without any cost. Data has to be loaded onto the SMT by networks one day after consumption, which is then available to customers and their retailers. Texans can utilise the “Green Button” to access their data from the SMT in a standardised format.

**C.IV.3.ii. The Green Button initiative**

476. The Green Button is an initiative launched by the Obama administration in 2011 to standardise how energy usage data is presented to customers. The initiative gives consumers the ability to download their detailed energy usage data by the “click of a green button”. Generally, the Green Button service is provided on the network’s website, however in Texas this service is also provided by the centralised data portal, SMT. The Department of Energy notes that the Green Button data standard is flexible enough to handle different types of energy data and time interval usage. In addition, the data can be provided in 15-minute, hourly, daily, or monthly intervals depending on what a utility decides to make available and what level of detail they are able to provide. The physical appearance of the green button itself is the same across the different portals and network provider’s websites.

---


763 Energy includes water, gas and electricity.

Outside of Texas, the Green Button initiative has an additional functionality known as “Green Button Connect”, which allows customers to share their data with third-party service providers to receive additional data-driven services.\(^765,766\)

The Green Button initiative has been taken up by networks in California, New York and other states with advanced metering infrastructure as well.\(^767,768\)

### C.IV.3.iii. Third-party energy service providers

Initially only customers and their retailers had access to energy usage data. However third party access to data was made available from November 2014. In October 2016, there were approximately 100 third-party competitive energy service providers that provide data-driven services to electricity customers, given the customer’s authorisation. However, there are fewer than 1,800 agreements between third party service providers and consumers for data access in Texas.\(^769\)

### C.IV.3.iv. Smart meter deployment

In 2017, Texas had around 7.3 million residential and commercial smart meters in the ERCOT areas open to retail electricity competition.\(^770\) In 2015, 81.5 percent of residential customers and 84.2 percent of commercial customers had Advanced Meters in Texas.\(^771\)

### C.IV.4. Consumer safeguards

Retailers in Texas are subject to Electric Substantive Rules (Chapter 25 Rules), which include strict provisions on customer protection and establish a range of

---


\(^766\) Green Button Connect is not available in Texas. However, Smart Meter Texas allows third-party service providers to access consumer data through the portal if given authorisation by consumers. See King, R. and Bevill, R., SPEER, “Improving Access to Smart Metre Data in Texas”, October 2016, p. 5.


\(^768\) To see the list of networks offering this service, see Energy.gov, “Green Button”.


\(^771\) Specifically these statistics on smart meter deployment are for the Texas Reliability Entity area, which is similar to the ERCOT area. Department of Energy, “Assessment of Demand Response and Advanced Metering”, December 2017.
penalties that may be assessed for the various violations. The PUCT enforces these rules and statutes in its jurisdiction through mechanisms such as administrative penalties and revoking a company’s certificate to operate.  

**C.IV.4.i. Information requirements and marketing**

482. Texas does not regulate retailers’ prices, and plans are made available through Texas’ Power to Choose website.  

483. Retailers that advertise the specific benefits of a particular product must provide the name of the electric product offered in the advertisement materials to the PUCT if requested. Retailers are responsible for representations of service by employees or other agents to their customers. The PUCT publishes substantive rules to govern the retailers’ selling and marketing efforts through print, TV, radio, Internet and outdoor advertising.  

484. According to the PUCT, all written, electronic, and oral communications, including advertising, websites, direct marketing materials, billing statements distributed by a retailer have to be clear and not deceptive, misleading, unfair or anti-competitive. If there’s a change to a contract, retailers must notify customers 14 days in advance of the new terms becoming effective.  

485. Chapter 25 Rules, as published by the PUCT, note specific rules on customer information requirements:  

- Without obtaining the customer’s confirmation, retailers shall not release proprietary customer information to any other person, including an affiliate of the retailer.  
- In regards to customer specific information or data, retailers should never sell, make available for sale, or authorise the sale of any such information.  

---


773 It is unclear whether it is compulsory for retailers to advertise their prices on the Power to Choose website.  


• If requested by the customer, retailers shall notify a third person chosen by the customer of any pending disconnection of electric service with respect to the customer’s account.

486. A retailer shall also provide information in the language designated by customers. Such information includes: 778

• “Terms of service documents, Electricity Facts Label, customer bills, and customer bill notices;
• Information on the availability of new electric services, discount programs, and promotions; and
• Access to customer service, including the restoration of electric service and response to billing inquiries”.

C.IV.4.ii. Switching

487. Chapter 25 also notes specific rules related to customers switching between retailers:

• A retailer providing service can collect early termination fees but shall not charge a customer any fee for the switching of a customer to another retailer.
• If the retailer switches a customer without obtaining their permission first, the PUCT may suspend or revoke the retailer’s license. 779

488. Customers can be enrolled through internet enrolment, written enrolment, door-to-door sales (orally), portable electronic devices, or over the telephone. 780

C.IV.4.iii. Complaints

489. The PUCT’s rules permit a customer to file a complaint with the Commission about their electric service. If the complaint is not resolved via an informal complaint process, the customer has the option to go through a formal complaint process. 781

C.IV.4.iv. Provider of last resort

490. As mentioned previously, the PUCT has designated Providers of Last Resort (POLR) as a back-up electric service provider in each area of Texas open to


779 Ibid.


competition. However, the PUCT claims that the service is relatively expensive, uncommon and temporary due to “the costs associated with planning and the risk of serving an uncertain number of customers with uncertain electricity loads.” However, as noted before, making the service relatively more expensive also provides an incentive for customers to switch to a competitive retailer.

C.IV.5. Targeted protection of vulnerable customers

In addition to protection from disconnections, programs such as the Weatherization Assistance Program, Texas Comprehensive Energy Assistance Program and previously active LITE-UP seek to protect vulnerable electricity customers in Texas.

C.IV.5.i. Disconnections

The retailer shall send customers written notice of contract expiration at least 30 days or one billing cycle prior to the date of contract expiration. Retailers can request the networks to disconnect customers who do not pay their electric bill after a required 10-day notice period. Prior to disconnection, the retailers must provide a written “Disconnection Notice” which must be mailed no earlier than the first day after the bill is due. The disconnection must be 10 days after the notice is provided and cannot fall on a holiday or weekend (or the day proceeding).

Following are some additional customer protection initiatives that restrict retailers from disconnecting vulnerable consumers due to non-payment:

- During an “extreme weather emergency”, retailers are not allowed to disconnect customers from electric services. In addition, if requested, the retailer must also offer the customer a deferred payment plan for bills due during the emergency.

---


783 If a customer takes no action, “the REP shall serve the customer pursuant to a default renewal product that is a month-to-month product.” see Public Utility Commission of Texas, “Chapter 25. Substantive Rules Applicable to Electric Service Providers”, accessed 20 November 2017, p. 638.

784 Unless the REP’s are available on those days to take payments or make payment arrangements and service can be reconnected. See, Public Utility Commission of Texas, “Utility Complaints – Know Your Rights”, accessed 8 March 2018.

785 Unless the REP’s are available on those days to take payments or make payment arrangements and service can be reconnected. See, Public Utility Commission of Texas, “Utility Complaints – Know Your Rights”, accessed 8 March 2018.

786 Further detail on extreme weather is provided by the PUCT: “An electric utility cannot disconnect a customer anywhere in its service territory on a day when: (1) the previous day’s highest temperature did not exceed 32 degrees Fahrenheit, and the temperature is predicted to remain at or below that level for the next 24 hours, according to the nearest National Weather Service
• If prior to the disconnection date stated in the notice, the customer established with the retailer that they or another resident on their premise has a “critical medical condition and will become seriously ill or more seriously ill if there is a disconnection of service”, then the retailer may not authorise a disconnection. 

C.IV.5.ii. Weatherization Assistance Program

The Weatherization Assistance Program is run by the Texas Department of Housing and Community Affairs and is designed to offer qualified low-income Texans energy audits, or a review of their homes’ energy efficiency, and installation of weatherisation measures to increase energy efficiency. In order to qualify, the income of the household must be below 200 percent of the federal poverty guidelines and the consumer’s home must be able to benefit from being weatherised. If the household qualifies, then those with children under the age of six, elderly residents or a disabled resident or households with the highest energy costs and lowest income will be prioritised. The program itself offers an audit of the qualified recipient’s house to see if there are air leaks or inefficient appliances causing higher energy costs than needed. After the audit is completed, the program also gives financial and installation assistance.

C.IV.5.iii. Texas Comprehensive Energy Assistance Program

The Texas Comprehensive Energy Assistance Program (CEAP) is designed to assist low income household in their energy needs and to encourage consumers to control energy costs through education. The program is run by the Texas Department of Housing and Community Affairs and provides relief to low-income elderly and/or disabled households, especially those most vulnerable to high energy costs from home heating and cooling. CEAP provides financial assistance through paying up to six or eight of the highest bills during the year. The program is not an entitlement; this means that households will only receive funds based on their

Continued from previous page

(NWS) reports; or (2) the NWS issues a heat advisory for any county in the electric utility’s service territory, or when such advisory has been issued on any one of the preceding two calendar days.”, see “Chapter 25, Substantive Rules Applicable to Electric Service Providers,” p. 92, accessed 12 March 2018.

787 To obtain this particular exemption, the customer must enter into a deferred payment plan with the REP and “have the ill person’s attending physician contact the REP and submit a written statement attesting to the necessity of electric service to support life. This exemption from disconnection due to illness or disability shall be in effect for 63 days and may be applied for again after the 63 days has expired and the deferred payment plan has been fulfilled.” See Public Utility Commission of Texas, “Utility Complaints – Know Your Rights”, accessed 8 March 2018.

availability. The program also provides assistance in an energy related crisis, or during severe weather or supply shortages.\textsuperscript{789, 790}

\textbf{C.IV.5.iv. LITE-UP Texas}

LITE-UP Texas was a program established in 1999 which allowed eligible low-income and elderly customers to save a certain proportion of their regular price of electricity, which was a set amount in cents per kilowatt-hours off of the price the customer pays.\textsuperscript{791} Texans who were eligible for food stamps or Medicaid automatically qualified for the program. In 2015, around 700,000 households relied on the program and subsidies ranged from 25 percent to 31 percent.\textsuperscript{792} However, LITE-UP Texas discounts ended in August 2016 due to insufficient funding.\textsuperscript{793}

\textbf{C.IV.5.v. Other educational programs}

The PUCT has also undertaken additional activities to promote education for vulnerable customers, including:\textsuperscript{794}

- Working with legislative offices and faith- and community-based organisations to provide educational materials and training to help their constituents better understand the deregulated market and the PUCT’s website.
- Training their Customer Protection Division staff to respond to customer calls, and to assemble and mail information packages comparing electric plans when requested by customers without Internet access.

\textbf{C.IV.6. Promotion of competition}

Since the introduction of retail competition, Texas has been able to attract and retain competitive retailers into the electricity market. In the pre-competition

\textsuperscript{789} Benefits.gov, "\textit{Texas Comprehensive Energy Assistance Program (CEAP)}", accessed 9 March 2018.

\textsuperscript{790} Benefits.gov provides details on the required household income to qualify for the program. In addition, the website also notes that “A person who participates or has family members who participate in certain other benefit programs, such as the Supplemental Nutrition Assistance Program (SNAP), Supplemental Security Income (SSI), Temporary Assistance for Needy Families (TANF) or certain needs-tested Veterans benefits may be automatically eligible.” See, Benefits.gov, “\textit{Texas Comprehensive Energy Assistance Program (CEAP)}”, accessed 9 March 2018.

\textsuperscript{791} HoustonKemp, “\textit{Supporting Vulnerable Energy Customers}”, 20 March 2015, p. 19.

\textsuperscript{792} Malewitz, J, The Texas Tribune, “\textit{Texas Stops Helping Poo Families Pay Their Electric Bills}”, 2 September 2016.

\textsuperscript{793} Public Utility Commission of Texas, “\textit{Paying Your Bill – Assistance Paying Your Bill}”, accessed 9 March 2018

environment, the incumbent utilities were the only formal seller of power. Retailers in Texas now not only include retailers associated with existing ERCOT network companies, but also affiliates of out-of-state network holding companies and other independent energy producers. These factors reflect a relatively low barrier to entry within the Texas retail electricity market; Littlechild (2018) labels Texas as “the most active and advanced competitive retail market in the nation”.796

C.IV.6.i. Uniform business rules

499. Barriers to entry were lowered as a result of Texas’ uniform business rules and the centralising of electricity service registration functions at ERCOT. When introducing SB7, the PUCT established the “Code of Conduct for Electric Utilities and Their Affiliates,” which was used to ensure that retailers and power generation companies were treated equally by the networks. The code’s stated purpose is to “establish safeguards to govern the interactions between utilities and their affiliates, both during the transition to and after the introduction of competition, to avoid potential market-power abuses and cross-subsidisation between regulated and unregulated activities.”797

C.IV.6.ii. Texas electricity wholesale market

500. The development of Texas’ wholesale market along the retail market also lowered barriers to entry as policies were put in place to ensure that market participants would have access to systems and facilities needed to participate in the market. The wholesale market structure was designed to rely upon and promote bilateral contracts between generation companies and retailers. A bilateral market between retailers and generators allows for retailers to have wide latitude to buy wholesale supply for long and short terms in different packages to match variance in consumer demand for power over time. In addition, existing generation capacity was made available to non-affiliated retailers in the early stages of retail competition. Just prior to the introduction of retail competition, incumbent generation owners had to auction multi-year entitlements to at least 15 percent of the power from their generation capacity. This continued until the earlier of January 1, 2007, or the point at which 40 percent or more of the residential and small commercial customers in


the networks’ service area were served by non-affiliated retailers.\(^{799}\) This initial 15 percent capacity entitlement auction gave non-affiliated retailers an opportunity to have access to power from the existing generation capacity.\(^{800}\)

**C.IV.6.iii. Incumbent network unbundling**

Requiring vertically integrated energy companies to unbundle into three distinct companies also lowered barriers to entry by allowing retailers and power generating companies to have equal access to services from the networks. This non-discriminatory access to the grid was also supported by ERCOT’s role as the independent grid administrator. Lastly, Texas established market monitoring and mitigation functions, which are conducted under the supervision of the PUCT with the assistance of a third-party market monitor.\(^{801}\)

**C.IV.6.iv. Centralised administration system**

Texas has also adopted a centralised system for administrating customer “move-in” and “switching” processes needed when a retail customer initiates or changes a service from the retailer. ERCOT is the centralised registration agent for the competitive electricity retail market in Texas. This role gives ERCOT the responsibility to receive and manage the transaction orders to assure that customers receive electricity service when they move from a location, start up electric service, arrange for power to be supplied by a retailer, and track monthly electricity usage data. By not allowing local distribution companies to provide these functions, as common in other jurisdictions, Texas avoids the build-up of multiple registration systems for a single state. This reduces inefficiencies that retailers may face, reducing costs of entering and operating in the market.\(^{802}\)

**C.IV.6.v. Retailer financial requirements**

In order for a retailer to enter the market it must demonstrate and maintain certain financial requirements:\(^{803}\)


• “(i) an investment-grade credit rating; or
• (ii) tangible net worth greater than or equal to $100 million, a minimum current ratio (current assets divided by current liabilities) of 1.0, and a debt to total capitalisation ratio not greater than 0.6
• REP and its guarantor must provide and maintain an irrevocable stand-by letter of credit payable to the commission with a face value of $500,000 for the purpose of maintaining certification.”

C.IV.6.vi. Other measures to reduce barriers to entry

504. Other measures that reduce barriers to entry in the Texas retail market are:

• Having no default offer increases the size of the market for the retailers because having default offers creates a source for inertia when switching between retailers.
• Retailers are required to bill customers directly since there is no default offer. Networks have very limited interaction with customers and consequently, network companies do not create competitive barriers. 804
• In order to initiate service in Texas, the customer must select a competitive provider. This is unlike other US states where a new customer must initiate service with a network first and then switch to a competitive provider.
• Texas’s codes of conduct and prohibitions on networks being in the merchant function.
• Competitive retailers in Texas can directly manage their credit and collection relationship with customers. In other states, this relationship must occur with a network involved.
• Retailers can charge deposits and issue disconnect orders for non-repayment to the network. 805

C.IV.7. Outcome of retail competition

505. The Texas electricity retail market is very competitive, and has an HHI of 440, although this includes all customer classes. 806 The percentage of customers using competitive retailers has risen since January 2002 from 0 percent to 69 percent in December 2016. In terms of load, 81 percent of Texas’s load is served by retailers as of December 2016. 807 Retailers offer various types of products, giving consumers options such as fixed/variable rate, renewable energy, and various lengths of plans.

806 Cornwall Insight, “Energy Spectrum issue 486”, 17 August 2015, p. 3.
ranging from 1 month to a few years. As of September 2016, 109 retailers were operating in ERCOT, providing 440 total unique products, 97 of which solely support electricity generated from 100 percent renewable sources. Together, the retailers in the competitive market serve approximately 6.2 million residential, 1.1 million commercial, and 4,000 industrial customers. In this highly competitive retail market, 92 percent of all customers have exercised their ability to switch retailers since the market opening in 2002. The proportion of residential customers that have made an active choice to be served by a non-affiliated retailer has also steadily increased since the introduction of retail competition. In 2003, 10 percent of residential customers were served by non-affiliated retailers. This value increased to 40 percent in 2007, 59 percent in 2012 and 68 percent in 2017. Since 2001, average retail rates across Texas have decreased by 63 percent.\(^{808}\)

### C.IV.7.i. Complaints resolution

506. From September 1, 2014 to August 31, 2016, the average number of days to resolve a utility complaint was 18 days. Between September 1, 2014 and August 31, 2016, the Commission received 4,465 electric complaints. Billing complaints continue to be the greatest cause of customer complaints, with 42 percent of all electric complaints concerning billing issues. Complaints relating to the provision of service, including customer service and the refusal of service, were the second highest cause of complaints at 15 percent.\(^{810}\)

### C.IV.7.ii. Consumer satisfaction statistics

507. According to a study conducted by J.D. Power, a market research firm based in California, in 2016 Texas achieved the highest overall score of 730/100 when measuring overall consumer satisfaction in comparison to eight other states in the US The study also notes that in 2016 Texas had 16 percent of customers switching to a new retailer. This number decreased from 18 percent in 2015. In addition, 41 percent of Texans renewed their service in 2016, which dropped from 44 percent in 2015.\(^{811}\)

---


C.IV.8. Price Monitoring

In Texas, there seems to be no reporting requirement for retailers that gives the PUCT’s price monitoring powers. However, the PUCT does publish the following recurrent reports that use pricing data:

- “Scope of Competition in Electricity Markets in Texas” – an annual report that has information on: the number of different tariffs on offer, number of products generated from 100% renewable sources, and statistics on the lowest fixed-term contract rate and the unweighted average rate across all plans for customers consuming approximately 1,000 kWh of electricity a month. The data is used to provide a summary of the competitive outlook in the retail electricity market, as well as price comparison in regards to the most recent regulated rate (adjusted by inflation) and a nationwide average price. Note that these statistics are calculated using data from the Power To Choose PCW.

- “Monthly Retail Electric Service Bill Comparison for Residential Electric Service” – a monthly report, which provides estimates of monthly customer bills for a subset of retailers and offers. Bills are estimated using four different load profiles for each offer. Each distribution network has its own set of load profiles.

- “Average Annual Rate Comparison for Residential Electric Service” – is a monthly report which provides annual average prices per kilowatt-hour (kWh). The data is presented by distributor for 11 retailers and for up-to 4 tariff options per retailer. Data is further classified by customers based on their total monthly consumption. The information is compiled using the Power to Choose website and rates are calculated using the “Commission Approved Residential Load Profile” for each area.

---


C.V. FRANCE

C.V.1. Overview of retail competition

Retail market liberalisation started in France in 1999, following the European Union’s 1996 Directive concerning common rules for the national electricity market. Retail liberalisation began with consumers with consumption over 100 GWh/year, and then was expanded to all industrial and commercial customers in 2004. Since 2007, residential customers are also able to choose their retailer. Retail competition only includes energy supply and billing, while distributors are required to provide and read meters.

Before liberalisation, around 95 percent of electricity customers were served by the state-owned, vertically integrated utility, EDF, which was created in 1946. The remaining 5 percent of customers were served by smaller local companies. Today, EDF continues to be the largest generator and retailer and is still controlled by the French State (although publicly traded). As of 2018, EDF continues to dominate the French electricity market operating more than 75 percent of generation, and serving more than 90 percent of smaller customers and 70 percent of larger customer load.

Competition in the retail market is monitored by three national entities, the energy regulator and France’s two competition agencies, as well as the European Competition Authority. The Energy Regulatory Commission, CRE, plays the most significant role and has monitored the energy market since its creation in 2000. The French competition authority, Autorité de la concurrence, covers general competition issues and only gets involved with the electricity sector for specific issues.

---


820 Ibid., p.1. Although the general term for “retailer” in France is “supplier”, we will be using the term “retailer” throughout this section to maintain consistency with the rest of the report.


822 By December 2017, the French Government owns 83.5 percent of the capital shares of EDF. EDF, “Shareholding structure”, accessed 8 March 2018.


issues, or on matters of principle. For example, the competition authority evaluated the methodology for setting regulated tariffs. Finally, the DGCCRF (Directorate General for Competition Policy, Consumer Affairs and Fraud Control) monitors the competitiveness of the market, consumers’ rights, enforcement and fraud in the energy market.

512. The French government regulates retail tariffs for natural gas and electricity. The government’s decision on tariff changes is finalised after the CRE publishes its recommendation on the basis of its audit of the suppliers’ historical financials and tariff proposals.

C.V.2. Customer engagement

C.V.2.i. Default tariff

513. Despite retail market liberalisation, most residential consumers remain on regulated tariffs (85 percent of the energy consumed by residential customers was supplied under regulated tariffs in 2017). Regulated tariffs are set by the French Government, in consultation with the Energy Regulator. These are available for small customers whose capacity is less than 36 kVA. EDF and historical local

---

826 For instance, in 2016, the competition authority conducted searches within EDF quarters as part of a preliminary inquiry of abuse of dominance. It also publishes evaluations and opinions in the energy sector, such as on regulated tariffs in 2016. See respectively:

Capital, "EDF confirms to have been searched by the competition authority", 25 November 2016, accessed 2 March 2018.

Competition authority website “The Autorité has published its evaluation report on the legal mechanism providing regulated access to incumbent nuclear electricity (hereinafter ARENH), and an opinion on the decree concerning regulated sales tariffs (hereinafter TRVs), as well as two opinions on plans to phase out TRVs on gas and electricity for certain business consumers”, 16 February 2016, accessed 2 March 2018.

827 Direction générale de la concurrence, de la consommation et de la répression des fraudes.

828 For instance, the governmental January 31, 2018 order sets regulated retail tariffs for electricity as at February 1, 2018, on the basis of the CRE’s proposal. See Article 1, “January 31, 2018 Order regarding Regulated Retail Tariffs for Electricity”, 1 February 2018.


831 Regulated tariffs are no longer available for customers with a capacity over 36 kVA, as per the NOME ruling, December 7, 2010 – see http://www.cre.fr/glossaire/loi-name, accessed March 29, 2018.
distributors are the only companies offering regulated tariffs. However, these tariffs are offered alongside market tariffs by EDF and are not branded separately. Nevertheless, EDF has to state on its invoices whether the tariffs are regulated or not.

C.V.2.i. Switching

514. Switching rates are still low, although increasing. For instance in 2016, only 5.4 percent of residential consumers switched retailers. Consumers can realise savings by switching to market offers, although these savings are possibly lower than those realised in other markets. The CRE estimated that in September of 2017 a low usage customer with an annual consumption of 2400 kWh could save up to €39/year (or 9 percent) switching away from the default tariff offered by EDF, while a higher usage customer with a consumption of 8500 kWh per year, would save up to €136/year (or 10 percent). It is important to note that such savings are almost always associated to market offers with a reduced customer service and therefore lower costs for the retailer. These offers are presented as “online offers” with no paper bills and no customer support via phone (only online chat is available). Market offers with a comparable customer service than that of the regulated tariff only save up to 3 percent in comparison to the regulated tariff. Most of the offers for residential customers are fixed price offers or fixed discounts to the EDF regulated tariff.

Continued from previous page

832 Those consumers can be residential or small businesses. However, the CRE distinguishes between the two when increasing the regulated tariffs. For instance, in January 2018, blue tariffs increased by 0.7 percent for residential consumers and by 1.6 percent for small businesses. CRE, “Deliberation N 2018-006”, January 2018, p. 1.

833 Those retailers are called ELD, standing for “Entreprises Locales de Distribution”, or in English, “local distribution companies”.


838 CRE, “Outlook for the fourth term 2017: Retail markets of electricity and gas”, March 2018, pp. 22-23,

C.V.2.iii. Measures of customer engagement

515. The French Authorities have implemented different measures that encourage consumer engagement. The French Authorities:

- Manage a national website, “Energie Info”,\(^ {840}\) which provides information on, for instance, retailers, tariffs, energy market operations, invoices, and smart meters;\(^ {841}\) Nearly 2 million customers visited the site in 2015. The site is managed by the National Energy Ombudsman.\(^ {842}\)
- Provide an independent tariff comparison tool on the same website, based on the consumer’s location and dwelling, household composition, electric equipment, meter type (maximum power and whether smart or not) and annual consumption. In order to be listed on the website, retailers need to sign and adhere to the membership charter defined by the National Energy Ombudsman. All tariffs are included for retailers that are listed on the site.\(^ {843}\) Other comparison websites exist in France such as the independent consumer association UFC-Que Choisir, or private websites such as Selectra;
- Created an independent Energy Ombudsman responsible for providing information on the retail market and solving disputes between consumers and retailers. In 2014, the Ombudsman addressed 1.6 million queries and complaints from consumers. 14,412 of these complaints were further investigated by the Ombudsman. Out of these disputes, the majority were related to billed consumption levels;\(^ {844}\)
- Produced a standardised layout (template) for bills, intended to make them easier for consumers to understand in 2012.\(^ {845}\) These standardized bill templates provide customers with specific information such as their consumption history over the last two years, a breakdown of different cost elements, and information on the origin of electricity (renewables, nuclear or thermal).\(^ {846}\) Retailers are, however, not obliged to use this standard layout but can format their bills as they see fit.

\(^{840}\) CRE’s 2016 Monitoring Report.


\(^{843}\) Energie-info, “Fonctionnement Du Comparateur Energie-Info”.


• Guarantee the reversibility of switching decisions: households can return to regulated tariffs after trying a market retailer without restrictions.\textsuperscript{847}

516. Despite these measures, the International Energy Agency still considers that consumers in France are not fully informed about retail electricity markets. In particular, consumers are not aware of the principle of reversibility of switching decisions and prices, which allows households to switch from regulated to market offers interchangeably without restrictions.\textsuperscript{848}

\textbf{C.V.3. Smart meters}

517. Smart meters started being deployed widely in 2015\textsuperscript{849} and the intention is for all households to have a smart meter installed by the end of 2021.\textsuperscript{850} The distributor Enedis, who is responsible for the distribution networks, has a legal obligation to install these meters free of charge.\textsuperscript{851} It is anticipated that Enedis will be able to fund this investment through the efficiency gains that smart meters create, for example not having to pay workers to carry out manual meter readings.\textsuperscript{852} The introduction of smart meters has been controversial in France, with fears of data privacy breaches and the possible health risks.\textsuperscript{853}

\textbf{C.V.4. Consumer safeguards}

518. France applies several policies and regulations in order to provide consumer safeguards.

\textbf{C.V.4.i. Standardised information on offers and bills}

519. First, retailers need to supply standardised information on offers and bills. Offers cannot vary geographically.\textsuperscript{854} Retailers also have to provide standardised contracts which must include elements such as the beginning date of the contract, a breakdown of the offer, details of the distributor, how to terminate the contract and

\textsuperscript{851} Enedis, “A new electricity meter for new energy needs”, accessed 28 February 2018.
\textsuperscript{854} DGCCRF website, “Prices, tariffs and follow-up”, 2 January 2018, accessed 4 March 2018.
legal information. The standardisation also applies to bills as retailers have to give mandatory information on taxes, payment methods and how to contact the retailer. Distribution costs need to be broken out separately on the bill.

**C.V.4.ii. Emergency supplier and contract renewal**

520. If the retailer defaults on consumers, an emergency supplier is allocated to the consumer and applies the same contract conditions as the previous retailer. In France, electricity contracts are renewed by the rule of “tacit renewal”. Since 2008, electricity retailers must send an information notice to consumers between one and three months before the end of the contract, stating that the contract is about to end. If consumers do not reply to that notice, the contract is automatically renewed for another year. If the retailer fails to send the notice, consumers are allowed to break the contract at any time without any costs.

**C.V.4.iii. Contract termination**

521. Consumers are allowed to terminate their contract at any time, even if it is a fixed term contract, without incurring a penalty. The termination can have a cost to the consumer if the network incurs costs, for instance because it has to carry out an additional meter reading. However, those termination costs have to be explicitly mentioned in the contract. Once a contract is terminated, consumers have the option to reverse back to the default regulated tariffs if they had switched to a market price contract. However, if the consumer is indebted to the retailer, the retailer can block the switch until some agreement on debt repayment has been reached.

**C.V.4.iv. Consumer rights**

522. Consumers can check what they are entitled to as consumers and read generally on tariffs and electricity retail market on the national website “Energie Info”, which includes a price comparison tool, retailers’ description and advice on

---


how to solve disputes and billing information.\textsuperscript{861} We did not see any specific resources for populations who may have trouble engaging with the online portal, such as customers with limited internet access or internet-literacy, or non-French speakers.

**C.V.5. Targeted protection of vulnerable consumers**

**C.V.5.i. Vulnerable customers defined**

523. France first legally defined the concept of “vulnerable consumer” in 2010,\textsuperscript{862} despite providing support to such consumers since 1990. According to French law, a vulnerable consumer is one who “experiences difficulties in their household to have access to the necessary energy supply to satisfy the basic necessities, because of the inadequacy of the resources or the conditions of their habitat”.\textsuperscript{863} As of 2013, 20.4 percent of French households fit into this definition of vulnerable energy consumers.\textsuperscript{864}

524. France has four different support mechanisms to protect vulnerable energy customers:

- Subsidies managed by local authorities, at the town or province level;
- Special tariff provisions;
- A prohibition on disconnections during the winter;
- Subsidies for energy efficiency measures.

\textsuperscript{861} Energie info website, accessed on 4 March 2018 at \url{http://www.energie-info.fr/}


\textsuperscript{863} Definition translated in English by the European Commission, “Second consumer market study on the functioning of the retail electricity markets for consumers in the EU: Country fiches”, September 2016, p. 43.


The National Observatory on Energy Precarity is an organisation created by the Law Grenelle 2 whose objective is to watch and analyse the energy vulnerability in France.
C.V.5.ii. Subsidies

In 1990, France instituted the Solidarity Fund for Housing (FSL). This fund is managed by local towns and provinces, and provides financial relief for customers who cannot afford housing and energy expenses. For instance, the FSL can help consumers to pay electricity bills and other utility bills. Which households can access the funds, and how much they are entitled to, depend on the income level and composition of the household but also vary across each FSL district.

C.V.5.iii. Social tariffs

France had a “social tariffs” system, which offered a discounted electricity price from 2005 through 2017. Only residential customers were eligible for social tariffs. Eligibility was based on whether customers qualified for government-provided health insurance through the complementary health insurance, and universal illness coverage programs. In 2013, France amended the social tariff by allowing new retailers to offer social tariffs. Social tariffs were funded by a tax applied to all residential consumers through their electricity bill, called the CSPE. Customers on social tariffs were exempt from the tax. France also changed the eligibility criteria to expand the coverage of social tariffs to 4 million households, out of a total of nearly 32 million households, and added an income criterion.

---

865 Fonds de solidarité pour le logement (FSL), equivalently in English, Solidary Fund for Housing.
871 Contribution au service public de l’électricité or, equivalently in English, tax for the electricity utility.
When the social tariff program ended in December of 2017, the program had reached more than 3.2 million out of the 4 million targeted households.875

527. In January 2018, France replaced the social tariff with an energy voucher system.876 The energy vouchers were initially piloted in 2016 in four provinces and found to have greater penetration than social tariffs.877 The vouchers can be used to pay for energy bills and for expenses to make housing more energy-efficient. The voucher system is aimed at:

- Expanding the coverage of the support (objective to reach 38 percent more households than the 4 million customers targeted with social tariffs);
- Increasing the level of support (€150 per year compared to the €100 that was spent average per year for each customer on the social tariff);878
- Giving consumers more choice on how and when to spend their allowance, according to the Energy Ombudsman879

528. The French tax administration automatically enrols all consumers living in households with a reference fiscal income below € 7,700 in the voucher scheme. The amount of the energy voucher depends on the household income and composition, and varies between €48 and €227 per year. The French administration reimburses energy retailers and certified environmental businesses for the value of the voucher. Vouchers are valid for up to two years and can be saved to be used on more expensive projects. Retailers cannot reduce the power intensity of the supply to customers who benefit from the energy voucher system.880

C.V.5.iv. Energy efficiency subsidies

529. Since 2010, the National Housing Agency has been managing the “Habiter Mieux” (Live Better) scheme. This scheme provides funds to consumers for energy-efficient housing works, conditional on the household composition and resources. To be eligible, households need to show that their accommodation can be more energy-efficient by carrying the work. The maximum amount awarded varies

875 Extract from the CRE's 2016 Monitoring Report.

876 The French Government provides information on how to use the voucher on an official website. Le Chèque Energie, accessed 27 February 2018.

877 Energy Voucher, “Assessment of the energy voucher pilot study”, January 2018 (NOR: TRER172569X)


879 Ibid.

between €7,000 and €10,000 depending on the household income. Since its introduction, more than 191,000 homes have benefitted from the scheme.

**C.V.5.v. Disconnections**

530. If a customer fails to pay their electricity bill, a retailer can disconnect them. However, customer disconnections are strictly supervised. Retailers have to send two warning letters to consumers, one 14 days after the invoice due date and then a second 15 days after the first letter. The letter must mention the availability of funds to help consumers who have difficulties paying their bills, such as the Housing Solidarity Fund (FSL). Retailers must wait 20 days from sending the second letter before disconnecting the consumer. Finally, retailers cannot disconnect consumers during the winter season, from November to March. This is called the winter truce.

531. In France customers pay a capacity charge based on their choice of supply capacity. Customers with smaller capacity are limited in the amount of electricity they can draw from the grid at once. The Energy Ombudsman advocates reducing capacity of supply as an initial step before disconnecting customers. They argue that this will help reconcile the needs of retailers and customers. Retailers cannot reduce the capacity of supply to customers who benefit from the energy voucher system during the winter truce.

**C.V.6. Promotion of competition**

**C.V.6.i. Market concentration**

532. With EDF still operating 75.4 percent of French generation, competition in the retail market is closely monitored by the French and European authorities and regulators. Indeed, only three other retailers have a market share exceeding 5 percent, in terms of consumption volume, the largest of which is ENGIE, the

---


default natural gas supplier. For this reason, the French regulator CRE still considers the retail market to be highly concentrated, especially at the residential level. According to a recent survey, only 50 percent of residential electricity customers are aware of their ability to change retailers.

**C.V.6.ii. Nuclear energy policy**

Since the 1970s, France has had a nuclear energy policy, with EDF having the historic monopoly to develop and deploy nuclear energy throughout France. Since 2010 and the introduction of the New Organization of the Electricity Market Law (Nouvelle organisation du marché de l’électricité or “NOME”), retailers are able to purchase electricity from the EDF nuclear fleet at a fixed price, through a new access program called Accès régulé à l’électricité nucléaire historique or ARENH. The scheme started in 2011 and is to last for 15 years through 2025. The price has been fixed at €42/MWh since 2012. The ARENH product consists in baseload electricity supply and guaranteed network capacity for the corresponding throughput for each day of the calendar year following the transaction.

One of the objectives of the measure was to help consumers benefit from the cheap nuclear power by allowing all retailers, and not just EDF, to purchase this electricity. However, the scheme has been deliberately set up in a way that is designed to encourage alternative retailers to secure supply from alternative sources:

---

889 The French gas retail activities of ENGIE (ex-GDF SUEZ) and EDF were part of the EDF-GDF group, the state-owned historical electric and gas supplier, until 2008 when GDF was acquired by Suez (see [https://particuliers.engie.fr/assistance-client/conseils/historique/comprendre-histoire-edf-engie.html](https://particuliers.engie.fr/assistance-client/conseils/historique/comprendre-histoire-edf-engie.html)). ENGIE's incumbent image in French consumers’ minds contributes to ENGIE’s success as an electricity alternative retailer. See for instance Direct Energie (another alternative retailer) describing this history and reminding the differences existing between the two companies today ([https://www.direct-energie.com/particuliers/parlons-energie/dossiers-energie/comprendre-le-marche-de-l-energie/comprendre-la-difference-entre-edf-et-engie](https://www.direct-energie.com/particuliers/parlons-energie/dossiers-energie/comprendre-le-marche-de-l-energie/comprendre-la-difference-entre-edf-et-engie)). Both accessed on March 29, 2018.


---
• In total, retailers can only buy up to 100 TWh (representing 25 percent of the total nuclear fleet) of ARENH electricity per year, compared to an overall annual demand of nearly 500 TWh. Consequently, retailers will need to develop further strategies in order to compete successfully with EDF.

• Given that the scheme will end in 2025, this again provides an incentive for retailers to develop innovation solutions over the coming years.896

535. In the recent year, wholesale baseload prices for year-ahead products are starting to be lower than the price of ARENH (€42/MWh), thus creating an opportunity for retailers to supply themselves at a more competitive price.897 For most of 2015 and part of 2016, baseload prices for the calendar year ahead were below the price of ARENH which led to no ARENH subscribed in 2015 for delivery in 2016.898 During the last quarter of 2016, wholesale prices went back up because of the uncertainty related to the availability of French nuclear power plants, which led to some ARENH subscriptions for delivery in 2017.

536. Halfway through the ARENH scheme, the French regulator has recently drawn some conclusions on its effectiveness. The scheme has been effective at increasing competition for larger industrial customers,899 but not for the residential and commercial segments. Retailers put forward as obstacles the limited ability of alternative retailers to supply electricity at a competitive price which would allow their retail market offers to be more competitive and the uncertainty surrounding the ARENH price, duration and methodology.900

537. The CRE also reported the absence of innovation so far with retailers having contracted zero mutual agreements with EDF or innovation schemes in the wholesale market. Asymmetrical information between EDF and alternative retailers, as well as the long horizon of the scheme, are considered obstacles to innovation.901 In particular, the French competition authority has recently urged the Government to clarify the future of the scheme beyond 2025 as uncertainty could impede the incentives for innovation.902


899 CRE, “ARENH Report”, January 2018, p.28

900 Ibid., p. 32.

901 Ibid., p. 44.

Furthermore, the ARENH scheme was implemented at the same time as the tariff methodology was reviewed. Regulated tariffs are now computed as the sum of:

- the ARENH purchase cost,
- Any additional electricity purchase costs (given the limit on the ARENH volumes);
- distribution and transmission charges; and

### C.V.6.iii. Partial tariff freeze

It was anticipated that the new methodology should increase pricing transparency, encourage EDF to limit its costs and enhance the competitiveness of market offers from alternative retailers.\footnote{CRE, “Annual Report 2014-2015: Operations of the French retail markets for electricity and gas”, November 2015, p. 73.} However, between July 2012 and July 2013, the government only allowed the regulated tariffs to increase by a maximum of 2 percent,\footnote{Before 2015, the government was responsible for deciding over the regulated tariff evolutions using the CRE’s audits and suggestions among other resources.} even though the CRE estimated that the residential tariffs should have increased by 5.7 percent during this period.\footnote{Légifrance, “Order of 20 July 2012 on the regulated electricity sales tariffs”, accessed 5 March 2018.} This partial tariff freeze created a tariff deficit of €422 million for EDF.\footnote{CRE, “Regulated electricity sales tariffs: Analysis of the production and commercialization costs of EDF with cost stacking pricing”, October 2014, p. 63. Hereafter, “Regulated electricity sales tariffs”.

The partial tariff freeze was also very harmful to alternative retailers, who, as explained above, typically offered tariffs that are at a fixed discount to EDF’s regulated tariffs.\footnote{CRE, “Deliberation N 2018-006: CRE deliberation of 11 January 2018 on the proposed regulated tariffs”, January 2018, p. 15. Hereafter, “Deliberation N 2018-006”.

This meant that, just like EDF, other retailers had their margin reduced and may end up not covering necessary costs.

\footnote{Fournisseur Energie, “Should we choose the blue tariff of EDF or the electricity contract?”, accessed 8 March 2018.}
their costs. The government has since removed the cap and retroactively increased the regulated tariffs in 2016, 2017 and 2018.

C.V.6.iv. Branding

540. The CRE also found that customers did not understand the distinction between the company who physically supplied their electricity i.e. their distributor, and the company who sold them their electricity i.e. their retailer. It was felt that this contributed to the reluctance of small consumers to switch retailers. Accordingly, EDF was required to rebrand its distribution arm. It is no longer called ERDF but Enedis and it is hoped that this will make it easier for consumers to understand the difference in the roles of retailer and distributor.

C.V.7. Outcome of retail competition

C.V.7.i. Level of competition

541. The level of competition in France is still relatively low. In 2017, 17 retailers operated nationally in the residential segment of the retail market and around 160 retailers operated locally, with offers to various customer segments. Excluding EDF, only three other retailers had a market share greater than 5 percent in 2016. The most concentrated segments are the residential, medium and small commercial segments. In fact, the three largest retailers combined cover more than 80 percent of the market in each segment. Since the introduction of the ARENH scheme, the market share of EDF has fallen to 70 percent for the major industrial consumers but remains above 90 percent for smaller consumers. In 2016, only 5.4 percent of residential consumers switched retailers.

C.V.7.ii. Switching rates

542. Even though the switching rate between retailers is low, consumers have options among different tariffs offered by each retailer. For instance, EDF offers several dynamic tariffs:

---

911 Fournisseur Energie, "Increase in electricity prices in 2017", accessed 5 March 2018.


915 This market share is in terms of consumption volume.

• A regulated “Blue” tariff - with two options - a baseload option or off-peak option
• A market “Green” tariff - with three options for different prices for baseload, weekend and off-peak consumption, as well as for the use of renewable electricity.

C.V.7.iii. Customer satisfaction

543. In 2016, a Customer Market Survey by the European Commission showed that French customers were very satisfied with their electricity markets, ranking them at the 6th position (84.6 point out of 100 compared to an EU average of 75.3).

C.VI. Germany

C.VI.1. Overview of retail competition

544. In 1998, the German electricity market was fully liberalised with the Energy Industry Act (Energiewirtschaftsgesetz, or EnWG). Prior to that there were eight large cross-regional vertically integrated electricity companies, with a combined market share of 79 percent of generation. There were also over 80 regional energy suppliers and 900 municipal utilities, who often supplied gas as well as electricity (dual fuel) to their customers. These regional and local companies were the only suppliers in their service areas, with the cross-regional companies acting as wholesalers, as well as owning some of the regional and local companies.

545. The introduction of retail competition offered customers the ability to choose their own supplier (hereafter, “retailer”), and allowed new retailers to enter the market and existing retailers to expand their service areas. In 2007, driven by European directives, the vertically integrated utilities detached their generation and sales operations business from network services. Separately, in 2006 and 2008, the provision of meter equipment and meter reading services was also liberalised.

546. This effect on new entry and expansion was not immediately observed however. Instead, market concentration increased due to mergers and acquisitions of retail businesses. By 2004 this had led to the creation of the four cross-regional

917 It should be noted that these choices were offered before the introduction of retail competition.

918 Descriptions of the offers can be found on EDF website. EDF, “Electricity offers for you!”, accessed 28 February 2018.

919 Luxembourg ranked the highest with 85.9 points and Bulgaria the lowest with 51.8 points. See EC, Consumer Markets Scoreboard 2016 – Energy Markets, 2016, p. 4.


vertically integrated electricity companies, RWE, E.ON, EnBW, and Vattenfall, who held a combined retail market share of 72.8 percent. The high market concentration may be explained by certain barriers to entry, including difficulties in obtaining access to the transmission and distribution systems. At the time, a system of negotiated (rather than regulated) access was used, which resulted in high access charges, limiting new entry and expansion in the retail market. In 2005, a modification to the Energy Industry Act: (1) created the Bundesnetzagentur (or BNetzA), the German regulator for electricity, gas, telecommunications, post and railway markets; and (2) required the BNetzA to regulate third-party access terms and charges. The BNetzA now sets cost-reflective access charges.

547. The same four cross-regional companies still exist, though they have undergone significant restructuring, including the separation of their network businesses. In March 2018, as part of a strategy to shift to renewables, E.ON and RWE engaged in a complex deal involving shares and asset swaps. E.ON would own the retail and network businesses of both companies (becoming the largest grid operator and retailer in Europe), while RWE would end up with the combined renewable-generation businesses and a large stake in E.ON (becoming the second largest producer of green energy in Europe). The Federal Cartel Office has determined that there are no longer any dominant retailers; the total share of the small customer market of the four largest participants is 41 percent. There are over 1,000 retailers serving households in the electricity sector, many of whom also provide gas. There are over 875 distribution operators.

548. From 1998 to 2018, retail electricity prices have increased significantly in real terms, due to the 202 percent real increase in taxes, levies and surcharges (especially the Renewable Energy Surcharges, or EEG-Umlage). In contrast, the other


927 All four larger players also have participations in a number of municipal utilities; see Insight Energy, Country Report Germany 2016.


929 Renewable energy surcharges increased with the government’s efforts to eliminate nuclear energy and foster renewable energy sources.
components of the retail price (e.g., generation costs, network access charges, and marketing cost) actually decreased by 21 percent over the same time period.\textsuperscript{930} It should be noted that the definition of household (hereafter, “residential”) customers in Germany includes small enterprises, more specifically “end-customers who use energy pre-dominantly for their own domestic consumption, or end customers with an annual consumption below 10,000 kWh for professional, agricultural or commercial purposes”.\textsuperscript{931}

549. In terms of customer rights protection, a number of market bodies are involved. As noted above, the BNetzA is responsible for ensuring that network charges are reasonable and non-discriminatory, and for overseeing regulatory developments that foster competition.\textsuperscript{932} The Federal Cartel Office looks after general competition issues, including market concentration. On the customer side, there is the Association of Energy Customers (Verbraucherzentrale Energieberatung), which is a non-profit organisation established by the BNetzA and financed by the Federal Ministry for Economic Affairs and Energy (BMWi), dedicated to informing customers about energy issues, such as disconnections, switching and customer rights.\textsuperscript{933}

**C.VI.2. Customer engagement**

**C.VI.2.i. Information requirements**

550. Under the terms of the Energy Industry Act, customers are in general able to switch retailers when they wish without paying a penalty charge.\textsuperscript{934} Minimum term contracts can only be cancelled early if consumers move house or the retailer changes the contract conditions, in which case the early termination does not incur any extra cost.\textsuperscript{935}

551. The Energy Industry Act also established a number of information provision requirements:

- Information on the contract must be provided in a “clear and understandable” way.

\textsuperscript{930} BDEW, “Analysis of electricity prices”, January 2018, p. 9 and 22.


\textsuperscript{932} See website of the Bundesnetzagentur, accessed 3 April 2018 at: https://www.bundesnetzagentur.de/cln_1422/EN/Home/home_node.html


\textsuperscript{934} Energy Industry Act, article 20a.

\textsuperscript{935} Strompresivergleich, “\textit{Special cancellation terms}”, accessed 6 April 2018.
The information must include contract and cancellation conditions, the payment method and compensation schemes in case of non-compliance by the retailer. The customer must be informed in advance about changes to the contract, allowing the customer to end the contract if they do not accept the changes.\footnote{Energy Industry Act, article 41.}

The Act also states that energy customers should have access to detailed information on their energy consumption. For customers with an analog meter, this information has to be provided at least once every 12 months. For customers with a smart meter, consumption information and corresponding costs information have to be provided at least once a month.\footnote{Energy Industry Act, article 40.} The Meter Operating Act of 2016 provides further rules pertaining to smart meter data and is discussed below.

In 2007 and 2010, the Amendment to the Energy Savings Ordinance (Verordnung über energiesparenden Wärmeschutz und energiesparende Anlagetechnik bei Gebäuden, or EnEV) and the Energy Services Act (Gesetz über Energiedienstleistungen und andere Energieeffizienzmaßnahmen) were introduced. The Amendment to the Energy Savings Ordinance required that property owners or landlords provide potential purchasers or tenants with information on the energy efficiency of the dwelling.\footnote{Energy Savings Ordinance, 24 July 2007, updated version on 24 October 2015, article 16.} The Energy Services Act required retailers to inform their customers at least once a year about available energy efficiency measures and associated effectiveness, and energy audit offers from independent providers. This information was to be presented in a clear manner on the bill.\footnote{Energy Services Act, 12 December 2010, updated on 18 April 2016, article 4.}

**C.VI.2.ii. Requirements on default supply contracts**

Customers who have neither changed tariff nor retailer are served under default supply contracts. The terms and conditions for default supply contracts are specified in the 2006 Ordinance of Default Supply with Electricity (Stromversorgungsverordnung, or StromGVV).\footnote{ACER, “ACER Market Monitoring Report 2015 – Consumer Protection and Empowerment”, 9 November 2016, p. 9.} Mainly, the StromGVV is focused on providing transparency and requires that Local Default Suppliers (LDSs) publish their prices (e.g. in the local newspaper) as well as on their website. Similarly, LDSs have to announce changes to these prices publicly and send a written notification to customers on the default tariff at least 6 weeks before the change.\footnote{German Legislation, “Ordinance of Default Supply with Electricity”, 26 October 2006, articles 2 and 5a and Court of Justice of the European Union, Judgement of the Fourth Chamber of 23 October 2014 on the joined cases C-359/11 and C-400/11”, 23 October 2014.}
also requires LDSs to give a clear breakdown of all the energy price components in their publications and bills, including generation costs, network tariffs, taxes and levies, and changes that were made to each of the components.\footnote{German Legislation, "Ordinance of Default Supply with Electricity", 26 October 2006, articles 2 and 5a and Court of Justice of the European Union, "Judgement of the Fourth Chamber of 23 October 2014 on the joined cases C-359/11 and C-400/11", 23 October 2014.}

### C.VI.2.iii. Complaint resolution procedures

555. Complaint resolution procedures are governed by the Energy Industry Act. Retailers are required to respond to complaints filed by customers within four weeks of receiving the complaint, and to keep customers informed about remedy proceedings in written or electronic form.\footnote{Energy Industry Act, article 111a and European Commission, “2014 Country Report Germany”, p. 94.} In 2011, the Ministry of Economic Affairs and Energy founded a new arbitration body, the Conciliation Board (Schlichtungsstelle Energie), to resolve disputes between residential customers and their retailer or distributor. Disputes are normally resolved within three months, and the service is offered free of charge to retail customers.\footnote{The service is financed through flat case payments by the retailer or distributor involved in the dispute. See Energy Industry Act, article 111b and Schlichtungsstelle Energie, “Your rights”, accessed 28 March 2018.} Although the decision is not binding, in 86 percent of disputes both parties agreed to a solution.\footnote{Tagesspiegel, "Trouble with the energy retailer", 26 July 2013, accessed 3 April 2018.}

### C.VI.3. Smart meters

556. A 2008 amendment to the Energy Industry Act required smart meters to be installed in new buildings and major renovations starting in 2010.\footnote{Law on the liberalisation of metering of electricity and gas, 29 August 2008.} By 2015, 5.1 million smart meters had been installed, but only 1 million of those were installed in residential households. This means that as of 2015, only 2 percent of households have smart meters.\footnote{Bundesnetzagentur, “Monitoring Report 2016”, 30 November 2016, p. 242.} Starting in 2017, customers with a consumption of more than 10,000 kWh per year will be required to install smart meters. Starting in 2020, this threshold will be lowered to 6,000 kWh per year. Price caps for the smart meter installation would apply if the smart meter were installed by the meter operator.\footnote{Bundesnetzagentur, “Modern meters and smart meters”, accessed 3 April 2018.} The BMWi and the Federal Office for Information Security (BSI) will award

---

942  German Legislation, "Ordinance of Default Supply with Electricity", 26 October 2006, articles 2 and 5a and Court of Justice of the European Union, "Judgement of the Fourth Chamber of 23 October 2014 on the joined cases C-359/11 and C-400/11", 23 October 2014.


944  The service is financed through flat case payments by the retailer or distributor involved in the dispute. See Energy Industry Act, article 111b and Schlichtungsstelle Energie, “Your rights”, accessed 28 March 2018.

945  Tagesspiegel, "Trouble with the energy retailer", 26 July 2013, accessed 3 April 2018.

946  Law on the liberalisation of metering of electricity and gas, 29 August 2008.


certificates to metering systems that comply with high data protection and data security requirements.  

557. Customers with smart meters can access their data locally at any time, including current consumption as well as historical data for up to three years. The Meter Operating Act outlines strict rules around smart meter data use, such as who can receive the data, and how long they can keep it for. Meter operator, network operator, and energy supplier are all allowed to work with metering data. However, they have to seek the user’s permission first before any data collecting, processing, and using, except when the information is necessary to comply with legal obligations or with sovereign powers. Meter operators have to provide information to network providers if the information were necessary for the operation of the networks. The meter operator has to delete any personal data directly after successful transmission. Base data has to be deleted 12 months after the closure if the meter.

C.VI.4. General customer safeguards

C.VI.4.i. Default supply

558. In Germany, the interpretation of “provider of last resort” is quite broad. For each distribution network, the retailer that services the most residential customers is deemed to be the Local Default Supplier (LDS). The determination of the LDS is reviewed every three years. The LDS provides electricity if the customer is on the default tariff, and/or if the customer does not receive electricity from their chosen retailer for any reason, including but not limited to the following:

- The retailer defaults;
- The retailer switch cannot be completed;
- The distributor cancels the retailer’s network contract; or
- Customers come to the end of their contract without signing a new one.

949 Bundesamt für Wirtschaft und Energie, “FAQ regarding the Meter Operating Act (MsbG) and smart meters” accessed 3 April 2018.

950 Meter Operating Act, section 3. Before 2016 the rules on data of smart meters were regulated in the Energy industry Act and through general rules about personal data protection, article 61.

951 Meter Operating Act, section 3.

952 Meter Operating Act, article 50.

953 Meter Operating Act, article 64.

954 Meter Operating Act, article 63.
Customers can “switch away” from their LDS at any time, but if they do not do so within three months, they are automatically assigned a default supply contract. Default tariffs tend to be more expensive than other available tariffs.

In addition to customers who have never engaged with their retailer (i.e. they have remained on the default tariff), the concept of the LDS is also relevant for vulnerable customers. Many retailers check a customer’s creditworthiness before offering a contract; but the local default tariff has to be offered to everybody. Therefore, vulnerable customers often end up on the default supply tariff simply because of their low creditworthiness. If the LDS has any reason to believe that the customer would fail to pay on time, it can install a prepayment meter or demand a deposit. The prepayment terms are supposed to be reasonable compared to previous billing periods, or to the bill of “comparable customers”; however these measures can only be taken once the LDS has informed the customer about what is going to happen, when, what the prepayment/deposit amounts will be, and how to exit from the prepayment terms. By 2015, 19,400 prepayment systems have been installed in Germany, which correspond to 0.04 percent of all metering connections.

C.VI.4.ii. Disconnection procedure

If the LDS does not receive payment, it can ask the distributor to disconnect that customer, once certain conditions have been fulfilled. First, the arrears must be greater than €100. Second, the LDS needs to send out a payment reminder, followed by a disconnection notice to the customer. 4 weeks must elapse between the serving of the disconnection notice and disconnection, and the actual disconnection date needs to be announced 3 weekdays in advance. The same conditions apply to

---

955 Ordinance of Default Supply with Electricity, 26 October 2006, article 3, paragraph 2.

956 See Handelsblatt, “Change from Default tariff to a cheaper tariff is worth it”, 6 February 2018 and Stromtarif and Verivox, “Default tariff”, accessed 2 April. For example, at the date of the report, a two-people residential consuming 2500 kWh a year in Berlin has to pay €844 a year for the default tariff with the current default retailer Vattenfall while the other tariffs offered by Vattenfall range between €643 and €666 except for the 100 percent green tariff using Vattenfall’s own wind energy, which costs around €847 a year; see Vattenfall, Default supply comparison, 17 March 2018; Vattenfall, Tariff Overview, 17 March 2018; and Vattenfall, Green tariff, 17 March 2018.

957 Stuttgarter Nachrichten, “Trouble to find a new energy provider because of creditworthiness”, 13 January 2013, accessed 3 April 2018.


market offer disconnections.\textsuperscript{961} The Ordinance of Default Supply with Electricity, Article 19, stipulates that, customers cannot be disconnected if the consequences of the interruption would be disproportionate to the severity of the default, or if the customer demonstrates that there is a reasonable possibility that he will make good on his arrears within the current financial year.\textsuperscript{962} Customers can also be protected from a disconnection if they receive social security and send a declaration that the costs will be borne by their local job center or social security office. Customers can dispute the disconnection any time after they receive the notice, though they have no guarantee that the case would be heard within the four-week window. A disconnection is usually not allowed if: (1) electricity is needed for medical reasons; (2) small children are affected; (3) energy is needed for heating during cold periods; or (4) the disconnection would occur over the course of public holidays.\textsuperscript{963} As far as we can tell, the denial of a disconnection is at the court’s discretion; nothing is written into law.

562. In 2015, out of 59 million residential energy customers,\textsuperscript{964} 7.6 million received disconnection notices, of which 2.8 million resulted in disconnection requests (which are shared with the network), of which only 375,000 resulted in actual disconnections (less than 1 percent of all residential customers). Around 6 percent of these disconnections were repeated disconnections of the same customers.\textsuperscript{965}

\textbf{C.VI.4.iii. Energy efficiency improvements}

563. Many of the policies in Germany that are supposed to support customers are based on energy efficiency measures. For example, the BMWi offers subsidies or loans through the reconstruction Credit Institute (Kreditanstalt für Wiederaufbau or “KfW”) to households that upgrade their homes to improve their energy efficiency.\textsuperscript{966} The Energy Savings Ordinance defines reference values for energy efficiency of houses depending on primary energy requirement and transmission heat loss. Homeowners with poor energy efficiency factors are eligible for low-interest loans to finance energy efficient renovations, such as improving insulation

---


\textsuperscript{962} For example, by agreeing to an affordable payment plan.


\textsuperscript{964} Bundesnetzagentur, “\textit{Monitoring Report 2016}”, pp. 27 and 260.


or installing renewable energy heating systems. Additionally the BMWi grants a subsidy of up to €30,000 per apartment to private owners that want to renovate their current apartment or that of a new purchase. These funds are available for the replacement of extremely old heating systems and the installation of new ventilation systems. Similarly, the Federal Office of Economics and Export Control, “BAFA”, offers subsidies for energy efficient renovations or for on-site consultation with energy advisors.967

C.VI.5. Targeted protection of vulnerable customers

C.VI.5.i. Social welfare system

German legislation does not clearly define the term “vulnerable customer” or “energy poverty”; rather, it targets overall poverty with national policies. At the federal level, low-income customers fall under the social security system and are covered by the Social Code (“Sozialhilfe” and “Arbeitslosengeld”).968 Unemployed individuals, part-time workers, asylum seekers, minors in low-income families, and the chronically ill are eligible for Social grants paid by the social security office or local job center.969 The cost of energy is assumed to be included in the monthly allocation for housing and heating. The average share of household spending on energy in Germany is about 6 percent.970 In comparison, the average social welfare recipient spends about €34 per household per month on energy, or 8 percent of the total monthly income grant.971

Social welfare recipients can apply to have any outstanding electricity arrears paid by the social security system or job center. This can be implemented via either a direct payment to the retailer or a social loan to the social welfare recipient.972 Social loans are more common than direct payments, but eligibility for both is

967 Effizienzhaus Online by Bosch, “Promotion for Renovation – Those are the Programs”, accessed at 28 March 2018.
969 Social Code XII (Sozialgesetzbuch XII), articles 19, 27 and 35-38, Social Code II (Sozialgesetzbuch II), article 22 (8).
970 Insight Energy, “Measures to protect vulnerable consumers in the energy sector”, 2016, Section II, p. 3.
972 In 2014 a job centre denied a social welfare recipient a loan to cover his outstanding debt, even though his retailer threatened to disconnect. The responsible state social court decided that this was illegal and forced the job centre to grant a loan to the recipient. The court argued that the recipient had tried everything to avert the disconnection by offering the provider a payment scheme and, hence, the loan was the only possibility to avoid a disconnection. NRW Social court, L 7 AS 1289/14 B ER and L 7 AS 1290/14 B, 28 August 2014
discretionary and will depend on the circumstances that led to the missed payment. For medically dependent customers, the Federal Social Court decided in 1997 that the mandatory public health insurance has to cover any cost that is related to prescribed medical equipment, including electricity costs.973

C.VI.5.ii. Nationwide and state-led initiatives

566. Other initiatives aimed at helping the "energy poor" have been state-led (Bundesländer). One such initiative was led by the 2012 project “Nordrhein-Westfalen fights energy poverty” (NRW bekämpft Energiearmut). The consumer information center that organised it defined energy poverty as: customers who spend a higher proportion of their income on energy than the average, or customers who do not have the resources to pay their bills because of their social standing.974 To assist these customers, the consumer information centre started offering free financial and legal advice to energy poor customers, customers threatened with disconnection, and disconnected customers. As a result, 80 percent of impending disconnections were prevented and 69 percent of disconnections already in place were cancelled after initiation.975

567. This project was conducted in conjunction with a nationwide program led by the Catholic social service organisation, Caritas, in cooperation with the German Federal Association of Energy and Climate Protection Agencies (Bundesverband der Energie- und Klimaschutzagenturen Deutschland). The program, called “Energy Saving-Check” (Stromspar-Check) and financed through national and international funds for climate change and energy efficiency976, focuses on training long-term unemployed individuals to advise low-income households on energy savings techniques and energy efficient products.977 On average, each household saved about €130 per year during the first project phase.978

973 Social Code V (Sozialgesetzbuch V), article 33 (1) and Federal Social Court (“Bundessozialgericht), file no. 3, RK 12/96.
976 See website of the “Energy Saving-Check” accessed 3 April 2018.
C.VI.5.iii. Social tariffs

In 2008, there was a lot of discussion about social tariffs, this started at about the time of the global financial crisis and surged with a proposal from the European Commission to create a charter for the protection of energy consumers. The Minister for the Environment postulated that every energy retailer should offer a social tariff. Most energy retailers and the Federal Cartel Office saw this as a government and not retailer responsibility. Matthias Kurth, president of BNetzA at the time, criticised social tariffs for distorting competition by lowering retail prices and thereby creating a barrier to new entry. He also argued that such a policy would interfere with levies that the government put in place to influence consumer behaviour, such as increasing energy prices to incentivise consumers to save energy.979

Evidence suggested that there was little appetite for social tariffs. E.ON, one of the few retailers who offered social tariffs, found that their take-up was only around half of what was expected.980 The low take-up was surprising given that social tariff customers were exempt from paying the fixed charge portion of the tariff. For customers of Eon-Mitte, a regional subsidiary of E.ON, this would have resulted in annual energy savings of about €90 (compared to annual spending of €985-€996 for a basic tariff without a minimum term). However, this may be explained by even lower offers from competing retailers, at annual spending of €725 to €850.981 Consequently, there are as of now little to no social tariffs in Germany.982 However, it should be noted that many low income customers will not have access to these low prices offers due to poor creditworthiness.

Overall, the European Commission described the German protection of vulnerable customers as a “simple and non-categorical scheme but with rather restricted eligibility and coverage [...] which covers in principle (but not in practice) all people in need of support”.983 In 2013, an article criticised the social grants for electricity for being 21 percent too low, when compared to actual electricity cost.984

981 Strom Magazin, “Social tariffs for electricity: Who is available and how cheap are they really?” and Welt, “These are the discounts unemployed receive”, 15 January 2009.
984 Spiegel, “Social grants for electricity are 20 percent too low”, 26 June 2013
C.VI.6. Promotion of competition

571. In Germany, generation and retail are competitive, while transmission and distribution are regulated by the BNetzA. There are no official limits on market power, but the Federal Cartel Office closely monitors the market shares of larger players in the wholesale and retail electricity markets. The government further encourages competition by prohibiting charging customers for terminating a contract, and/or changing to a new retailer.

C.VI.6.i. Barriers to entry and expansion

572. To be able to operate as an electricity retailer to residential customers, a business has to first gain clearance from the BNetzA. The activity can be prohibited if the BNetzA considers that the economic, technological or staffing capacity is not guaranteed. Therefore the company has to provide a number of information to the BNetzA such as organigrams, financial statements as well as information about the creditworthiness of each member of the board of directors. In 2006, the BNetzA published the Guidelines on the Business Processes for Delivering Customers with Electricity ("Geschäftsprozesse zur Kundenbelieferung mit Elektrizität", or GPKE), which energy providers have to comply with when supplying electricity customers, such as cancellation processes, provision of metering reading data, responsibilities of default suppliers or processes related with the use of distribution grids.

573. In addition, the Energy Industry Act requires vertically integrated energy retailers to ensure that their promotional materials do not create confusion between their activities as retailers and as distributors. In such a case, the BNetzA has the power to impose a fine of up to €10 million if the entity does not withdraw the advertisement.

574. Due to the system of negotiated grid access, liberalisation of the retail market initially had little effect. Between 1998 and 2005, the total number of customers who have at any point switched tariffs was 7 percent. The subsequent

---

989 Energy Industry Act (Energiewirtschaftsgesetz (EnWG)), article 7 (6).
introduction of regulated network access substantially increased competition in the market. By 2015, the BNetzA considered that the retail electricity market was generally competitive, saying that “the cumulative market share of the four largest entities on the [retail household market excluding default tariffs] is around 36 percent. The large number of small local suppliers before the advent of competition helped to create favourable conditions for the development of competition, because it was relatively straightforward to expand services into neighbouring areas.

**C.VI.6.ii. Barriers to switching**

575. With 1,238 electricity retailers as of 2016, customers are given many (perhaps too many) options to choose from. To make comparing offers easier, the Federal Ministry of Justice and Consumer protection (BMJV) and the non-profit Association of Energy Consumers (Bund der Energieverbraucher e.V., or BdE) created in 2014 a website about electricity and gas retailers, “Energieanbieterinformation.de”. Currently, the website publishes information about more than 153 retailers for electricity and gas. The information on the website is publicly available information that is verified, ordered in a systematic way, and audited by the retailers themselves. It focuses on particularly cheap tariffs, and provides a summary of existing reviews, retailers’ annual accounts and ownership structures, and analysis of the legality of the tariffs. Instead of comparing energy companies, it tries to assist consumers in their decision process by offering an objective overview.

576. Besides complex deal comparisons, German consumers also face a number of other difficulties. For example, in 2013, the electricity retailer Flexstrom went bankrupt. All customers who had made prepayments lost their credit. In 2017, the German Federal Court (BGH) directed energy retailer Stromio to delete a clause

---

992 See website of Bundesnetzagentur, accessed 3 April 2018

993 Bundesnetzagentur, “Monitoring Report 2016”, 30 November 2016, p. 40. Author’s translation of “Der aggregierte Marktanteil der vier Unternehmen (CR 4) beträgt auf diesem Markt somit – wie im Vorjahr rund 36 Prozent. Dieser Wert liegt ebenfalls deutlich unter den gesetzlichen Schwellen für die Vermutung einer marktberechtigten Stellung”. On a legal basis 4 companies would be dominant market players if they delivered more than two thirds of the market (66.67 percent); see Law against Competition Constraints (Gesetz gegen Wettbewerbsbeschränkungen, or “GWB”), article 18 (6).


995 WirtschaftsWoche, “Flexstrom is bankrupt – what customers need to know now”, 12 April 2013, accessed 3 April 2018.
from its terms and conditions, which had stipulated that price changes due to taxes or levies would not give the consumer the right to cancel a contract.996

C.VI.7. Outcome of retail competition

577. The German electricity retail market is quite competitive, with an HHI of 2.021.997 Even though the four largest companies still maintain 41 percent of the market998, a household has on average 99 electricity retailers in its network area it can choose from.999

C.VI.7.i. Switching rates

578. The switching rate in 2016 was around 9.6 percent, or 4.6 million households.1000 Overall, 24.9 percent of residential customers are served by a retailer other than their default retailer, another 43.1 percent are on a tariff with the default retailer that is not the default tariff, leaving 32.0 percent of residential customers still on a default tariff contract.1001 In their 2016 monitoring report, the Bundesnetzagentur found that in April 2016 the average residential default tariff cost 43.73 cents/kWh, while an alternate tariff at the same retailer cost 39.77 cents/kWh. Alternative retailers were similarly priced at 39.21 cents/kWh. 1002 For industrial customers1003, switching rates were higher at about 12.6 percent in 2015.1004

C.VI.7.ii. Metering

579. In 2008, the Energy Industry Act was updated with the rule on the liberalisation of metering of electricity and gas (Gesetz zur Öffnung des Messwesens bei Strom und Gas für Wettbewerb, or WettbMesswSGG). The rule change further opened up the meter market, from the liberalisation of meter operations in 2006 to

1003 Defined as annual consumption below 10MWh; CEER, National Country Report Germany, 2016, p. 190.
third-party access to meter reading. By 2015, meter operations in 784 out of the 875 distribution networks were undertaken by a third party (a retailer or independent operator). In Germany, charges for meter operation and reading are included in the retail price, and are itemised (along with network charges and taxes and levies).

C.VI.7.iii. Pricing diversity

Customers can choose between variable or fixed contracts. Fixed contracts, which typically last for 14 months, provide a guaranteed price, except for those tariff elements that are beyond the control of the retailer, such as network charges, taxes, renewable energy surcharges, etc. Green energy tariffs are also offered, and are typically more expensive than default tariffs. To demonstrate that the energy is green, retailers can present seals of approvals from various institutions, such as the World Wildlife Fund (WWF).

C.VI.7.iv. Customer satisfaction

In 2016, a Customer Market Survey by the European Commission showed that German customers were very satisfied with their electricity markets, ranking them at the 6th position (83.2 point out of 100 compared to an EU average of 75.3). This was based on the ease of comparing offers, trust in retailers, satisfaction with the number of retailers, and the relatively low proportion of customers who had experienced problems in the market.

C.VI.8. Price Monitoring

The Energy Industry Act requires the regulating authority to monitor the electricity and gas markets, and inform the government about the market outcomes. It enables the regulatory authority to request documents and information about technical and economic conditions from market players and

---

1005 Law on the liberalisation of metering of electricity and gas, 29 August 2008.
1007 Law on the liberalisation of metering of electricity and gas, 29 August 2008, article 40.
1009 In 2017, 55 percent of the residential electricity price consists in taxes, levies and surcharges, while network charges make up 25 percent of the retail price. See BDEW, “Analysis of electricity prices”, January 2018, p. 2.
1010 Luxembourg ranked the highest with 85.9 points and Bulgaria the lowest with 51.8 points. See European Commission, “Consumer Markets Scoreboard 2016 – Energy Markets”, 2016, p. 4.
industry associations. Every year, the BNetzA collects data from these businesses, and covers between 95%-100% of the markets by market share. The results of the analysis are published every year in the “Monitoring Report” (“Monitoringbericht”) in collaboration with the German Cartel Office, and the results are shared with the European Commission and ACER.

Retailers have to provide the retail tariffs that they charge across four consumption bands of household consumers: annual consumption below 1,000 kWh, between 1,000 and 2,500 kWh, between 2,500 and 5,000 kWh, or between 5,000 and 10,000 kWh. Tariffs themselves are divided into: (1) default tariff; (2) tariff with the local default supplier other than the default tariff; (3) tariff with a retailer that is not the local default supplier. The information has to include the total price in ct/kWh as well as non-variable price components (e.g. fixed base tariff) and a break-down of all the price components (e.g. components that do not depend on the retailer but can differ between network areas, such as network charges, concession fees, fees for billing, and metering and meter operation). Deducting these "external" factors from the total tariff results in the part that the retailer can influence: procurement cost, sale cost, and retailer margin.

For each consumption and contract type the retailers have to provide the average price they charge and the corresponding consumption volume in kWh. The Monitoring Report shows the individual price components and average prices and for each consumption category, weighted by each of the three contract types’ electricity sales volume. The report also discusses any changes in the residual price, or the component that the retailer can influence by contract type and consumption structure.

---

1015 The first three consumption groups correspond to the designations of “DA”, “DB”, and “DC” according to Eurostat.
C.VII. GReAT BrITAI N

C.VII.1. Overview of retail competition

585. In Great Britain, retailers buy electricity from the wholesale market or through bilateral contracts with generators, and deliver it to the end-consumer.\textsuperscript{1019} The market has been historically dominated by the Big 6 suppliers (retailers) - British Gas, EDF, E.ON, RWE npower, Scottish Power, and SSE – though these businesses’ market share has been on the decline since 2012.\textsuperscript{1020} Like in the NEM, these large retailers also own generation businesses (hereafter referred to as “gentailers”). A majority of the residential customers are on the Standard Variable Tariff (SVT),\textsuperscript{1021} which is generally the retailers’ default tariff (discussed in more detail below).

586. Ofgem is the energy regulator, and within this role, publishes annual “State of the energy market” reports on the performance of the electricity and gas markets, including the retail market.\textsuperscript{1022} Since April 2014, the Competition Markets Authority (CMA) has taken over many of the functions of the now defunct Competition Commission (CC) and Office of Fair Trading (OFT), and is responsible for conducting market studies and investigations where there may be competition and consumer problems.

587. Full retail competition was introduced into Great Britain’s electricity market in 1999 and since then, there have been a series of further regulatory interventions. In 2002, price controls on retail prices were removed. In 2006, price regulation for electricity metering was lifted. In 2009 regional price discrimination was prohibited following the 2008 Energy Supply Probe. Ofgem undertook a Retail Market Review (RMR) in 2010 leading to Simple Tariff Rules in 2014.

588. In 2014, in its first review of competition in the retail energy market, Ofgem found that there was increasing distrust of the retailers, uncertainty about the retail and generation arms of the six large gentailers, and rising retailer profits with no

\textsuperscript{1019} Although the term “supplier” is used in Great Britain, we’re going to use the term “retailer” through the remainder of the document to ensure consistency across jurisdictions. Likewise, we refer to residential customers instead of domestic ones, and active/passive instead of engaged/disengaged.

\textsuperscript{1020} These businesses supply both electricity and gas (dual fuel).

\textsuperscript{1021} 58 percent of residential customers who are not on prepayment meters are on the SVT. This is based on data from retailers with more than 100,000 customers as of April 2017. See Ofgem, “State of the Energy Market, 2017 Report”, 31 October 2017, Figure 2.7, p. 26.

clear evidence of better outcomes for consumers. In light of these perceived problems, Ofgem asked the CMA to further investigate these competition issues in the electricity and gas markets in Great Britain.

In June 2016, the CMA published its findings. The CMA noted that while there had been sustained growth for new retailers (outside of the six gentailers) over the past few years, there were also substantial problems which required significant intervention. First, the CMA highlighted three regulatory interventions by Ofgem that have had unintended adverse consequences on retail competition in recent years:

1. **The prohibition on regional price discrimination resulting in weakened competition**: The 2009 regional price discrimination prohibition followed the 2008 Energy Supply Probe, in which Ofgem found that former incumbent retailers earned higher margins in their incumbent areas than outside their incumbent areas. To address this price difference, Ofgem introduced a new licensing condition, which prohibited undue discrimination between terms and conditions offered to different groups of customers (Standard License Condition 25A). The Decision however provided exemptions on promotional tariffs (e.g. temporary percentage discounts on SVTs, cheaper fixed-price tariffs or capped tariffs). SVTs do not have a defined contract length. It is retailer’s default retail tariff i.e. tariff that customers pay when they do not make an active choice at the end of a fixed-term contract. Customers can actively choose SVT. They are also referred to as “evergreen” tariffs. To be compliant with SLC 25A, retailers who used to offer cheaper SVTs outside of their incumbent areas to gain market share changed to increasing their “out-of-area” SVTs and instead pricing aggressively on the promotional tariffs. The intervention expired in July 2012; however, retailers continued to adhere to the SLC 25A principles in their pricing of SVTs. In December 2014, Ofgem wrote to retailers confirming that SLC 25A had lapsed and that they were no longer bound by it.

---


1025 When the energy market was privatised in the 1990s, the 14 former Public Electricity Suppliers (PES) had a monopoly to supply electricity and distribution in their designated areas. The retail business has since opened to competition and the 14 ex-PES retailers were consolidated into 5 retailers (EDF Energy, E.ON UK, RWE npower, Scottish and Southern Energy and Scottish Power). These five retailers together with British Gas are incumbents in their designated areas.

1026 Ofgem recognises that there can be cost differences between geographic areas such as network charges.

1027 For example, see CMA, “Energy Market Investigation, Appendix 8.3: The pricing strategies of the large energy firms in the retail supply of electricity and gas to domestic customers over the specified period (January 2006 to end 2014)”, Annex F, paragraph 14.
2. New license requirements, standards of conduct and enforcement action resulting in the withdrawal of the six large gentailers from doorstep selling: Following new standards and political pressure opposing doorstep sells in 2010 and 2011, online tools became more important acquisition channels, such as Price Comparison Websites (PCWs) and retailers’ own websites. However, retailers noted that the direct selling (either doorstep selling or other face-to-face channels) were still the more effective tools for reaching passive customers, and submitted that the withdrawal from doorstep selling led to a reduction in customer switching retailers in 2012.\(^{1028}\)

3. The 2014 Retail Market Review (RMR) reforms resulting in fewer number of tariffs offered by each retailer\(^{1029}\): Compliance with the 2014 RMR reforms (more on this below), which aimed to make the market simpler, clearer and fairer to customers, led to some unintended consequences of restricting product innovation and competition. In this case, the reforms limited competition among price comparison websites (PCWs) as they were unable to negotiate exclusive tariffs with retailers or give discounts to customers. Due to the four tariff rule, PCWs could not secure exclusive tariffs with retailers. And, due to limitations on cash discounts, PCWs could no longer attract customers through offering cashback. In fact, because of the uncertainty around the cashback rules, many retailers stopped working with cashback websites.\(^{1030}\) Thus, retailers removed discounted variable tariffs (meaning that all fixed-period tariffs now also fixed the price through the term of the tariff), removed premium green, two-tier and bundled tariffs, and withdrew prompt-pay discounts, discretionary credits, and rebates and cashback offers.\(^{1031}\)

Second, the CMA observed that a significant number of passive customers paid more than what they would have paid under a different retailer. To understand why these customers did not switch, the CMA identified a number of barriers to customer engagement. Some of the identified barriers include: lack of access to the internet and thus online price comparison websites; fewer opportunities to shop

---


around and switch for customers on prepayment plans; and automatic roll-overs to the default tariff at the end of a contract. To enhance customer engagement, the CMA suggested the following reforms:1032

1. **A transitory price cap on prepayment meter tariffs until 2020**: The price cap on prepayment meters came into effect on 1 April 2017. This applied to around four million customers, then to five millions when, in February 2018, Ofgem extended the price cap to a further one million customers who received the Warm Home Discount (WHD).1033 On 26 February 2018, the government proposed legislation to the Parliament, which would introduce a temporary tariff cap on default tariffs until 2020. Ofgem would be responsible for designing and implementing the tariff cap.1034 But since this legislation has not yet been enacted, Ofgem has not yet taken action to cap default tariffs.

2. **Trialling prompts for passive customers to engage in the market and shop around for cheaper tariffs**: A number of trials have recently concluded and are discussed below.

3. **An Ofgem database that would contact passive customers about better value deals**: Also discussed further below.

591. To keep pace with the rapid changes occurring in the retail electricity market, the UK energy regulator Ofgem has been transitioning over time from a prescriptive rules-based approach to a more general set of principles.1035,1036 This principles-based approach has been used since the introduction of the Standards of Conduct in 2013.1037 Ofgem, in 2016, published a “roadmap for reform”, where, in particular, they aimed to remove a “significant amount of unnecessary prescription from the supply license” by 2016/2017.1038 This was subsequently achieved in 2017.1039 A number of other changes to regulation have been made as a result of the push

---


towards principles-based regulation, such as removing the Simpler Tariff Choices rules (see Section C.VII.2.ii); allowing retailers to set standing (default) offers that are not SVTs (see Section C.VII.4.iii);¹⁰⁴⁰ and adding broad principles to the residential Standard of Conduct (see Section C.VII.2.ii).¹⁰⁴¹

The latest version of the Standard of Conduct was published in October 2017. "They are enforceable broad principle-based rules that apply across a range of supplier-customer activities".¹⁰⁴² It contains four basic ‘limbs’ of standards by which retailers must meet: 1) their behaviour toward consumers, 2) the information they provide to consumers, 3) customer service, and 4) considering vulnerable consumers.¹⁰⁴³

C.VII.2. Consumer engagement

In its review, the CMA identified that passive customers tended to be a combination of low income, low qualifications, living in rental accommodations, or above 65.¹⁰⁴⁴ The CMA also observed that prepayment customers were less engaged than direct debt customers. While prepayment customers' demographic overlapped with the demographic of general passive customers, CMA identified that prepayment customers also faced higher barriers to access information and to switching. In particular, prepayment customers had relatively lower access to the internet and relatively low confidence in using PCWs. Other barriers to switching specific to prepayment customers included the need for changing meters before switching to a wider range of tariffs and the complicated switching process for customers in debt.¹⁰⁴⁵

We describe below the three CMA remedies regarding customer engagement, and follow with a discussion of technologies designed to help with customer engagement and recent findings about the level of customer engagement.

C.VII.2.i. Database about passive customers

Following the 2016 enquiry into the energy market, Ofgem planned to build a database of passive customers with a tentative rollout year of 2018, which would

¹⁰⁴⁰ Ofgem, “Modification of the electricity and gas supply licences to allow suppliers to roll customers onto further fixed-term tariffs at the end of their existing fixed-term deals”, 11 October 2017, p. 9


then be made available to competitors for marketing purposes. In December 2016, CMA announced a requirement for retailers to provide Ofgem with details of residential consumers who have been on one or more default tariffs for three years or more. A 2017 consumer survey carried out by market research firm, GfK, estimated that around 48 percent of the consumers would be included in this database.

Ofgem has carried out two trials testing the database. In January 2017, Ofgem carried out a postal offers trial with retailers contacting customers about better offers via post, which was reported to be successful. Ofgem selected 2,400 customers from two large retailers, who had not switched retailers for more than three years. Each customer was randomly assigned either with marketing letters from other retailers, a best offer letter from Ofgem, or no letter. The total switching rate (internal and external) was significantly higher for the treatment groups contacted by other retailers (13.4 percent) and Ofgem (12.1 percent), than the control group who had no contact at all (6.8 percent). However, Ofgem found that the switching gain was not significantly different among the three groups (about £131 per year). Interestingly, qualitative interviews suggested that very few customers switched to the retailers they received information about. Customers were either prompted to look at information on the PCWs or to negotiate with their current retailers for a better tariff, using the new information.

Ofgem then ran a digital trial in the autumn of 2017 with 10,000 E.ON customers in Northampton customers, who had been on SVT for three years or more. Under the “Check Your Energy Deal” trial, Ofgem selected a PCW to calculate best deals for these customers, and offered them an online switching service. Ofgem also used a digital agency to raise service awareness through social media. The digital trial achieved a switching rate of 8.3 percent, which was 4.6 percent higher than the control group. On average, online switching reached savings of £293 per year.

C.VII.2.ii. Simpler tariff choices

In late 2010, Ofgem initiated the Retail Market Review ("RMR") following concerns that the energy market was not working effectively for consumers. Specifically, Ofgem found that a high number of customers chose not to switch retailers despite being better off if they did, and attributed this passive behaviour to

---


1048 Ofgem, “Small Scale Database Trial, Research Results”, paragraphs 1.8, 1.11.

1049 Ofgem, “Small Scale Database Trial, Research Results”, paragraph 1.13.

the complexity of pricing information. To encourage customer engagement, Ofgem proposed the “Simpler Tariff Choices” package, which included:

1. Banning tiered tariffs and introducing a new tariff structure of a unit rate and a standing charge, which would make it easier for customers to compare tariffs (SLC 22A.3(a) & (b));

2. Restricting the number of core tariffs that retailers can offer to four (SLC 22B.2(a) & (b));

3. Setting rules on how discounts, bundles and reward points could be offered. For example, retailers could only offer cash discounts to customers dual fuel or debit customers, as opposed to discount vouchers and other non-cash rewards (License Condition SLCs 22B.3–6; SLCs 22B.9–16; SLCs 22B.17–23; SLC 22B.24–28);

4. Requesting suppliers to make all tariffs available to new/existing customers (SLC 22B.30 and 22B.31).

As mentioned previously, CMA found that the “Simpler Tariff Choices” intervention had the unintended effect of limiting product innovation, and recommended lifting the ban on complex tariff rules, the four-tariff rule, the restrictions on offering discounts, bundles and reward points, and the requirement to make all tariffs available to new/existing customers. Following CMA’s recommendation, Ofgem removed the rules from retailers’ license starting in November 2016. CMA proposed to replace these rules with a more general requirement that retailers needed to design tariffs that were easy for customers to compare. Ofgem has followed through on this by adding broad principles to the residential Standard of Conduct to ensure that customers make informed choices.

---

1051 In Great Britain, retailers often use a two-tier pricing system where they charge a higher rate for the first portion of energy consumed and a lower rate for the consumption amount that exceeds the threshold. This system usually means that the smaller consumer pays more expensively because a greater proportion of their consumption falls into the first tier. Each firm has a different threshold for customers to reach before the lower rate kicks in. Energy retailers explained that the two-tier system is used to cover the fixed cost of getting energy to a customer, no matter how much energy they use. Some retailers use a daily standing charge instead of a two-tier system to cover the fixed costs.

1052 One of the four core tariffs has to be the SVT (the evergreen tariff).


1055 Ofgem, “Modification of electricity and gas supply licences to introduce five ‘informed choices’ principles and remove the majority of the prescriptive sales and marketing rules”, 27 April 2017.
C.VII.2.iiii. Trialing prompts for customer engagement

600. Also resulting from the 2010 RMR review was Ofgem's introduction of “clear information” rules to facilitate customers’ engagement, which required retailers to provide customers, in bills and other communication tools, with:

- A Tariff Comparison Rate (TCR) to help consumers compare tariffs among different retailers, based on a representative consumer profile;\(^{1056}\)
- A Tariff Information Label that would present tariffs in a standardised way;\(^{1057}\)
- Personalised annual cost projections based on customers’ actual consumption;
- Personalised information on the cheapest tariff that the current supplier offers.\(^{1058}\)

601. The CMA grew concerned that this provision was not subject to adequate testing before Ofgem’s introduction.\(^{1059}\) Thus, in its 2016 report, the CMA proposed that Ofgem establish a program to identify, test, and implement measures to help customers be engaged in the market. The CMA also recommended that Ofgem introduce a license condition (what later became SLC 32A) to require suppliers to participate in this program.

602. Between June and August 2017, Ofgem carried out the “Cheapest Market Offers Letter” trial, which was built upon the results of the postal offer trial.\(^{1060}\) Ofgem used a larger sample of customers to explore the effectiveness of letter-based approach (in total, 137,876 letters were posted). This trial selected customers who had been on SVTs for at least a year, excluding customers who were in debt or had non-standard meters. In the trial, customers received a personalised letter presenting three cheaper offers from alternative retailers (as selected from a PCW), based on their current consumption, payment type, account management and billing preference. Customers would either receive a letter branded by Ofgem or by their own retailer.

603. In November 2017, Ofgem published the trial results. The results showed that the letters increased switching rates, especially if the letter were branded by the current retailer (3.4 percent of customers switched, compared to the 2.4 percent

---

\(^{1056}\) TCR represents the cost of a tariff for a typical consumer. It assume a medium level of usage (a household that uses 3,200 kWhs of electricity and 13,500 kWhs of gas per year), and express tariff including discounts and standing charges in pence per kWh or £ per year.

\(^{1057}\) Include payment method, discount, termination fees, and estimate of annual costs for a typical consumer. Ofgem provides a template for retailers to provide Tariff Information Label on the bill. See [Standard Condition of Electricity Supply License, Schedule 1 to standard condition 31B](https://www.ofgem.gov.uk/static/protected/standard_conditions_of_supply_of_electricity_15020028.pdf), accessed 9 March 2018.


who switched when they received an Ofgem-branded letter and the 1 percent who switched when they received no letter.\textsuperscript{1061} In particular, Ofgem pointed out that the letter had a greater effect on customers who were on the SVT for more than three years, than on customers who were on the SVT 1-3 years. Ofgem also observed that the letter had a greater effect on customers who did not submit a meter reading in the previous 12 months. Following these observations, Ofgem concluded that the letter had a greater effect on passive customers.\textsuperscript{1062} Customers who received a letter on average saved £50 more from a switch than those who did not.\textsuperscript{1063}

\textbf{C.VII.2.iv. Use of online services}

Online tools, such as Price Comparison Websites (PCWs), have become an important channel for consumers to shop around and switch. The 2017 consumer survey found that 49 percent of consumers who had engaged with the energy market found deals through a PCW.\textsuperscript{1064} The internet has also become an increasingly important tool for consumers to manage their accounts. In 2016, the number of customers on online tariffs (tariff with paperless billing and online account) rose by around 6 percentage points to 40 percent (from 34 percent in 2014).\textsuperscript{1065}

The CMA found that customers with lower income and lower education levels were less likely to use Price Comparison Websites (PCWs). Out of those who did not feel confident using PCWs, 43 percent stated that they either didn’t believe or trust PCWs.\textsuperscript{1066}

\textbf{C.VII.2.v. Innovation in switching services}

There is a new suite of switching services in the UK that are designed to address customers’ lack of response. Flipper is an online automatic switching service launched in 2016 that identifies best deals for its customers and handles the switching process on the customers’ behalf. Besides automatic switching, Flipper is also different from traditional PCWs in that it charges consumer a flat rate of £25/year rather than taking a commission from retailers. Flipper works by extracting out consumption data from customers’ online energy account, and searching on the

\textsuperscript{1061} Ofgem, “\textit{Cheaper Market Offers Letter Trial – Research Result}”, 24 November 2017, paragraph. 4.2.

\textsuperscript{1062} Ibid., paragraph 4.3.

\textsuperscript{1063} Ibid., paragraph 4.5.


\textsuperscript{1065} Ofgem, “Retail Energy Markets in 2016”, 3 August 2016, paragraph 3.22.

market to find the best offer, taking into consideration exit fees and discounts. If the best offer saves customers at least £50, Flipper would then start the switching process on the customers’ behalf (e.g. contact retailers, set up account with the new retailer, etc.). Customers would then receive the new retailer’s information via email. For customers who do not wish to go ahead with the switch, there is a 14-day cooling off period during which customers can cancel the switch at no additional cost. If the switching were successful, customers would be charged £25, and for this fee Flipper would continue to provide its services for another 12 months. Flipper does the market search monthly; if it finds a better deal, Flipper would initiate the automatic switching process again.1067

607. Flipper went to administration whilst looking for a buyer in June 2017, but was subsequently acquired by a water company, Wessex Water. Flipper revealed that it had difficulty finding financing as investors struggled to understand its business model by taking upfront fee instead of commissions.1068 This may suggest that consumers hesitate to pay upfront when the saving can only be realised later.1069 This is particularly the case for the customers on a fixed term contract, who will need to pay the subscription fee plus exit fee upfront to “flip”. This is in contrast with the traditional switching/consultation service such as Cheap Energy Club (run by MoneySavingExpert.com). It recommends deals to customers who sign up for the service, but customers need to make an active decision to switch, once the switch is complete, Cheap Energy Club explicitly gives half of commission from suppliers as cash back to customers.1070

608. Switching services are also expanding to mobile platforms. For example, Voltz is a smartphone-based switching and advisory service. Like conventional PCWs, Voltz tracks energy deals on the market and recommends best offers to customers based on their consumption and current tariff. In addition, it provides alerts when a better deal is found, and enables easy switching with a few taps on the phone. Its website however does not explain whether it receives a commission from retailers.1071

---

1067 See [Flipper website](#), accessed 5 April 2018.


C.VII.2.vi. Switching rate and customer satisfaction

In August 2013, Ofgem proposed reforms, which aimed to promote customer engagement and improve competition following the 2010 RMR review. To evaluate the impact of these reforms, Ofgem commissioned a national-wide survey of energy consumers since 2014 and repeated this survey annually for three years. In September 2017, Ofgem published the results of the 2017 survey. The survey showed that the consumer engagement had increased from 34 percent in 2014 to 41 percent in 2017. This survey defined active customers as ones who switched retailer, changed tariff, or compared tariff with their own or other retailers. This survey identified the profiles of active customers:

- Younger people
- Higher income
- Frequent users of internet
- Pay by direct debit
- Dual fuel (gas and electricity supplied by the same supplier)
- Use of smart meter

This survey also found that the internet was a key facilitator for engagement. Of the consumers who had switched tariffs, switched retailers, or at least compared deals in the market, 49 percent discovered deals through a PCW, and another 8 percent and 7 percent looked at their retailer’s or a competitor’s website, respectively. By contrast, 15 percent spoke with their supplier over the phone, while the rest found deals either through face-to-face interactions or via advertisements on TV or in print.

Switching rate had been on the decline since 2008, coinciding with Ofgem’s ban on regional price discrimination in 2009, and the six large gentailers’ withdrawal from doorstep selling in 2011 and 2012. However, this trend reversed since late 2015, following information campaigns led by Ofgem and Department of Energy & Climate Change (DECC).

Retailers also announced gas price cuts in early January 2016, following a significant drop in the wholesale prices of oil and gas in 2015. This might also have an impact on electricity customers...
In February 2015, DECC launched a four-week campaign, “Power to Switch”. This included television and online advertising, to raise awareness for potential savings from switching and shopping around for the best deal. DECC reported that 130,000 households acted on switching following the campaign. In 2015-2016, Ofgem also a campaign, “Be an Energy Shopper”, to encourage customers to shop around for better deals on their energy bills. Figure 6 shows customer switching over time from 2003 through 2017.

Figure 6: Residential customer switches – Electricity

In 2016, a Customer Market Survey by the European Commission showed that the UK customers were only slightly more satisfied with their electricity markets compared to an average European consumer. The UK customer satisfaction scored at 76.9 point out of 100 compared to an EU average of 75.3 and ranked at the

Continued from previous page

switching retailers if they were on dual fuel. BBC, “British Gas and EDF cut gas prices”, February 2016, accessed 18 March 2018.


1078 Note that European Commission reports statistics for United Kingdom which also includes Northern Ireland, rather than for Great Britain.
14\textsuperscript{th} position out of 28 countries.\textsuperscript{1079} This was based on the ease of comparing offers, trust in retailers, satisfaction with the number of retailers, and the relatively low proportion of customers who had experienced problems in the market.

614. An annual customer engagement survey undertaken by Ofgem shows that trust in the energy sector had increased since 2014, but was still low. In 2017, 67 percent customers found that energy retailers treated them fairly. 66 percent of customers trusted that their retailers provided clear and helpful information for them. 58 percent of customers trusted that their retailers charged them a fair price. In terms of engagement, customers felt most confident making a complaint to their energy retailers (75 percent) but the least confident to make comparisons among offered deals (58 percent).\textsuperscript{1080}

615. A separate consumer survey by GfK (which updates every quarter since 2010) reported results for gas and electricity customers in the GB market, and found that electricity customers’ satisfaction had been rising since 2014.\textsuperscript{1081}


\textsuperscript{1080} Ofgem, “State of the energy market, 2017 Report”, 31 October 2017, Figure 2.15, pp. 33-34.

\textsuperscript{1081} This is based on responses to the 2017 consumer survey by the GfK. Customers were asked the question ‘How satisfied are you with the service you get from your current supplier?’ See Ofgem, “Retail Market Indicators”, accessed 18 March 2018.
C.VII.3. Smart meters

CMA noted that another reason why some customers may remain passive was that traditional meters were not informative to customers. The infrequent meter readings added to the opacity of the energy bills. Smart Energy GB publishes the Smart Energy Outlook twice a year to keep track of consumers’ attitude towards smart meters and the impact of smart meters on consumer’s experience in the energy market. The August 2017 publication reported that 82 percent of smart meter customers had better ideas of their energy costs and 70 percent of smart meter customers felt more in control of their energy use.

As of March 2018, there are around 11.3 million smart and advanced meters installed in residential households across Great Britain by both large and small energy suppliers. Out of the total 25.42 million electricity meters operated by large energy suppliers in domestic properties, 5.60 million are smart meters.


(approximately 22%). The government envisions that a full retailer led smart meter deployment will take place by 2020 for residential customers. Retailers need take “all reasonable steps” to offer a smart meter to all customers by 2020. In the interim, retailers must meet meter deployment targets that are approved by Ofgem. The roll out is proving difficult for retailers since it is optional for customers and many meters are located inside customer homes, making switching meters a time intensive process.

618. For those customers who do have smart meters, they have a say in how their smart meter data is used. Retailers and energy network companies have access to the data, but only to the level that is necessary to ensure accurate billing and delivery. This means that retailers can access only daily aggregated meter data unless the customer gives permission for access to the half-hourly data. Only with the customers’ permission then can retailers and third parties access and use half-hourly data to propose new products and services to customers.\textsuperscript{1086}

619. CMA notes that the current generation of the smart meters (SMETS1) is at risk of losing functionality when the customer switches retailers, unless retailers have pre-established bilateral agreements to preserve the functionality of the smart meters.\textsuperscript{1087} The SMETS2 (fully interoperable) smart meters, on the other hand, can communicate with any retailers via the Data Communication Company. Since only SMETS1 meters installed before 28 October 2017 would be counted towards retailers’ roll-out targets, DECC does not expect that retailers would install SMETS1 beyond this date.

C.VII.4. Consumer safeguards

C.VII.4.i. End of contract

620. Retailers may charge exit or termination fees if customers switched tariff or retailer prior to the end of the contract. Ofgem requires retailers to show the exit fee on customers’ bill. It is not clear if it needs to be shown on the tariff offer.

621. The retailer needs to notify customers that their current contracts are coming to an end 42 to 49 days before the contract ends.\textsuperscript{1088} If the contract expires and the customer has not taken any further action, the customer will be automatically rolled


\textsuperscript{1088} Ofgem, “Tougher rules on fixed term energy deals come into force as Ofgem’s retail market reforms begin to bite”, 22 October 2013, accessed 5 April 2018.
over to a default tariff. This used to be a SVT, but now retailers can roll customers onto a default fixed term tariff as long as it is not more expensive than a SVT. \(^{1089}\)

**C.VII.4.ii. Notice of price changes**

622. Retailers are required to notify customers 30 days before a change in price. Customers can terminate their contracts without incurring an exit fee if there were a change in the contract. \(^{1090}\)

**C.VII.4.iii. Default tariff**

623. In Great Britain, each retailer sets its own default tariff, which applies when customers do not make an active decision to change their tariff or retailer at the end of a contract. The default tariff, or the SVT in most cases, has no fixed term and customers can stay on it indefinitely unless they actively switch out. \(^{1091}\) As mentioned previously, retailers must give 30 days’ notice to customers before it changes the price. \(^{1092}\) This is different for prepayment customers as the SVT is an active acquisition tariff as opposed to the default tariff. As of March 2015, prepayment electricity customers had access to 22 standard variable tariffs and 4 fixed tariffs, compared to 27 standard variable tariffs and 27 fixed tariffs for direct debit customers. \(^{1093}\)

624. In October 2017, Ofgem modified the license conditions such that retailers would be able to choose to roll customers over to another fixed term contract other than the SVT, as long as the new fixed term contract did not have a penalty for early termination, were the same or cheaper than the SVT, or were similar to the customers’ current tariff. Ofgem hoped to give retailers enough flexibility so that they would provide better deals to customers. \(^{1094}\) Ofgem explained that this change would enable retailers to stop offering the standard variable tariff. \(^{1095}\) In November 2017, British Gas announced that it would stop offering the SVT for new customers.

---


\(^{1093}\) Ofgem, “Prepayment review: understanding supplier charging practices and barriers to switching”, Figure 2 (p. 15).


\(^{1095}\) Ofgem, “Modification of the electricity and gas supply licences to allow suppliers to roll customers onto further fixed-term tariffs at the end of their existing fixed-term deals”, 11 October 2017, p. 9.
from April 2018, and instead would offer at least two three-year fixed tariffs instead. British Gas would also set up a new 12-month default tariff with no exit fees for customers who do not pick a new contract when their existing one expires.\textsuperscript{1096}

\textbf{C.VII.4.iv. Retailer of last resort}

625. Ofgem established the retailer of last resort process in case a retailer was to go out of business. If that were to happen, Ofgem would appoint a replacement retailer to ensure that customers would continue to receive energy without disruption. In October 2016, Ofgem updated its safety net policy to also protect customers’ credit balances.\textsuperscript{1097} Under the updated safety net, Ofgem allows the replacement retailer to recover the cost of reimbursing customers for their credit balance through an industry levy. This levy would be spread across all energy customers’ bill.

\textbf{C.VII.4.v. Rules governing third-party intermediaries}

626. Ofgem does not apply any rules to third-party intermediaries (Confidence Code is a voluntary scheme). These intermediaries are however subject to more general consumer protection regulation. For example, these energy retailers are subject to license conditions that hold them responsible for the actions of “representatives” in sales and marketing practices,\textsuperscript{1098} with a focus on the accuracy and the suitability of information presented to customers (SLC 25.4-25.6).

\textbf{C.VII.5. Targeted protection of vulnerable customers}

627. In 2001, UK first defined fuel poor households as those who needed more than 10 percent of their income to heat their home adequately.\textsuperscript{1099} An independent review found this definition problematic. First, this measurement varied by fuel price, but kept the 10 percent benchmark static. Second, this measurement confounded the extent and depth of fuel poverty. This definition was therefore revised in 2012 to the “low income, high cost” standard (LIHC). That is, a fuel poor household is one for which the fuel cost was above median level and the income net of fuel cost, below the poverty line.\textsuperscript{1100} England has since adopted the LIHC standard to measure fuel poverty, but Wales and Scotland still use the 10 percent income threshold.

\footnotesize


\textsuperscript{1099} \textsuperscript{21}\textdegree C in the living room and \textsuperscript{18}\textdegree C in the other occupied rooms according to WHO standard.

In addition, Ofgem also has a definition for vulnerable customers. A vulnerable customer is someone who is:

- Significantly less able than a typical consumer to protect or represent his or her interests in the energy market; and/or
- Significantly more likely than a typical consumer to suffer detriment, or that detriment is likely to be more substantial.\(^{1101}\)

Ofgem’s definition is broader, as it not only concerns affordability, but also living situation (e.g. home efficiency) and barriers to engage in the market (e.g. struggle to understand information to get the best deals, or lack of access or choices).

### C.VII.5.i. Disconnection, prepayment meters and debt management

UK has relative higher arrears on energy bills but lower disconnection rates when compared to other EU Member States.\(^{1102}\) Insight Energy attributes it to the fact that UK has strong guidelines for disconnection times and procedures, as well as other debt management measures in place, such as prepayment meters.\(^{1103}\) Compared to other EU Member States, it takes relatively longer to disconnect customers in the UK.\(^{1104}\)

Currently, Great Britain customers have 28 days to contact their energy retailers to repay outstanding debt, or risk getting disconnected.\(^{1105}\) There are some exceptions to the rule, for example customers who are eligible for Priority Service Register including seniors; disabled customers; customers with a chronic sickness or a long-term medical condition; customers with hearing, visual impairments or other

---


1102 Insight Energy, “Measures to protect vulnerable consumers in the energy sector: an assessment of disconnection safeguards, social tariffs and financial transfers”, December 2016, Figure III-1. Note that Insight Energy reports statistics for United Kingdom, which includes Great Britain and Northern Ireland.


communication needs; or customers in a vulnerable situation, would not get disconnected during the winter months. As part of the debt recovery process, retailers would ask indebted customers to install a prepayment meter (PPM). The majority of retailers do not charge consumers for installing a PPM. As of 2015, 15 percent of electricity and gas customers used a PPM.

Since PPM is a pay-as-you-use scheme, concerns arose that customers would self-disconnect as they couldn't afford to top up their meters. For example, in 2013/14, Citizens Advice, which is a government funded consumer advice organisation, found 15 percent of the PPM customers have at one point or another cut off their energy supply. This was in line with a prior observation in 2012, where Citizen Advice noticed an increase in customers using prepayment meters, even though prepayment meter was a more expensive option compared to direct debit. This suggested that these households preferred a greater control on household spending as households budget tightened.

**C.VII.5.ii. Direct payment**

Since 2011, the government has provided the Warm Home Discount (WHD), which is a fixed rebate for energy bills between the months of September and March, for those who are in fuel poverty or are at risk of it. The Department for Business, Energy and Industrial Strategy (BEIS) is responsible for WHD policy and legislation, while Ofgem’s role is to administer certain elements of the scheme. Energy retailers with more than 250,000 customers are required to participate in the

---

106 It is a system designed and managed by Ofgem to ensure individual with special requirements get additional supports from their energy retailers. Customers can sign up the Priority Services Register are those who are either of pensionable age, are disable or chronically sick, have a long-term medical condition, have a hearing or visual impairment, are in a vulnerable condition. Customers will receive free services such as advanced notice of planned power cuts or meter reading services.


108 Sometimes retailers would install prepayment meters at the customer’s request.


112 Dhara Vyas, “Topping-up or dropping-out: self-disconnection among prepayment meter users”, October 2014, Key Fact (p. 6).
WHD scheme, though there are smaller retailers who voluntarily participate in the scheme. Two main types of customers are eligible for the WHD scheme: the Core Group (pensioners who receive the Guarantee Credit element), and the Broader Group (low-income customers who meet the retailers’ criteria for the scheme). For the scheme year ending March 2018 (SY7), customers in the Core Group and the Broader Group received a rebate of £140 each.1113 These rebates took the form of: (1) a credit to the customer’s gas or electricity account; (2) a credit to the prepayment customer’s account; or (3) a tender payment to the customer, which Ofgem suggested should be the last resort. In addition, there is the Industry Initiatives element of the scheme, where retailers help fuel-poor customers through third parties. The support can include advice on energy savings, or help with reducing energy debts.

635. In addition to WHD, the government also provides direct cash payments to low income customers and pensioners:

- **Cold Weather Payment (CWP):** Customers who receive certain income supports may receive £25 for each week of very cold weather between 1 November and 31 March,1114 and

- **Winter Fuel Payment (WFP):** Customers who were born before 5 August 1963 receive between £100 and £300 for each winter.1115

### C.VII.5.iii. Energy efficiency measures

636. The most prominent government-led energy efficiency measure is the Energy Company Obligation (ECO), which requires retailers with more than 250,000 customers to deliver energy efficiency measures to their residential customers. As of March 2016, there have been 1.8 million installations under this Ofgem-administered scheme. ECO requires retailers to: (1) promote measures such as roof and wall insulation and connection to district heating under the “Carbon Emission Reduction Obligation”; and (2) promote measures leading to energy savings such as replacement or repair of boiler under the “Home Heating Cost Reduction Obligation”.1116

637. The other energy efficiency measure, Green Deal, provides a financing package to fund house upgrades such as better insulation. Customers on this scheme

1113 Customers are eligible for WHD if they or their partner receive a Guarantee Credit element of the Pension Credit (the Core Group), see GOV.UK, “Pension Credit”, accessed 9 March 2018. Other customer could receive WHD if they meet certain criteria. See Ofgem, “Warm Home Discount: Guidance for Retailers [Version 5.1]”, 1 September 2016.


are paid back with energy bill savings. Insight Energy criticised that the scheme uptake was limited due to unattractive interest rates in financing.1117

638. There are also more regionally focused programs. For example, in Scotland, there are Home Energy Efficiency Programmes for Scotland (HEEPS), which target energy efficiency measures in fuel poor areas. In Wales, there is the Nest scheme, which sends automatic advice to customers on how to reduce their energy bills. For eligible customers, Nest also provides free home improvements, such as new boiler installation, central heating or insulation.

C.VII.6. Promotion of competition

C.VII.6.i. Price regulation - safeguard tariff

639. Market offers to prepayment customers are relatively limited. CMA reported that almost all prepayment customers were on SVTs.1118 In June 2017, Ofgem observed that price comparison websites offered 122 tariffs for customers paying by direct debits, but only 33 prepayment tariffs.1119

640. In addition, concerns arose around the fact that available prepayment tariffs were generally more expensive, and people tended to self-disconnect when they couldn’t afford to top up. Following CMA’s recommendation, in April 2017, Ofgem implemented a safeguard tariff on prepayment meter tariffs. This cap is expected to be a transitional measure expiring in December 2020, when retailers would have completed the roll-out of smart meters. It is envisaged that at this stage all prepayment customers will have “fully interoperable” smart meters removing the need for separate prepayment meters. It is thought that this will lower retailers’ costs, and lead to a whole host of other benefits such as a wider choice of tariffs, easier customer switching, more flexible credit arrangements, and provide customers with opportunities to monitor and top up whenever necessary.

641. The cap is set based on three indices: (1) wholesale price for the six months prior to the cap being set; (2) environmental levy forecasts; and (3) the consumer price index. The price cap also considers an allowance for network charges, which vary by region, and includes some headroom. For the purpose of allowing for some headroom on an ongoing basis, CMA took a percentage of the price cap pre-headroom, excluding network costs. To determine the £15, CMA took into consideration the achieved reduction in excessive pricing, the impact on retailer’s profitability, and the prevailing tariff for prepayment customers.1120 CMA


established a competitive benchmark based on the direct debit tariff charged by the mid-tier retailer.\textsuperscript{1121} The price cap is calculated based on the competitive benchmark plus headroom of £15 per fuel. Price cap is updated every six months.\textsuperscript{1122}

642. Ofgem estimated that the introduction of the price cap to prepayment customers reduced dual fuel bills by £60 on average per year.\textsuperscript{1123} As a result of this cap, prepayment customers now pay less than customers on SVT and those on direct debit (£57 less for a typical consumer); however, the prepayment tariff is still higher than the equivalent fixed-term tariff.\textsuperscript{1124} The implementation of the safeguard tariff meant that all large retailers had to make significant reductions to their prepayment offers. Some mid-tier retailers were already offering prepayment tariffs below the safeguard tariff. Since the price cap became effective, Ofgem observed that many of the mid-tier retailers chose to increase their tariffs to match the cap. In addition the number of retailers offering zero-standing charge tariffs targeted at low income customers fell from four to two, thus lowering choice and increasing prices for some prepaid customers.\textsuperscript{1125}

643. In February 2018, Ofgem extended the safeguard tariff to customers receiving the Warm Home Discount\textsuperscript{1126} after its research showed that customers with vulnerable characteristics\textsuperscript{1127} also found it difficult to engage in the market. Lacking information to precisely identify who was vulnerable, Ofgem decided that customers receiving WHD were likely to be vulnerable. To ensure that this measure is proportionate and in line with EU legislation, which states that any price regulation has to be temporary, Ofgem plans to phase out the WHD-related safeguard tariff in December 2019.

644. Ofgem wanted to extend the WHD safeguard tariff to a further two million vulnerable consumers for winter 2018-19, but noted that if the price cap proposed

\textsuperscript{1121} CMA established the competitive benchmark by using the average of First Utility and Ovo Energy direct debit tariffs, adjusted to achieve a 1.25 percent EBIT margin. First Utility and Ovo Energy are the seventh and the eighth largest suppliers in terms of market share in the domestic market as of February 2018.

\textsuperscript{1122} Ofgem presentation, “Prepayment Price Cap or ‘Safeguard Tariff’”.

\textsuperscript{1123} Ofgem, “State of the Energy Market, 2017 Report”, 31 October 2017, key fact on competition. This is based on typical level of annual consumption.


\textsuperscript{1126} Ofgem, “Providing financial protection to more vulnerable consumers”, 20 December 2017, accessed 9 March 2018.

\textsuperscript{1127} Low income, social housing renters, age 65 or over, living with a disability.
by the government for all SVTs and fixed-term default deals passed before winter 2018-2019, then Ofgem would not implement the vulnerable safeguard tariff.

To identify vulnerable consumers for further coverage, Ofgem’s preferred approach is data matching between retailers and the Department of Work and Pension. An alternative approach would be for retailers to identify the eligible consumers.\footnote{Ofgem, “Providing Financial Protection to More Vulnerable Consumers”, 06 March 2018.}

**C.VII.6.ii. Confidence Code for Price Comparison Websites (PCWs)**

In 2002, Energywatch established the “Confidence Code”, a voluntary code of practice which manages independent energy price comparison websites (PCW) and switching services. Ofgem took over the responsibility for this in March 2013.\footnote{Ofgem, “Appendix 9.3: Price comparison websites and collective switching”, paragraph 16.} The PCWs who are listed as compliant with the “Confidence Code” are websites that Ofgem recognises as presenting options and prices fairly and accurately (“the accredited PCWs”). In 2015, Ofgem amended the Confidence Code so that PCWs cannot by default only present “fulfillable” tariffs (tariffs on which PCWs would receive a commission if customers chose to switch), but would have to instead present all available tariffs.\footnote{CMA, “Energy Market Investigation, Full Report”, 24 June 2016, paragraph 8.84.}

One potential issue with this “full picture by default” approach is that retailers who do not reach commercial deals with the PCWs are able to free-ride on their services, reducing PCWs’ incentives to contribute to the market for better and more competitive services. The CMA recommended that Ofgem make changes to the Confidence Code so that the PCWs could be more flexible about what tariffs they presented to customers. In its place, the CMA recommended introducing a requirement in the Code around being transparent about what PCWs provide to customers.\footnote{Ofgem, “CMA Remedies Implementation Plan- Whole of Market Remedy”, pp. 9-10.}

In July 2017, Ofgem decided to go ahead with the CMA’s proposal to modify the Confidence Code in order to allow accredited PCWs to show a partial view of market offers as a default, but added a requirement that accredited PCWs would still offer customers easy access to the full view of market offers.\footnote{Ofgem, “Decision on the partial implementation of the CMA’s Whole of Market remedy & consulting on new Code requirements”, 3 July 2017, paragraph 2.6.}

**C.VII.6.iii. Barriers to entry and expansion**

Ofgem conducted a competition assessment in June 2014 and expressed concerns over vertical integration issues. After further investigation, in 2016, CMA...
found that vertical integration does not have significant adverse impact on competition.\textsuperscript{1133} It found that the wholesale market was sufficiently liquid; therefore independent generators and retailers could participate and compete effectively in the retail market.

In addition to vertical integration, Ofgem’s 2014 assessment also listed social and environmental obligations as potential barriers to expand, the largest of which is the Energy Company Obligation (ECO). Retailers that have more than 250,000 residential customers, and supply more than 400 GWh of electricity or 2,000 GWh of gas to customers are required to comply with the ECO, leaving smaller energy retailers exempt. While some retailers expressed concerns that such an exemption would act as a subsidy to small retailers, the CMA noted that the exemption was justified on the grounds that the compliance cost would have been disproportionally high for small retailers. Additionally, the CMA noted that compliance is tapered up to 500,000 customers, and that there are smaller retailers that exceed this benchmark. This suggests that the exemption does not act as a barrier to expansion. The CMA was of the view that without the exemption, entering the market would be difficult for small retailers.\textsuperscript{1134}

\textbf{C.VII.6.iv. Barriers to switching - residential customers}

Ofgem requires licensed retailers to complete a transfer within 21 days from the end of the 14 day cooling-off period. The average time for residential customers to complete a switch in September 2017 was 16 days, compared to 18 days in 2014.\textsuperscript{1135} In 2016, 15.8 percent of residential customers switched their electricity retailers; 15.6 percent of small business customers switched their electricity retailers.

The Debt Assignment Protocol (DAP) process is the process that assigns debt when indebted prepayment customers want to switch. It includes reading the meter and going over the payment schedule with customers who would like to switch. Figure 8 shows how the process works.


\textsuperscript{1135} Ofgem, “Retail Market Indicators”, accessed 9 March 2018.
In 2014, Ofgem recognised that indebted prepayment customers faced barriers to switch under the DAP process, after observing a low switching rate in this sector (typically less than 1 percent of attempted switches were successful). In July 2015, Ofgem therefore increased the threshold from £200 to £500 per fuel. Currently, DAP allows prepayment customers who are up to £500 in debt per fuel to switch retailers. Ofgem also agreed with industry stakeholders to ask customers about data sharing at the point of acquisition rather than during the switching process to facilitate switching (Point of Acquisition or POA model). Since the intervention, the success rate for switching increased to 9-11 percent in Q1 2016. However, CMA in its 2016 investigation still identified DAP as a barrier for prepayment customers to switch. That was because the DAP allowed retailers to raise an objection to switching based on the level of debt owed. CMA pointed out that the process to respond to the objection was burdensome to customers, thereby limiting switching.


C.VII.6.v. Barriers to switching - non-residential customers

For non-residential customers, the average switching time is similar to that of residential customers, around two to three weeks’ time.1138 CMA identified a number of barriers for microbusiness customers to switch:

- Lack of price transparency as a substantial proportion of the microbusiness tariffs were individually negotiated between customers and retailers;
- Some microbusiness customers were on auto-rollover contracts, and were therefore automatically locked in for another fixed period without exit clause, and the window to switch was narrow.

The consumer survey showed that the contract lock-in was indeed a major factor for no switching. In 2016, 53 percent of small and microbusiness customers stated that they had not switched or attempted to switch because they were locked into the contract.1139 As a remedy, as of June 2017, CMA has requested retailers to stop locking customers into automatic rollover contracts.1140 This means that retailers could not charge customers exit fees in automatic roll-overs, and that commercial customers could terminate contracts at any time.

Another remedy that CMA proposed was “price transparency”, which would require retailers to disclose prices for all their available acquisition and retention contracts to a large proportion of their microbusiness customers.1141 The modified license condition took effect in June 2017.

C.VII.7. Outcome of retail competition

C.VII.7.i. Residential customers

The residential retail market has seen substantial new entry in recent years. In September 2017, there were 59 retailers active in the electricity or dual fuel retail market for residential customers.1142 Compared to September 2016, there were 17 net new entries, as shown in Figure 9. The residential market is still dominated by the large six gentailers: British Gas, EDF, E.ON, RWE npower, Scottish Power, and SSE (80 percent in Q3 2017); but their combined market share has been on the decline since 2012 (99 percent in Q4 2012).1143

1140 Ofgem, “CMA Remedies Implementation Plan”, p. 16.
1142 Ofgem, “Retail Market Indicators”, Number of Active Domestic Suppliers by Fuel Type (GB), accessed 9 March 2018.
1143 Ibid., Electricity Supply Market Shares by Company: Domestic (GB)
Annual external switching (or, switching to another retailer) rate reached 18 percent in September 2017, compared to 12 percent in October 2015. Annual internal switching (or, to another tariff within the same retailer) rate was 26.5 percent.  

New entrants have intensified competition, but the market is still very concentrated in a few players. The HHI index, which measures market concentration, was 1,353 in June 2016 and 1,247 in June 2017.

Figure 9: Number of active residential retailers in the GB market

Note: Include retailers supply both gas and electricity or just electricity

---

1144  Ibid., Large Suppliers: Internal and External Switching Rate by Fuel Type (GB)

Ofgem is of the view that market competition continues to benefit consumers who are able and willing to shop around. However, competition hasn’t driven good outcomes for consumers who are less active.\textsuperscript{1146} In 2017, 35 percent of customers said they’ve never switched retailers and 23 percent said had they’ve only switched once (together, passive customers account for 58 percent of all customers).\textsuperscript{1147} As of October 2017, 34 percent of residential non-prepayment customers were on the SVT for more than three years and 23 percent of residential customers were on the SVT for less than three years (together, 57 percent of customers were on the SVT).\textsuperscript{1148} When considering all payment methods, 62 percent of customers were on the SVT.\textsuperscript{1149} Out of the six large gentailers, SSE has the highest percentage customers on the SVT (71 percent as of April 2017), and Scottish Power has the lowest percentage customers on the SVT (40 percent as of April 2017).\textsuperscript{1150}


\textsuperscript{1148} Ofgem, “[Retail Market Indicators](#)”, Number of Non-Prepayment Domestic Customer Accounts by Supplier: Standard Variable, Fixed and Other Tariffs (GB), accessed 9 March 2018.

\textsuperscript{1149} Ofgem, “[Retail Market Indicator](#)”, accessed 12 March 2018.

\textsuperscript{1150} Ofgem, “State of the Energy Market, 2017 Report”, 31 October 2017, Figure 2.7 (p. 26).
As of February 2018, the default tariff provided by six large gentailers was, for a typical consumer, around £300/year higher than the cheapest fixed-term tariff.\(^{1151}\) Ofgem’s analysis showed that between July and September 2017, internal switching could lead to savings of up to £180 while external switching could lead to savings of £90-£300.\(^{1152}\)

Ofgem reported that, between April 2014 and June 2017, 26 million switching requests were submitted, but only 22.6 million followed through.\(^{1153}\) Retailers’ objections based on customers’ existing debt could explain some of the failures to switch. The length of the switching process could also explain some of the failures to switch. In 2017, 27 percent of respondents of the consumer survey believed that the switching process took too long.\(^{1154}\)

On average, since 2012, the profit margin (measured as EBIT divided by total electricity and gas revenue) has stayed constant for the six large gentailers. However, there were wide variations in profit margin even among these large gentailers. In 2016, EDF and npower made losses of -0.9 percent to -6.3 percent, respectively, while the other four made profits of 5.2 percent to 7.2 percent.\(^{1155}\)

Since lifting the “simpler tariff choices” in 2016, Ofgem observed that the number of core tariffs increase from 90 to 120 in the non-prepayment market, an increase that can mostly explained by new entrants. Ofgem also observed an increase in tariffs that track wholesale price, and tariffs bundled with non-energy services.\(^{1156}\)  

### Small business customers

As of June 2017, the largest five small non-residential customers accounted for roughly 70 percent of demand in that segment.\(^{1157}\) Non-residential switching rate has been on the increase. Survey data indicated that microbusiness and small business customers were making more active choices at the end of fixed term

---

\(^{1151}\) Ofgem, “Retail Market Indicators”, Retail price comparison by company and tariff type: Domestic (GB), accessed 5 April 2018.

\(^{1152}\) Ofgem, “State of the Energy Market, 2017 Report”, 31 October 2017, Figure 2.8 (p. 27).


\(^{1157}\) Market share based on small-scale non-domestic electricity class 3&4. See Ofgem, “State of the Energy Market Report, 2017 Report”, 31 October 2017, Figure 2.17 (p. 36).
contracts. The HHI index for small non-residential customers has decreased from 1,276 in June 2016 to 1,200 in June 2017.\textsuperscript{1158}

The customer survey showed that two-third of customers have engaged in the market in the past 12 months.\textsuperscript{1159} In 2016, 21 percent of businesses switched retailers (compared to 23 percent in 2014 and 25 percent in 2015).\textsuperscript{1160} That same year, 39 percent of business renegotiated contracts with their existing retailer (compared to 30 percent in 2015).\textsuperscript{1161}

C.VII.8. Price Monitoring

Ofgem has rules, as set out in the “Electricity Supply Standard Licence Conditions” (SLC), in regards to information sharing that retailers must comply with; which includes both regular and ad hoc information submissions.\textsuperscript{1162,1163} The most relevant regular information requirement is set out in SLC 32 which requires reporting on performance by providing data on payment methods, missed payments, disconnections, energy efficiency and the Priority Services Register.\textsuperscript{1164} In addition, SLC 5 requires “suppliers to provide Ofgem with any information [Ofgem] reasonably require[s] in order to allow [Ofgem] to perform [their] functions under legislation or regulation, eg [their] publication, compliance, and enforcement functions.”\textsuperscript{1165}

Ofgem publishes the following reports using electricity retail pricing data:

- “Retail Market Indicators” – Ofgem publishes a number of retail electricity market statistics on its website in order to provide a “snapshot” of price monitoring done by Ofgem.\textsuperscript{1166} This including: “Retail price comparison by company and tariff type”;

---

\textsuperscript{1158} Market share based on small-scale non-domestic electricity class 3&4. See Ofgem, “State of the Energy Market Report, 2017 Report”, 31 October 2017, Figure 2.19 (p. 37).

\textsuperscript{1159} Ofgem, “Micro and Small Business Engagement in the Energy Market 2016”, Section 3.3 (p. 18).

\textsuperscript{1160} Ofgem, “Micro and Small Business Engagement in the Energy Market 2016”, Section 1.2.1 (p. 5).

\textsuperscript{1161} Ofgem, “Micro and Small Business Engagement in the Energy Market 2016”, Figure 4.6 (p. 26).

\textsuperscript{1162} Ofgem, “License guide: interactions with Ofgem and other industry participants”, pp. 1-2.

\textsuperscript{1163} Ofgem, “Standard conditions of electricity supply licence”, 14 February 2018.

\textsuperscript{1164} “The Priority Services Register is a free service suppliers are required to provide to offer additional support to certain eligible customers.” See Ofgem, “License guide: interactions with Ofgem and other industry participants”, p. 2.

\textsuperscript{1165} See Ofgem, “License guide: interactions with Ofgem and other industry participants”, p. 3.

\textsuperscript{1166} Ofgem, “Retail Market Indicators”, accessed 16 May 2018.
“Cheapest tariffs by payment method”; “Average tariff price per supplier”; etc. These statistics are compiled using the price comparison websites: Energyhelpline and Energylinx. Other statistics such as “Number of non-prepayment domestic customer accounts by supplier” uses retailer data submissions on payment methods required by the SLC. Statistics are updated based on what is being measured, e.g. “Retail price comparison by company and tariff type” is updated monthly whereas “Number of non-prepayment domestic customer accounts by supplier” is updated once a year. Note that these statistics are also published in the “State of the energy market” report.

- “State of the energy market” – is an annually published report by Ofgem, which provides an overview of the energy market in the UK and according to Ofgem the report assess how well energy markets are working based on consumer outcomes. The report uses pricing data to provide statistics such as: “Average retail energy prices: 1970 to 2016”, which uses data from the Department for Business, Energy and Industrial Strategy (details provided below). Note that the statistics published under “Retail Market Indicators” are also published in the “State of the energy market” report. Other statistics published in the report include: “Savings available to SVT consumers by switching”, which is collected using Energyhelpline.

The Department for Business, Energy and Industrial Strategy (BEIS) collects and publishes a range of retail electricity data, especially through its “Quarterly Energy Prices” (QEP) report. The BEIS notes the following: “Domestic price statistics provide important information for monitoring the energy market. They are used to measure the rises and falls in gas and electricity prices and the effect this has on domestic energy bills, including effects on prices from any changes to competition within the market. UK domestic energy prices are compared with prices in other countries to measure the competitiveness of the UK and monitor the effects of liberalising energy markets across the EU.” The QEP has been published on a quarterly basis since June 2001, and focuses on billing data for all energy sources. Retail electricity data in the report includes:


• “Average standard electricity bills” - estimates for bills based on a fixed annual consumption level of 3,800kWh.  
• “Domestic energy bills based on actual consumption” – based on actual and temperature adjusted consumption.  
• “Proportion of customers on each payment types” – the payment types are: credit, direct debit, and prepayment.  
• Average annual bills on each payment type – estimates for bills based on fixed annual consumption levels of 3,800kWh.  
• “Proportion of customers on variable and fixed tariffs”.  
• Average standard electricity bills for fixed and variable tariffs.  
• Proportion of standard electricity customers on a fixed tariff by regions.  

In regards to data collection and methodologies used by the BEIS to calculate statistics, the department has published the “Domestic Energy Prices: Data sources and methodology” report. The report firstly notes that the purpose of data collection and energy price statistics is to monitor prices and their effect on energy bills. According to the report, all price data for the UK is collected directly from energy retailers on a quarterly basis. There are two main surveys used to collect data by the BEIS: the “Domestic Fuel Inquiry” (DFI) and the “Price Transparency” (PT) survey. The DFI is used to collect data on prices and average consumption at the tariff level and the survey is sent out to nine retailers on a quarterly basis. The bills estimates provided using the DFI are weighted by the number of customers on

1183 DFI is sent to nine domestic electricity retailers on a quarterly basis, BEIS, “Domestic Energy Prices: Data sources and methodology”, September 2017, p. 2. 
each tariff. PT is quarterly survey which is used to calculate domestic energy pricing information for the purpose of comparison with prices across the EU. The survey is sent to seven electricity retailers and prices do not reflect actual consumption.

C.VIII. ITALY

C.VIII.1. Overview of retail competition

There are two institutions in Italy that oversee the electricity market: the Italian Regulatory Authority for Energy, Networks and the Environment (ARERA) and the Italian Competition Authority (AGCM). These institutions cooperate with regards to the promotion and monitoring of retail competition.

The ARERA regulates the energy sector through rulings (resolutions), and specifically:

• establishes tariffs for the use of network infrastructure and guarantees equal access for operators;
• promotes the development of competition in the wholesale and retail electricity markets;
• guarantees adequate standards of quality and efficiency of service;
• ensures transparency in the advertising of service conditions;
• encourages investment in infrastructure with particular emphasis on adequacy, efficiency and safety;
• monitors compliance with legislation (predominantly ARERA resolutions).

The main responsibility of the AGCM is the repression of unfair commercial practices, misleading and unlawful comparative advertising and the application of conflict of interest laws to government–office holders.

Before liberalisation, the Italian electricity market was primarily controlled by a single vertically integrated state-owned company, Enel. The initial phase of

---

1188 AGCM website, “What the Authority is”, accessed 7 March 2018.
1189 There were also a few municipal networks, ARERA, “The Italian Electricity Market”, 6 October 2008, p. 9.
liberalisation was launched by the Bersani decree (Legislative Decree No. 79 of 16 March 1999),\textsuperscript{1190} which divided the electricity system into three different classes:

- Licensed activities:
- distribution
- Monopoly activities:
- transmission (carried out by Terna, the system operator)
- dispatch (carried out by GME, the market operator)
- Competitive or potentially competitive activities:
- generation, export, supply and metering.\textsuperscript{1191}

Initially, only the largest customers – those consuming more than 30 GWh/year – could choose their retailers;\textsuperscript{1192} smaller customers could still only be served by their local supplier. Over time, the threshold for eligibility was reduced in stages,\textsuperscript{1193} until in 2007 all consumers were able to choose a competitive retailer. Despite this, there continues to be a regulated tariff – the "enhanced protection market" – on which all customers who have not actively chosen a retailer remain.\textsuperscript{1194} A single buyer, the Acquirente Unico or "AU", has the legislative mandate to ensure adequate services to the enhanced protection market, purchasing electricity on the wholesale market and selling it to default tariff retailers, who in turn resell it at a regulated rate.\textsuperscript{1195} It is possible for customers to move back to the “enhanced protection market” after having chosen an offer in the open market.\textsuperscript{1196}

In addition to the enhanced protection market, there is also a "safeguarded market" – effectively a “supplier of last resort” mechanism for very large customers


\textsuperscript{1191} Legislative decree, “Bersani decree”, 16 March 1999, article 1.1.

\textsuperscript{1192} In Italy, the common term to describe retailers is “suppliers”; however, to maintain consistency with the remainder of the report, we will use the term “retailer”.


\textsuperscript{1194} Legislative decree, “Bersani decree”, 16 March 1999, article 4.1.

\textsuperscript{1195} Legislative decree, “Bersani decree”, 16 March 1999, article 4.1.

\textsuperscript{1196} ARERA website, “Is it possible to return to the enhanced protection market from the open market?”, 16 May 2016, accessed 19 March 2018.
who have previously moved away from the regulated tariff but, for some reason, temporarily find themselves without an electricity retailer.\textsuperscript{1197}

677. In 2016, there were 542 retailers in the open market, 133 retailers in the enhanced protection market and 2 retailers in the safeguarded market.\textsuperscript{1198} We are not certain of how many retailers serve residential customers. In 2016, 61 percent of residential load was on the regulated tariff.\textsuperscript{1199}

678. Under the framework of a market competition law, Law No. 124/2017, the retail market will be further developed and the regulated tariff will be abolished from 1 July 2019 onwards.\textsuperscript{1200} ARERA will ensure that customers who are still on the regulated tariff in 2019 will receive adequate information regarding the ending of the tariff and the steps they need to take to receive electricity service moving forward. ARERA will also guarantee that this information will be widely published.\textsuperscript{1201} See Section C.VIII.4 for further discussion.

679. The same law also contains measures to make it easier for customers to change retailers, such as the development of a web portal for the collection and publication of market offers, setting guidelines for advertising offers, and the creation of IT platforms that facilitate the aggregation of small consumers. In August of 2017 ARERA launched the above mentioned procedures to implement these policies with the aim of improving awareness of retail choice for small consumers and enhancing their ability to make choices in the market.\textsuperscript{1202} At time of writing, no results had been released of the efficacy of the reforms.

680. Italy was the first European country to implement a large-scale smart meter rollout starting in 2001. Now, after having successfully implemented the first wave

\textsuperscript{1197} The “safeguard market” has been set up for companies that find themselves without an electricity retailer and have an annual turnover of more than 10 million euros or more than 50 employees. This regime was established in order to avoid situations in which a company on the open market remains without electricity. The price applied to this category is the sum of the average price in the electricity market and a premium, which serves as a penalty for being without a supply contract. See VELGA, “Safeguarded market or enhanced protection market?”, accessed 23 March 2018.

\textsuperscript{1198} ARERA, “2017 National Monitoring Report”, p. 82.

\textsuperscript{1199} Load volumes are sourced from ARERA, “2017 National Monitoring Report”, p. 83. The total residential load (57,113 GWh) is the sum of regulated (35,058 GWh) and competitive (22,055 GWh) load, yielding a 61 percent market share for regulated load.

\textsuperscript{1200} Enerdata, “Italy’s retail power and gas markets will be fully liberalized in 2019”, 4 August 2017.


of smart meters, Italy is starting to roll-out second-generation smart meters with increased granularity and enhanced functionality such as the ability for customers to obtain real-time data (see Section C.VIII.3 for further discussion).

C.VIII.2. Consumer engagement

C.VIII.2.i. Default tariff

681. As discussed above, despite the retail market being fully open to competition since 2007, over half of domestic consumers remain on regulated tariffs. However, switching rates are increasing and 13.7 percent of customers switched retailers in 2016 compared to 10.4 percent in 2012.1203

C.VIII.2.ii. Price comparison tools

682. According to ACER, in 2015 it was not clear whether price comparison websites (PCWs) existed in Italy. These are generally seen as a crucial requirement to encourage customer switching, since they provide clear and transparent information to consumers regarding the savings they could achieve from switching.1204 In fact, since 2009 the ARERA has had a user-friendly search engine on its website, the “Trova Offerte”, for finding and comparing the various offers available in the electricity market.1205 However, ACER does not recognise the Trova Offerte as a PCW because it is not run independently and it only shows offers provided by retailers on a voluntary basis.1206

683. As noted above, the 2017 competition law stipulates the creation of a price comparison website showing all the available offers on a comparable basis. This tool will be set up independently from retailers and will be managed by the single buyer (AU) through its metering and customer database, called the Integrated Information System Manager (SII).1207 This new PCW will be implemented gradually:1208


1205 By entering the postcode of the municipality of interest, the type of contract, and annual consumption, the consumer can view on “Trova Offerte” the offers of the vendors operating in the selected area. ARERA, “Electricity: introduction of ‘Trova offerte’”, 8 April 2009.


1207 The Integrated Information System Manager is a nationwide database of meter points and customer identification data in order to guarantee ease in the exchange of data between the parties participating in the electricity market. Acquirente Unico, “Integrated Information System Manager”, accessed 21 March 2018.

• From 1 July 2018, only market offers with the same conditions as the regulated tariff will be covered. It is hoped that these “PLACET” (Prezzo Libero A Condizioni Equiparate di Tutela) offers will facilitate comparison and switching, since the PLACET offers will only vary on price.1209

• From 1 September 2018, all offers on the previous website, Trova Offerte, will be transferred to the new PCW.

• From 1 December 2018, the new PCW will collect all offers advertised on retailers’ and other websites, and also those offers advertised at retailers’ physical branches.1210

684. In addition, in order to help consumers understand which companies are active in the market, ARERA publishes on its website a list of active retailers that meet certain criteria, including financial stability requirements and a minimum service area.1211

**C.VIII.2.iii. Billing**

685. From January 2016, ARERA introduced the “bolletta 2.0”, a standard and simplified billing template, with the purpose of helping consumers understand the bills better and enabling them to compare offers across retailers more easily. The following information must be presented:

• Energy expenses, where the price is composed of:
  • A fixed price or standing charge (€/year);
  • Variable charges (€/kWh), which may include different prices for different time periods;
  • System charges, including transmission, distribution and balancing charges;
  • Metering charges;
  • A social bonus for vulnerable customers (see section C.VIII.5 for further discussion);
  • Taxes and Italian television tax.1212

**C.VIII.3. Smart meters**

686. As mentioned in Section C.VIII.1, starting in 2001, Italy was the first European country to embark on the nationwide deployment of smart meters.1213 The smart meters are owned by Distribution System Operators, who are responsible for

---


their implementation as well as for third-party access to metering data.\textsuperscript{1214} This program was funded by consumers through their electricity bills,\textsuperscript{1215} and allowed Italy to meet the target residential smart meter deployment level of 80 percent set by the EU, well ahead of the 2020 deadline.\textsuperscript{1216} Now it is the leading country in the world in terms of the number of in-service smart meters, with over 35 million out of a total of 37.3 million meters.\textsuperscript{1217} Italy is considering implementing a second roll-out of enhanced smart meters with better technology, but no timetable for such a scheme has been set as of this writing.\textsuperscript{1218, 1219} The goals of a second roll-out would include:

- improving remote reading efficiency, currently equal to 96 percent, and remote management;
- increasing the granularity of the energy measurements detected in remote reading;
- making the validated readings available to retailers within 24 hours; and
- delivering data in real time to the customer.\textsuperscript{1220}

\section*{C.VIII.4. Consumer safeguards}

\subsection*{C.VIII.4.i. Information and assistance}

\begin{itemize}
  \item In 2010 ARERA introduced two communication channels designed to enhance the role and power of customers: the “Sportello per il Consumatore” and “Atlante per il consumatore”.\textsuperscript{1221}
  \item The “Sportello per il Consumatore”, managed by ARERA and Aquirente Unico, provides information and assistance to electricity customers. It is a direct
\end{itemize}

\footnotesize
\begin{itemize}
  \item European Commission, “Commission Staff Working Document: Country fiches for electricity smart metering”, 17 June 2014, table 11-A.
  \item See metering charges related to the management of smart meters included among the expenditure items on the “bolletta 2.0,” ARERA, “Bolletta 2.0”, accessed 12 March 2018.
  \item ARERA, “Smart metering”, accessed 8 March 2018.
  \item ARERA, “Smart metering di seconda generazione”, 11 January 2017.
  \item The implementation of second generation smart meters will be funded by consumers through the payment of the bills. ABB, “The living environment will become increasingly practical and functional”, accessed on 19 March 2018.
  \item ARERA, “Energy: introduction of “Sportello per il consumatore” and “Atlante per il consumatore””, 26 January 2010.
\end{itemize}
channel of communication, accessible by phone, mail or fax, which provides answers to complaints, requests and reports.1222

689. The “Atlante per il consumatore” collates information and clarifications concerning the guarantees and protection provided by the ARERA’s rules. It follows a FAQ structure, and offers a summary that allows consumers to understand their retail choices and consumer rights.1223

C.VIII.4.ii. Complaints

690. From January 2017, the mechanisms for dealing with complaints and resolving disputes between customers and retailers are structured as follows:

- First, a written complaint must be submitted to the retailer. The aim is to solve most complaints in this way.
- If the answer to the complaint is not satisfactory or no answer is received, consumers can contact the Conciliation Service (“Servizio di Conciliazione”). The Conciliation Service is a free service, established by ARERA and managed by single buyer, AU, and involves the intervention of a conciliator specially trained in energy and mediation who helps the parties to find a solution.1224
- Finally, ARERA will intervene in the dispute upon request, if conciliation has not been successful. This intervention, however, does not undermine the right of the parties to apply to the civil courts, which remains an available option. 1225

691. To submit a written complaint, the customer can use the form that retailers must make available on their website and in all of their shops.1226 A written response to the complaint must be sent to the consumer within 40 calendar days from the day that the retailer receives the written complaint. If the retailer fails to adhere to this timetable, they must provide the following compensation in the first available bill: €25 for a response in 40-80 days, €50 for a response in 80-120 days, €75 if the response takes longer than 120 days.1227


1225 ARERA, “Energy: from 2017 the mechanisms for dealing with complaints and resolving disputes will be strengthened”, 22 July 2016.


1227 ARERA, “Resolution 413/2016/R/com, 21 July 2016, articles 16-19. The retailer will liquidate just one complaint per year.
C.VIII.4.iii. Switching

692. If a consumer wishes to switch retailers, they are entitled to do so without paying a penalty or any costs. However, notice has to be given to the current retailer at least three weeks in advance.\(^{1228}\)

C.VIII.4.iv. Marketing

693. To safeguard consumers, ARERA has issued the “Code of commercial conduct for the sale of electricity”, which covers how retailers can promote their tariffs, the extent to which tariffs can be modified, the steps that retailers must take to sell a contract and the penalties for poor customer service described above.\(^{1229}\) According to this Code:

- The retailers have to advertise their contractual offers in a transparent, complete and non-discriminatory manner, and take all reasonable steps to meet the information needs of customers (e.g. all commercial communications should contain contact information which the customer can use to ask information about the offer);
- Before closing a deal, the customer must be provided with information such as the duration of the contract, the conditions for the renewal, the terms, the conditions and the notice period to exit from the contract.

C.VIII.4.v. Quality of service and enhanced protection

694. ARERA also has rules regarding the quality of service, including the mandated provision of service continuity, which is defined as uninterrupted supply of no less than 5 percent of the declared supply voltage.\(^{1230,1231}\) In addition to the complaints procedure described above, the quality of service requirements cover what retailers must provide in respect of customer information and billing requests, bill adjustments, and call center services. If a retailer does not comply with the quality standards, consumers are entitled to automatically receive compensation.\(^{1232}\)

695. As mentioned in Section C.VIII.1, customers who do not actively move to the open market currently have a regulated tariff in the “enhanced protection”

---

\(^{1228}\) ARERA, “Resolution 302/2016/R/com”, article 2.1.

\(^{1229}\) ARERA, “Resolution ARG/com 104/10”, 12 July 2010.

\(^{1230}\) ARERA, “Resolution ARG/com 164/08”, 20 November 2008, article 3.

\(^{1231}\) Service continuity ceases when supply interruptions occur, which may be with or without prior notice. The continuity of service may not always be 100 percent guaranteed due to technical reasons and force majeure. ARERA, “Resolution 646/2015/R/eel”, 22 December 2015, article 1; and ARERA, “What does “continuity of the service” mean?”, accessed 12 March 2018.

market. While ARERA sets and updates the regulated tariff for these consumers every quarter, the regulated tariff will be abolished as of 1 July 2019 pursuant to Law No. 124/2017. In order to compel consumers to transfer to the open market, the market competition law requires retailers to offer to households and small businesses at least one “standard” supply fixed-price proposal (in which the price is kept fixed for a certain period of time) and at least one variable-price proposal. Under the provisions of this law, ARERA established PLACET offers, which, as described above, have the same conditions as the default tariff but are priced by the market, thus making it easy for consumers to compare and understand them.

C.VIII.5. Targeted protection of vulnerable customers

C.VIII.5.i. Energy poverty defined

Italy does not have a legally binding definition of energy poverty. However, in 2014 ARERA created a non-binding definition stating that energy poverty occurs when a customer spends more than 5 percent of their income on electricity expenditures.

Although there is little institutional focus on energy poverty in Italy, there is a support system in place for qualifying low-income consumers. This “social bonus” takes into account the household’s income level and characteristics (including physical hardship and family size). The social bonus, which is offered by ARERA with the cooperation of municipalities, provides an annual discount on a customer’s

1233 It is possible for consumers that had actively moved to open market to get back to the “enhanced protection” market. ARERA, “Is it possible to get back to the “enhanced protection” market from the open market?”, accessed 5 April 2018.


1238 ARERA, “Report on the survey on the state of the implementation of electric and gas bonuses”, 27 February 2014, p.17.

1239 Economic hardship refers to a family with ISEE of less than €8,107.5 per year. ISEE is an instrument that measures the welfare of families in Italy, taking into account the family’s income, assets and characteristics (e.g. number of family members). Physical hardship refers to cases in which a serious illness requires the use of medical devices powered by electrical energy (electro-medical) essential for maintaining life. Large families refer to families with more than three children and with ISEE less than €20,000.
electricity bill. Municipalities connect the different parties who interact to ensure the provision of the social bonus to eligible consumers. It is funded by a levy on all other electricity consumers. In 2014 it was found that only 30 percent of eligible families were applying for the social bonus and the Ministry of Economic Development and the Energy Authority launched a communication campaign to increase the visibility of the program to its potential beneficiaries. However, we did not find any data evaluating the success of this program.

C.VIII.5.ii. Disconnections

The roll out of smart meters has enabled further safeguards to be provided for customers who are in arrears. Instead of being disconnected immediately, they are left with a minimum service, equal to 0.5 kW, for two weeks before they are completely disconnected. Furthermore, when the debt is settled, electricity service can be reactivated almost instantaneously without the customer having to wait for a visit from their retailer.

Electricity customers who are dependent on medical equipment cannot be disconnected; however they can be placed on minimum service if this is sufficient capacity to power their medical equipment.

C.VIII.6. Promotion of competition

C.VIII.6.i. Barriers to entry

In 2014, a survey of European energy retailers commissioned by ACER found that, while entry barriers in Italy were perceived to be low overall compared to those in other European countries, there were some specific concerns raised by the survey participants. In particular, the retailers noted that regulated tariffs in Italy were below wholesale prices and were “squeezing” margins, and that they felt

---


1243 ARERA, “Energy: social bonuses, only 30 percent of eligible consumers requests for it”, 15 October 2014.


that regulatory changes occurred at short notice and created uncertainty.\footnote{Ibid, p. 30.} However, the authors of the study noted that regulation in Italy has actually been stable, with “visibility over 10 years” and a limit on the market share of incumbent suppliers.\footnote{Ibid, p. 30.}

701. In 2016, the CEER noted “very significant market activity” in Italy, where 54 retailers entered the residential consumer market, and 21 retailers exited the market.\footnote{CEER, “Retail Markets Monitoring Report”, 21 November 2017, section 2.1.3.}

C.VIII.6.ii. Other measures

702. Most of the measures that have been adopted to promote competition have been described in the preceding sections. These include, for example, allowing customers to switch without incurring any penalties or paying any costs, and the introduction of a standard and simplified billing template. It is, however, worth mentioning that ARERA publishes an annual report on the functioning of the energy retail market. This report assesses the extent of competition in the retail market and highlights any obstacles to the development of competition.\footnote{ARERA, “Resolution ARG/com 151/11”, 3 November 2011.}

C.VIII.7. Outcome of retail competition

C.VIII.7.i. Market concentration

703. Although there are a large number of retailers in the electricity market for residential consumers, the market is relatively concentrated because most retailers have very small market shares.\footnote{ARERA, “Retail monitoring report 2016”, 30 November 2017, p.5.} As shown in Figure 11, the total market share of the largest retailers (those with a market share of more than 5 percent) was at least 70 percent from 2012 to 2016. In 2016 just three retailers had a market share higher than 5 percent.\footnote{Ibid, p.7.} By contrast, the total market share of these retailers in the non-domestic market is only around 25 percent.\footnote{Ibid, figures 4.2 and 4.3.}
The HHIs shown in Figure 11 confirm that, while the non-residential consumer market segments are characterised by a reasonable level of competition, the domestic market is relatively concentrated. The HHI in the residential consumer market is consistently above 2,800 between the years 2012 and 2016, and the market share of the largest retailer remains stable at around 50 percent during this time period.

Ibid, figure 4.1.
Table 12: Concentration indexes in terms of sold energy per type of market

<table>
<thead>
<tr>
<th></th>
<th>HHI</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domestic clients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>2,849</td>
<td>50.2%</td>
<td>62.0%</td>
<td>72.8%</td>
</tr>
<tr>
<td>2013</td>
<td>2,810</td>
<td>49.8%</td>
<td>63.0%</td>
<td>72.4%</td>
</tr>
<tr>
<td>2014</td>
<td>2,802</td>
<td>49.4%</td>
<td>64.7%</td>
<td>73.4%</td>
</tr>
<tr>
<td>2015</td>
<td>2,809</td>
<td>49.9%</td>
<td>64.8%</td>
<td>71.4%</td>
</tr>
<tr>
<td>2016</td>
<td>2,824</td>
<td>50.4%</td>
<td>64.6%</td>
<td>69.9%</td>
</tr>
<tr>
<td><strong>Low tension non-domestic clients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>920</td>
<td>26.9%</td>
<td>33.0%</td>
<td>37.8%</td>
</tr>
<tr>
<td>2014</td>
<td>853</td>
<td>25.0%</td>
<td>33.5%</td>
<td>38.6%</td>
</tr>
<tr>
<td>2015</td>
<td>700</td>
<td>22.9%</td>
<td>27.6%</td>
<td>31.9%</td>
</tr>
<tr>
<td>2016</td>
<td>767</td>
<td>24.5%</td>
<td>29.3%</td>
<td>33.4%</td>
</tr>
<tr>
<td><strong>Medium tension non-domestic clients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>371</td>
<td>9.3%</td>
<td>17.6%</td>
<td>22.8%</td>
</tr>
<tr>
<td>2013</td>
<td>364</td>
<td>9.5%</td>
<td>18.4%</td>
<td>23.3%</td>
</tr>
<tr>
<td>2014</td>
<td>543</td>
<td>17.7%</td>
<td>25.4%</td>
<td>30.4%</td>
</tr>
<tr>
<td>2015</td>
<td>428</td>
<td>12.5%</td>
<td>20.1%</td>
<td>27.6%</td>
</tr>
<tr>
<td>2016</td>
<td>368</td>
<td>11.8%</td>
<td>17.5%</td>
<td>22.6%</td>
</tr>
</tbody>
</table>

Notes:
HHI refers to Herfindahl-Hirschman Index values
C1, C2 and C3 respectively represent the market share held by the largest, the two largest and the three largest retailers.
Low tension indicates nominal tension lower than 230 V.
Medium tension indicates nominal tension higher than 230 V.

C.VIII.7.ii. Customer satisfaction

In 2016, a Customer Market Survey by the European Commission showed that Italian customers generally appear to be satisfied with their electricity markets, with a satisfaction level that is slightly less than the average EU-wide one (71.8 point out of 100 compared to an EU average of 75.3).\textsuperscript{1256}

C.VIII.7.iii. Product diversity

The retail market is characterised by a variety of commercial offers available to domestic consumers. Sellers actively try to attract residential customers to the open market, witnessed, for example, by the high and ever-growing number of offers that can be viewed on the “Trova Offerte” website since 2012.\textsuperscript{1257} 72.5 percent of all offers to residential customers comprise one or two year fixed rate energy tariffs, charged per kilowatt-hour.\textsuperscript{1258}

\textsuperscript{1255} Ibid, table 4.3.


\textsuperscript{1257} ARERA, “Trova offerte”, accessed 9 March 2018..

C.VIII.8. Price Monitoring

707. As part of the regular monitoring of operating conditions in the retail electricity market, ARERA publishes the annual Retail Market Monitoring Report. This report summarises the market outcomes over the last year in order to: assess the extent of competition in the retail markets, highlight any obstacles to the development of competition, and detect alleged irregularities in drafting supply contracts.\footnote{ARERA, “Retail monitoring report 2016”, 30 November 2017, p. 4.} One section of this Report is dedicated to offers and prices in the electricity retail market. ARERA:

- Collects residential consumer information through “Trova Offerte”, the official PCW;\footnote{ARERA website, “Trova offerte”, accessed on 9 March 2018.}
- Combines information collected quarterly from the retailers on average prices paid by residential and non-residential consumers.\footnote{We believe this to be a simple average given the lack of mention of any kind of weighting.}

708. The retailers also have the obligation to report to ARERA for both residential and non-residential consumers the following four individual cost components:

- Metering and costs of the network;
- System charges;
- Taxes;
- procurement, sales, and sales margins.\footnote{ARERA, “Retail monitoring report 2016”, 30 November 2017, Section 4.3.}

C.IX. The Netherlands

C.IX.1. Overview of retail competition

709. The liberalisation of the Dutch energy market started with the Electricity Act of 1998 (Elektriciteitswet). In 2002, the retail electricity market was liberalized for industry customers; and in 2004, for residential customers. Prior to liberalization, the market was divided into regional monopolies, which were vertically integrated and regulated.\footnote{Mulder, M. and Willems, B.,“Competition in Retail Electricity Markets: An Assessment of Ten Years Dutch Experience, TILEC Discussion Paper No. 2016-011”, 15 June 2016, p. 7.} Four companies engaged in the generation and transmission services, while 23 companies engaged in distribution and retail services.\footnote{OECD, “Country Studies, Netherlands – Regulatory Reform in the Electricity Industry”, 1998, p .5.} Following the unbundling of networks, the Ministry of Finance owned the
transmission network, while Dutch municipalities and provinces owned most of the eight distribution networks.\footnote{1265}

710. In 2013, the Netherlands Consumer Authority, the Netherlands Competition Authority (NMa), and the Netherlands Independent Post and Telecommunications Authority (OPTA) combined to form a new regulator, the Netherlands Authority for Consumers and Markets (ACM).\footnote{1266} ACM’s central responsibilities focused around: competition, market transparency, and regulation of the wholesale and retail electricity and gas markets.

**C.IX.2. Consumer engagement**

**C.IX.2.i. Consumer information website and campaign**

711. ACM operates the “government information desk for consumers” website “ConsuWijzer”, which offers consumers information and practical help relating to their rights\footnote{1267}, including on energy related issues such as dealing with complaints and disputes and switching retailers. In 2013, ACM launched a campaign called “If you snooze, you lose” (Niets doen kost je poen), which aimed to raise awareness around benefits of switching (estimated to be up to €450 per year per household).\footnote{1268} The campaign was primarily a media campaign, and included an online video to motivate customers to review their existing contracts.

712. In 2016, consumers consulted ConsuWijzer 2.8 million times.\footnote{1269} In that same year, a customer satisfaction survey commissioned by ACM found that ConsuWijzer was particularly helpful to customers taking action against businesses with unfair commercial practices. Of those surveyed, who had phoned or emailed ConsuWijzer, about half said that they had subsequently exercised their rights; and 40 percent of those respondents indicated that their problems had consequently been solved.\footnote{1270}

**C.IX.2.ii. Code of conduct for retailers and information guidelines**

713. The organisation that represents energy retailers in the Netherlands is called “Energie-Nederland”. In 2006, it published a voluntary code of conduct for retailers,
covering topics such as information provision and fair selling. For example, the code states that communication with consumers should be clear and transparent, and not be misleading regarding any aspect about the product or service. A list of businesses that have signed the code is shown on its website. As of March 2018, most, but not all of the top 10 businesses by size had signed, along with a host of other smaller businesses.

In an effort to ameliorate consumers’ switching process (consumer complaints lodged at the Dutch Court of Arbitration mostly related to the switching process), ACM established several information guidelines. Many of the requirements in the guidelines have been designed to improve market transparency by making the information published by different retailers more comparable, and by prohibiting unfair or misleading marketing practices. For example, in 2014, ACM published the following requirements that retailers must meet when making offers:

- consumers must be informed in advance about all costs associated with an offer;
- the total annual cost must be displayed;
- consumers must be informed about the contract’s start date and cooling-off period;
- any changes in the tariff must be communicated in advance;
- generation type (how much is produced by renewables and fossil generation) must be declared.

Since 2014, ACM has required companies to amend their websites if the information they provide is deemed incomplete or misleading; and in case of non-compliance, issue fines. By 2015, ACM has made website amendment requests to seven companies because it deemed that the previously provided information had not provided fair and transparent offers. Of these seven businesses: three complied with ACM's instructions, four received fines for failing to comply in a timely manner; and of those four, one ended up taking down its website.

ACM also requires information on energy bills to be verifiable and understandable. For example, prices have to be listed separately if there were any

---


adjustments made between bills (as opposed to being listed as an average). ACM gave companies until 1 July 2017 to make changes to their bills. However, 21 out of 40 retailers were found to have not complied with the requirements and been issued a warning. ACM started a proceeding against three of the companies because they failed to comply in a timely manner, and issued a penalty for two for two of them.  

C.IX.2.iii. Switching campaigns

717. Another advocate of customer engagement and protection is the “Consumentenbond”, a membership-based non-profit organisation. The Consumentenbond negotiates, on behalf of its members, collective energy prices with energy retailers. To do so, the Consumentenbond organises a campaign, the main part of which is an auction where energy retailers bid against each other to provide the best offer. Customers have to register with the campaign prior to the auction, but are not obliged to accept the collective energy price contract that results from it. Instead, they can make a decision once the auction is completed and can accept the offer either via the campaign website or by ringing the Consumentenbond, who then forwards the registration to the retailer. Between 2011 and 2014, there were nine collective switching campaigns, involving 55,000 to 309,000 consumers per campaign. After the auction customers could decide if they wanted to sign up for the contract under offer, with no obligation. Each of the campaigns resulted in savings of between €1.4 million to €34.7 million for between 8,000 and 111,000 consumers.

C.IX.3. Smart meters

718. The Dutch government has implemented a two-stage plan for the introduction of smart meters. First, the amended Electricity Act requires retailers to offer a smart meter to all households and small businesses that are replacing meters or making new installations. However, customers have the choice to decline the offer or, if they accept a smart meter, to decline real-time readings. In 2014, the ACM

---


concluded that this phase of the smart meter roll-out was going well, with more than 98 percent acceptance rate among customers who were offered a smart meter.\textsuperscript{1283}

719. After the success of the first phase, a second phase was launched in 2015 with an accelerated roll-out to all households and small businesses.\textsuperscript{1284} By 2016, approximately 2.9 million residential consumers out of 7.8 million have installed smart meters.\textsuperscript{1285} Smart meters send usage data every two months to the distribution network operator.\textsuperscript{1286} In compliance with the Personal Data Protection Act (Wet bescherming Persoonsgegevens, or WBP), businesses are not allowed to collect and interpret someone’s personal data without that consumer’s explicit permission.\textsuperscript{1287} In cooperation with the Dutch Data Protection Authority (CBP), ACM published a checklist on ConsuWijzer that assists customers in learning about their meter provider’s data policies on smart meters.\textsuperscript{1288} The provision of real-time consumption data is provided by third-party commercial services that the consumer chooses and authorises.\textsuperscript{1289}

\textbf{C.IX.4. Consumer safeguards}

720. The 1998 Electricity Act states that consumers have the right to receive clear information on their energy consumption and on measures to improve energy efficiency.\textsuperscript{1290} In addition to consumer safeguards discussed above, the Act specifies that customers can cancel their contract if their retailer changes its terms and conditions.\textsuperscript{1291} It also sets a cap on the penalty payment that consumers may have to

\begin{itemize}
  \item \textsuperscript{1283} ACM press release, “\textit{Introduction of smart meter is progressing well}”, 10 March 2014, accessed 18 March 2018.
  \item \textsuperscript{1286} ACM, “Smart-meter”.
  \item \textsuperscript{1287} This could be the case of energy optimisation.
  \item \textsuperscript{1288} ACM press release, “\textit{Privacy checklist for smart meters helps consumers make more conscious choices}”, 25 June 2014, accessed 20 March 2018 and ConsuWijzer website, “\textit{Checklist – Smart-meter privacy}”.
  \item \textsuperscript{1289} USmartConsumer, “European Smart Metering Landscape Report”, November 2016, p. 23.
  \item \textsuperscript{1290} 1998 Electricity Act (“Elektriciteitswet 1998”), articles 95a and 95b and EC, Country fiches 2016, p. 92.
  \item \textsuperscript{1291} 1998 Electricity Act (“Elektriciteitswet 1998”), articles 95a and 95b and EC, Country fiches 2016, p. 92.
\end{itemize}
pay when they choose to change retailers before the end of their contract (and there
has been no change in price).

C.IX.4.i. Information and tariff surveillance

721. In 2011, the government aimed to improve market transparency and, in an
amendment to the 1998 Electricity Act, specified the terms for a standardised tariff
(one of many tariffs a retailer may offer) in which retailers may only compete on
price. In 2012, the regulator at the time, NMa, established the model contract that
retailers would have to follow. However, because of the strict conditions associated
with this tariff, it is generally not as competitive as other tariffs and is scarcely
demanded.1292

722. Other retail tariffs are not directly regulated as such, but any new tariff or
change has to be submitted to the regulator at least four weeks before it comes into
force. The retailer has to provide a breakdown of the included costs and ACM uses
this information to determine whether the price is excessive. ACM does not publish
its assessment methodology since it believes that doing so would lead to new tariffs
clustering around the maximum allowed price, hindering competition.1293 ACM can
require retailers to adjust the price, or directly set the maximum price that the
retailer is allowed to charge (i.e. if the supplier is unwilling to revise its prices). In
2016, two retailers had to comply with ACM’s direction and adjusted their prices
downwards.1294 However in 2017, the ACM had to set a maximum price for the first
time for the energy retailers Nuon.1295

723. Despite this tariff monitoring, evidence suggests that it is still possible for
retailers to differentiate their tariffs, and that the tariff review does not constitute a
barrier to entry.1296 Nevertheless, in 2014, the International Energy Agency (IEA)
recommended that the tariff review be removed, arguing that it hinders innovation
in retail products, although they did not explicate on why.1297

1292 Mulder, M. and Willems, B., “Competition in Retail Electricity Markets: An Assessment of Ten

1293 Mulder, M. and Willems, B., “Competition in Retail Electricity Markets: An Assessment of Ten


1295 ACM, “Maximum tariffs set for electricity products of Nuon”, 22 December 2017, accessed 28
March 2018.

1296 ACER and CEER, “Annual Report on the Results of Monitoring the Internal Electricity and
Natural Gas Market in 2014”, November 2015, p. 89.

C.IX.4.ii. Complaints

The treatment of complaints to energy retailers is regulated by the 1998 Energy Act. Details of the process, such as timing and format, have to be stated in the “general conditions” of the energy retailers. In general, complaints have to be sent, by post, to the customer’s retailer indicating the reason for the complaint. The retailer has to provide a response, including a proposed solution, within four weeks. If the process cannot be settled between the two parties, the consumer can consult with the Dispute Committee (De Geschillencommissie), whose decisions are binding. In 2016, there were 396 complaints handled by the Energy Dispute Committee. Of these complaints, 26 were well-founded, 17 were partly well-founded, 131 were unfounded, and the rest either settled or inadmissible. However, not all electricity retailers are members of this committee, so customers of retailers who are not affiliated with the umbrella organisation of Energy Netherlands (Enegrie-Nederland) or Network management Netherlands (Netbeheer Nederland) cannot file complaints with the Dispute Committee. Instead, these customers can address their complaints directly to the distributor or the regulator. Unlike all other EU Member states, the dispute resolution service is not free unless the consumer is proven to be right.4.46 per 100,000 energy customers complained in 2014 about their retailer to the alternative resolution agency, while 34.48 per 100,000 addressed ACM directly.

C.IX.4.iii. Default supply

In the event that a retailer defaults (e.g. due to bankruptcy), a retailer of last resort arrangement ensures customers continue to receive electricity. The 2006 Decree on the supply security stipulates that the network operator of the national high-voltage grid must coordinate in advance to redistribute consumers among retailers. Consequently, instead of there being a single retailer of last resort, the responsibility for ensuring electricity supply is split among retailers in proportion to the demand each retailer serves. When a retailer defaults, the designated emergency

---

retailer immediately takes over servicing the customer, and applies its own tariff conditions on the provided service. As the emergency retailer incurs additional costs, the new tariffs will typically be higher than ones under the customer's old contract. Since the customers did not choose their emergency retailer, they are able to switch to a new retailer without incurring any contract cancellation fees.

C.IX.4.iv. Green energy

Some retailers provide "green tariffs", under which 100 percent of electricity would come from renewable generation. In practice, energy companies purchase "Guarantees of Origin" (GO) certificates to prove that the generation was green. These certificates have to be retired when the corresponding kWhs are sold, to ensure that the green energy can only be sold once. ACM monitors the certificate retirements, and can impose additional requirements if it finds that a company has not retired enough certificates – this has only happened once. The regulator identified that the electricity company Innova did not retire sufficient GO certificates in 2013 and 2014 and as a consequence sold more green energy than it had actually purchased. Additional requirements were imposed on Innova to allow it to continue to provide green power.

C.IX.4.v. Licensing requirements

Another customer safeguard is the requirement for retailers to be licensed by ACM if they want to supply small consumers. There are currently 56 license holders. To obtain a license, a retailer must show that it has the technical and financial capabilities to provide electricity to small consumers at a service level that complies with the statutory rules of the Electricity Act 1998. Through licensing, ACM can ensure that quality standards are met by all retailers, and can revoke their licenses if standards are not met. In December 2017, the retailer EnergieFlex was instructed by ACM to get its administrative and internal controls in order. ACM

---

1308 This is defined as residential or business customers with less than 3x80A of consumption. ACM, “Energy permits” accessed 11 March 2018.
thus added new requirements to EnergieFlex’s license and may revoke the license if EnergieFlex fails to comply.\textsuperscript{1311}

728. Whilst licensing acts as a consumer safeguard it can also be a potential barrier to entry. Firstly, retailers need to pay €1,199 for the license itself and incur additional costs to collect the necessary information for the application.\textsuperscript{1312} Secondly, the application process can be complex leaving retailers uncertain about whether or not they are eligible to qualify for a license. In 2015, ACM revised the application procedures to make the process faster and more efficient. By outlining what the requirements are and how applicants may meet them, ACM hoped that it would give applicants more certainty about how to successfully obtain a license.\textsuperscript{1313}

\textbf{C.IX.4.vi. Switching}

729. Switching between suppliers is relatively straightforward in the Netherlands, as illustrated by high switching rates compared to other European countries. In 2016, 16.4 percent of customers switched retailers.\textsuperscript{1314} The switching procedure allows a cooling-off period of 14 days to allow for decision changes (this is a general consumer right and not specific to energy), then a month to reverse the switch. Hence, it leaves consumers up to six weeks to change their mind about a switch.\textsuperscript{1315} When switching from a fixed-term contract, consumers may incur a termination fee. However, the ACM states that the new supplier must inform the consumer about the switching procedure and the potential costs that could arise from the switch due to termination fees imposed by the previous or current retailer.\textsuperscript{1316}

\textbf{C.IX.5. Targeted protection of vulnerable customers}

730. The Netherlands defines vulnerable customers as residential consumers for whom a disconnection from electricity would result in serious health risks.\textsuperscript{1317} The


\textsuperscript{1313} ACM, “ACM has revised the license application procedure for supplying energy to small-scale users”, 20 January 2015, 11 March 2018.


\textsuperscript{1316} Ibid., p.20.

seriousness of the health condition must be determined through a doctor’s statement. This is however different in concept from energy poverty.

C.IX.5.i. Social policies

731. The Netherlands addresses energy poverty via general social policies rather than separate energy-market specific measures. For example, social security grants cover housing costs, including electricity costs. There are also Housing Allowance Service Grants for low-income workers who share a living space. These grants are intended to cover energy costs of common living areas.

C.IX.5.ii. Disconnection procedure

732. In the Netherlands, a disconnection process usually takes up to 60 working days. The retailer has to first send a notice of non-payment, then a reminder, or outsource the debt collection process to a third party. Twenty working days later, if the payment is still outstanding, the retailer may disconnect the customer. The Ministerial Decree regarding disconnections for small electricity and gas consumers (Regeling afsluitbeleid voor kleinverbruikers van elektriciteit en gas) prohibits the disconnection of vulnerable consumers. The same law also bans disconnections during winter (October to April) for all residential consumers. In both cases, customers may still be disconnected in the case of fraud or refusal to enter a debt recovery program.

C.IX.5.iii. Social housing initiatives

733. A number of measures against energy poverty focus on social housing. In the Netherlands many low-income households live in social housing managed by housing associations: 2.4 million of all 7 million houses are social housing. Since 2008, the Energy Saving Covenant has required landlords of social housing to improve the energy efficiency of their properties before raising rent. Moreover,
landlords are only allowed to raise rent by the maximum amount that the energy bill is expected to decrease as a result of the energy efficiency measures, so that there is no net increase in housing costs (rent plus energy cost). In 2012, this covenant was expanded to include the private rental market as well, with the aim of driving energy-efficiency savings in existing housing associations by 33 percent by 2020.1326

734. Since 2008, another programme provides support to energy efficiency upgrades (Energiesprong). It is organised by housing associations and financed with upfront capital from the WSW social bank, which has provided €6 billion to underwrite government-backed 40-year loans to housing associations. The idea behind the programme is that tenants would pay a similar amount to their energy bill to the housing associations instead of paying for energy themselves. The associations would then use this money to pay building companies to retrofit the houses with cost-effective “industrialized” renovation processes. This initiative aims to retrofit a total of 111,000 houses.1327 Out of the Energiesprong initiative the “Stroomversnelling” (river rapid) deal between Dutch building contractors and housing associations emerged. The initiative in the Netherlands is now known under the latter name. The members of the Stromversnelling are among others contractors, component suppliers, housing providers, local governments, financiers. So far, 1,300 Net Zero Energy buildings have been created, a further 500 are in progress, and 15,000 more are in planning.1328 Very recently, the program has expanded also to the UK, France, Germany and New York.1329

C.IX.6. Promotion of competition

C.IX.6.i. Barriers to entry

735. ACM promotes several policies to enhance competition within the retail electricity market. The Netherlands had required the separation of network and retail activities as it believed that this would prevent network operators from favouring their associated retailer. Similarly, in 2012, the then regulator, NMa, fined


the network operator Liander for not having fully protected its consumer data, thus possibly enabling its competitor retailer, Nuon Sales (who was storing customer data on the same platform), to access material information that would have given it an unfair competitive advantage and distort the market.1330

736. The Independent Grid Administration Act of 2006 (WON) directed a separation of network and production/trade/distribution businesses.1331 In the past, networks and retailers had been permitted to fall under a common corporate group, but this was no longer allowed (also called “group-ban”). The purpose of the unbundling was aimed at preventing consumers and businesses from not being supplied due to risky group commercial activities.1332 Companies such as Eneco and DELTA filed legal proceedings against the WON. However, in 2015, the Supreme Court of the Netherlands ruled that the WON was not in breach of EU law.1333 ACM gave the companies respectively 14 and 19 more months to unbundle.1334

C.IX.6.ii. Barriers to switching

737. As discussed previously, ACM actively promotes retailer switching by making switching requirements clearer and more transparent. More switching would result in more offer choices, better quality of service, and lower prices.1335 ACM approved in principle of the collective bargaining auctions organised by the Consumentenbond. However, in 2014, the ACM started investigating the energy auctions to ensure that they did not involve any price fixing or anti-competitive practices. ACM did not find any anti-competitive behavior, but now requires the auctions to accept bids below the reference price (the minimum price set by the auctioneer) in advance. These bids would lead to lower prices for consumers, and

1335 ACM, “Record number of consumers have switched energy providers”, 18 November 2016, accessed 11 March 2018.
allow more retailers to participate in this auction, thereby stimulating competition.1336

C.IX.7. Outcome of retail competition

C.IX.7.i. Switching rates

738. 56 companies currently supply electricity in the Netherlands.1337 The three largest companies, Essent, Nuon, and Eneco have a combined market share of 79 percent.1338 Nonetheless, according to ACER and CEER, the Netherlands has one of the most competitive electricity and gas markets in Europe.1339 Compared to other European countries, switching rates are high at around 16.4 percent in 2016.1340. 98 percent of the customers who switched indicated that they were satisfied with the switching process. Unsurprisingly, the main motivation for switching was said to be the energy cost savings. Close to 40 percent of all energy consumers stated to have consulted a comparison website when considering a switch.1341

C.IX.7.ii. Tariff diversity

739. B. Willems and M. Mulder (2016) found that retail prices between 2008 and 2014 were 50 percent higher than wholesale prices. They further observed that the difference was decreasing over time, and was higher for green electricity than for non-green electricity.1342

740. Retail tariffs in the Netherlands vary widely. By 2016, consumers could choose from 70 tariffs from the seven main retailers, including 50 green and 20 non-green tariffs.1343 This split reflected the fact that around 66 percent of the electricity supplied to residential customers in 2014 was green. Dutch customers can also


choose what type of renewable energy they wish to purchase (i.e. wind, solar, or hydro) and pay a different premium depending on which type they choose.\textsuperscript{1344}

Retailers also offer both variable and fixed price contracts. Variable tariffs are adjusted every 3 to 6 months, but they are not necessarily indexed to the wholesale prices. Fixed price tariffs last for between 1 year and 3 years. Customers on fixed tariffs who do not change or extend their contract are moved automatically to a variable tariff when their fixed tariff ends.\textsuperscript{1345} Contracts can also vary depending on the contracted volumes or payment method. However, this is not very common in the Netherlands.

New pricing structures have emerged over the past few years. For some tariffs, prices are allowed to change but can only be set below a certain price level, which acts as an implicit price cap. Others combine elements of the fixed and variable tariffs to reduce overall price volatility. Some contracts index retail prices to wholesale market conditions, and offer lower prices when temperatures fall or when wind speed increases. These new pricing structures are usually heavily advertised.\textsuperscript{1346}

Other offers include cashbacks, such as bonuses when entering into a contract with a new provider, or reduced tariffs for an initial period of the contract.\textsuperscript{1347} Some retailers offer time of use tariffs to customers with smart meters, with cheaper rates applying during off-peak periods.\textsuperscript{1348} However, the comparison website energieleveranciers.nl found, in a survey of 1,000 customers, that savings from off-peak rates are negligible.\textsuperscript{1349} Finally, retailers are beginning to offer bundled plans that include delivered electricity and a range of services or devices, such as smart thermostats, energy audits, or home insulation.\textsuperscript{1350}

\begin{enumerate}
\item See Mainenergie, “Electricity rates”, accessed 14 March 2018.
\item NLTimes, “No Advantage Day and Night Rate Electricity”, 28 October 2013, accessed 14 March 2018.
\end{enumerate}
C.IX.7.iii. Customer satisfaction

744. According to the European Commission’s Consumer Market Scoreboard 2016, Dutch consumers are very satisfied with their electricity market ranking it 13th among its peers, with 77 out of 100 points (1.7 points higher than the EU average). The score was a weighting of: customers’ level of fulfilled expectations, their satisfaction with the number of retailers, their ease of comparing goods and services, and their trust in the retailer.1351

C.X. NEW ZEALAND

C.X.1. Overview of retail competition

745. In New Zealand, the electricity market regulator is the Electricity Authority (“EA”). The EA, established pursuant to the Electricity Industry Act of 2010, has taken over most of the responsibilities of its predecessor, the Electricity Commission (“EC”).1352 These responsibilities include registering industry participants; monitoring and enforcing compliance with the Electricity Industry Participation Code, which promotes competition, reliability, and efficiency in the industry; undertaking market reviews and inquiries; and promoting consumer engagement.1353

746. The Ministry of Business, Innovation, and Employment (“MBIE”) is also involved in the electricity market. The MBIE is responsible for protecting consumers, pursuant to the Consumer Guarantees Act of 1993.1354 The MBIE also monitors the Energy Efficiency and Conservation Authority (“EECA”), which was established under the Energy Efficiency and Conservation Act of 2000 to improve energy efficiency in New Zealand and promote renewable energy.1355

747. The Electricity Industry Reform Act of 1998 required full ownership separation of generation and retail businesses from distribution businesses by 31 December 2003. It was completed in 1999, and thus retail competition began while simultaneously price regulation was removed. There were initially seven retailers, of

which five were owned by generators (“gentailers”). These are Genesis Energy, Mercury Energy (formerly known as Mighty River Power), Meridian Energy, Contact Energy, and Trustpower, of which the first three are still majority owned by the Government, while the last two gentailers are now publicly traded.

There are no default retailers or default tariffs in New Zealand. Retailers are responsible for metering and meter reading (often performed by third-party metering service providers), billing the customer, and assuming the credit risk of customers.

C.X.2. Consumer engagement

A key finding of the 2009 Ministerial Review into the Performance of the Electricity Market was that consumers could save “on average $100 a year … by switching to the cheapest available retailer.” To reduce sticky behavior and educate consumers on the benefits and simplicity of switching, the Government established the Consumer Switching Fund (“CSF”), a 3.5-year program of $5 million per year in funding, recovered through a levy on retailers. The CSF funded two projects: the “What’s My Number” awareness campaign, which is run by the EA and helps consumers understand the simplicity of switching, and “Consumer Powerswitch”, which is run by the independent not-for-profit organisation, Consumer New Zealand.


1362 Customers on the Low Fixed Charge Tariff, which is intended to assist low use customers, can elect a split-charging (dual billing) option, whereby the network and the retailer each bill the customer directly with their respective charges. See New Zealand Legislature, “Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004”, 30 August 2004, accessed 28 March 2018, section 7.


Zealand ("Consumer NZ"). It was initially funded by the EA, but in recent years various retailers have voluntarily taken over roughly half of the funding. The EA worked with various community groups such as budget advisory services and public libraries to promote Powerswitch in an effort to reach lower income and vulnerable consumers.

**C.X.2.i. What's My Number campaign**

The What's My Number ("WMN") campaign, launched in May 2011, received $3.5 million per year to create and administer advertising campaigns. These advertisements were aimed at helping consumers understand the benefits of comparing and switching retailers, and were administered through television, radio, print, online (including social media) and outdoor locations such as billboards and buses. The campaign also produced an online tool under the same name that helped residential consumers calculate savings by filling in a few details, with a link to the Powerswitch website to execute a switch if desired. While it is not clear how often the What’s My Number tool is updated, the Powerswitch website works “closely” with retailers to make sure that all of their publicly available offers are listed on the website.

The WMN campaign succeeded in reaching many consumers. In a March 2014 report on the performance of the CSF, the now-disestablished Retail Advisory

---


Group identified five types of consumers: bargain hunters, generation Y, battler mums, affluent sceptics and old status quo. Even in the least engaged “old status quo” consumer segment, who were identified as being more likely to have lower incomes, be at least 60 years old, and be a widow or widower, 77 percent of consumers had seen WMN advertisements.

From May 2011 through September 2017, the WMN campaign had 1.8 million unique visitors to its website and had facilitated at least 300,000 switches every year. In New Zealand, as of February 2018, there are 1.8 million residential customers and 250,000 small and medium sized businesses. Whereas the 2009 Ministerial review found that awareness of the switching process was low, as of August 2017, after the implementation of the CSF, 68 percent of consumers now believe that it is “worthwhile” to review their retailer, and 24 percent of consumers had switched in the past month because of the campaign (down from the peak of 48 percent in September 2012).

The EA has concluded that the WMN campaign had “an immediate and ongoing impact” while noting that yet more could be done to improve consumer awareness and motivation to engage actively in the market. Upon the conclusion of the CSF, the EA refocused the WMN campaign to encourage consumers to “make a habit of checking they are on the best power deal for their circumstances” through April 2017.

---

1374 The Retail Advisory Group was established via the Electricity Industry Act 2010 to provide independent advice regarding the retail electricity market to the EA. More info at: Electricity Authority, “Terms of reference for the Retail Advisory Group”, 18 June 2013, accessed 26 March 2018, p.4.


C.X.2.ii. Small and medium enterprises

754. Also during the CSF, the EA contracted with Switchme.co.nz to develop an online tool for small to medium sized businesses.\textsuperscript{1383} The tool allows those businesses, which are not on a time-of-use plan, to request quotes from retailers, compare offers, and receive help with switching, all at no cost.\textsuperscript{1384,1385}

C.X.2.iii. Other educational tools

755. The EA also maintains a “Jargon Buster” section on its website that helps define industry terminology, such as “fixed charge” and “variable charge” for consumers.\textsuperscript{1386} The EA further educates consumers by providing information on its website about the electricity supply chain, consumers’ rights and retailers’ obligations, and disconnection protocols.\textsuperscript{1387}

C.X.3. Smart meters

756. As of August 2017, 76 percent of the mass market customers had smart meters. The roll out of these meters is administered by retailers, and does not impose costs on the government nor on consumers.\textsuperscript{1388} Retailers often contract with metering equipment providers who install the meters and transmit the data to authorised parties. The data is owned by the customer.\textsuperscript{1389}

757. As part of the EA’s “retail data project,” the EA allows and encourages customers to access their own usage data. Customers can request data on their power usage from the past 24 months; if they have a smart meter installed, they can also see their load profile. The consumer can request this data by phoning or submitting a written request to their retailer, or authorising a third-party agent to submit an Electricity Information Exchange Protocol (EIEP) form to the retailer via the EIEP hub.\textsuperscript{1390,1391}

\textsuperscript{1383} Retail Advisory Group, “\textit{Review of options for increasing consumers' propensity to compare and switch retailers}”, 30 August 2012, accessed 26 March 2018, p. 4.

\textsuperscript{1384} Switchme, “\textit{Compare business power companies}”, accessed 26 March 2018.

\textsuperscript{1385} Retail Advisory Group, “\textit{Review of options for increasing consumers' propensity to compare and switch retailers}”, 30 August 2012, accessed 26 March 2018, p. 5.

\textsuperscript{1386} Electricity Authority, “\textit{jargon buster}”, accessed 23 March 2018.

\textsuperscript{1387} Electricity Authority, “\textit{What are my rights as an electricity consumer}?” , accessed 26 March 2018.

\textsuperscript{1388} Electricity Authority, “\textit{Briefing to the incoming Minister}”, October 2017, accessed 28 March 2018, p. 21.

\textsuperscript{1389} Electricity Authority, “\textit{Part 10 review: nomination of metering equipment provider and access to metering data}”, 13 April 2012, accessed 30 March 2018, p. 2.

\textsuperscript{1390} Electricity Authority, “\textit{My usage}”, accessed 29 March 2019.
Access to this data also allows retailers to develop innovative pricing designs and products in the market, by obtaining permission from consumers to act as their agent.\textsuperscript{1392, 1393} Of the 21 retail brands that entered the market in the five years through 2016, most of them built innovative business models made possible by utilising smart meter data to “reduce costs, increase efficiency, improve customer service, and offer new services and tariffs.”\textsuperscript{1394} The EA is currently conducting a consultation into how smart meter data can be shared among multiple partners to the household, besides the retailer.\textsuperscript{1395} The inquiry stems out of a concern that the current system, which focuses on a one-to-one relationship between the customer and the retailer for all of their electricity needs, unnecessarily limits choice and constrains new ways of doing business. Key to this is access to customer data that electricity service providers, other than a customer’s retailer, face barriers in gathering.\textsuperscript{1396} As of writing (March 31, 2018), submissions had been collected, but no policy or guidance papers have come out yet.

C.X.4. Consumer safeguards

C.X.4.i. Model contracts

In May 2010, the EC published good practice principles relating to domestic contracts and suggested minimum terms and conditions. These include providing information on how the consumer can initiate the process to switch to another retailer, the notice period required before the switch can take place, and the timing of notices of disconnection that the consumer will receive in the event of non-payment. Additionally, in the event that the retailer transfers the customer to another retailer, the contract must also guarantee that the retailer will provide...
information on how the customer can contact the gaining retailer and when the transfer will take place.1397

760. While these guidelines and minimum terms are voluntary, the EA has conducted three alignment reviews for all retailers, in 2010, 2011, and 2012. For the worst-performing retailers in the 2012 review, the EA conducted follow-up alignment reviews in 2014 1398 and 2016.1399 In all of these reviews, the EA determined the extent to which publicly available retail contracts met the minimum suggested terms and conditions (not including the contracting principles), and published a list of retailers that achieved a “high level of alignment with the minimum terms”, as well as the set of retailers that were “poorly aligned”.1400 Most retailers that were deemed “poorly aligned” have modified their contracts to become better aligned with the EA’s suggested terms.1401

C.X.4.ii. Billing requirements

761. Despite ongoing discussions, the EA does not have any similar guidelines for customer billing. The Retail Advisory Group published a report in March 2014, recommending that the EA not introduce regulations on relating to the components displayed on electricity bills.1402 In 2015, an Electricity Transparency Bill was introduced in parliament but failed upon the first reading.1403

762. However, there are minimal requirements that the retailer must meet, namely to itemise the following on their bills:

- The quantity and cost of the electricity supplied
- Relevant fees
- Fees for products and services other than the supply of electricity


The retailer is not required to itemise distribution charges.\textsuperscript{1404}

\textbf{C.X.4.iii. Marketing requirements and grace periods}

In New Zealand, there are rules surrounding marketing only in the context of uninvited direct sales, such as door-to-door sales or telemarketing\textsuperscript{1405}. If the retailer fails to comply with its information disclosure requirement, the customer has the right to cancel the agreement at any time. The sales agreement must be written in plain language, and the front page must include the supplier’s contact details, a clear description of the service, as well as the consumer’s rights to cancel the agreement. The agreement must also state the total price. Even if the retailer fulfils its disclosure requirement, customers have five working days to cancel a contract if they signed it as a result of an uninvited direct sale.\textsuperscript{1406}

\textbf{C.X.4.iv. Utilities Disputes Limited}

764. In 2001, the Electricity Complaints Commission Scheme (“ECCS”) was launched by the government as an independent service to help resolve consumers’ issues with their electricity retailers at no charge. Since then, ECCS has been renamed to Utilities Disputes Limited, and now provides dispute resolution services for other sectors such as gas, broadband, and water.\textsuperscript{1407} Upon receiving a complaint, Utilities Disputes Limited holds a “conciliation conference” between the customer and the retailer, collects and examines evidence such as bills and emails from both parties, and makes a recommendation. If the customer rejects the recommendation, he or she may be able to move the complaint to the Disputes Tribunal or District Court.\textsuperscript{1408}

\textbf{C.X.4.v. Trader default scheme}

765. According to the trader default scheme, if a retailer defaults there are three steps that occur in the month following the default. First, immediately after default, the retailer has seven days to assign its customers to a competing retailer. The assigned retailer must accept these customers on its own terms and conditions. After seven days, if there are any customers still with the defaulting trader, the EA

\textsuperscript{1404} Electricity Authority, \textquotedblright{2014 domestic electricity retail contract alignment review\textquotedblright, 3 June 2014, accessed 23 March 2018, p. 29.

\textsuperscript{1405} To be considered an “uninvited direct sale,” the price of the offer must exceed NZ$100, or be unknown at the time of sale. See Electricity Retailers’ Association New Zealand, \textquotedblright{Choosing the right electricity retailer\textquotedblright, 2016, accessed 4 April 2018.

\textsuperscript{1406} Commerce Commission New Zealand, \textquotedblright{Fair Trading Act: Door-to-door and telemarketing sales\textquotedblright, December 2014, accessed 4 April 2018.

\textsuperscript{1407} Utilities Disputes Limited, \textquotedblright{History of Utilities Disputes\textquotedblright, accessed 26 March 2018.

contacts them to choose a new retailer in the next seven days, through means such as letters, SMS messages, television, and newspapers. After this period (14 days after the initiation of the trader default process), the EA will host a tender of the remaining customers, in which retailers can bid for some or all of the remaining customers, offering their standard tariff as of the initial day of the default scheme, or a lower price. The EA will then assign customers randomly to the retailer bidding the lowest price, then the next lowest price, and so forth. If there are any customers remaining after the tender, the EA will assign customers to retailers in the same network area based on market share. After receiving the newly assigned customers, gaining retailers must provide information pertaining to the terms and conditions of their contracts, and notify the customers of their option to switch retailers at any time. There will not be any disruptions of supply for customers of the defaulting retailer during this entire process.\textsuperscript{1409}

**C.X.5. Targeted protection of vulnerable customers**

**C.X.5.i. Medically Dependent Consumers and vulnerable consumers**

766. In 2005, the EC established guidelines intended to protect low income and vulnerable consumers from electricity disconnections. Low income consumers were defined as “[t]hose consumers whose low income, whether temporary or permanent, makes it genuinely difficult for them to pay their electricity bill”,\textsuperscript{1410} while vulnerable consumers were defined as those who, “through health or disability issues, may face additional challenges compared to the average household if their power is cut off”.\textsuperscript{1411}

767. For both types of consumers, the EC recommended that retailers take measures such as:

- offering alternative payment methods when the customer is in arrears
- informing customers of assistance provided by government agencies
- making reasonable efforts to communicate with the customer prior to disconnecting them.

768. For vulnerable consumers, the EC additionally recommended that such consumers identify themselves to their retailer, and nominate a preferred contact

\textsuperscript{1409} Electricity Authority, “\textit{Guideline for managing trader default situations\textsuperscript{1}},” 9 June 2015, accessed 23 March 2018, pp. 5-14.

\textsuperscript{1410} Electricity Commission, “\textit{Guidelines on arrangements to assist low income domestic consumers\textsuperscript{2}}”, November 2005, accessed 15 March 2018, p. 3.

whom the retailer should contact to help prevent having to disconnect the consumer.1412

769. However, in 2007, the protection of vulnerable consumers proved to be insufficient when a woman who had been dependent on an electric oxygen machine was fatally disconnected for non-payment.1413 Following this incident, the EC created mandatory consumer protections guidelines for consumers.1414 Now, the EA, which has succeeded the EC, formally defines guidelines to protect Medically Dependent Consumers (“MDC”), who are defined as those customers who are “dependent on mains electricity for critical medical support, such that loss of electricity may result in loss of life or serious harm.”1415

770. The guidelines have evolved in several notable ways. First, rather than having the consumer self-identify as an eligible individual, it is now the responsibility of the consumers’ health practitioner to initiate the process, by filling out a Notice that the consumer must then provide to their retailer. The Notice contains instructions to the Patient in multiple languages. The consumer must apply for MDC status every time he or she switches retailers. Retailers, on their part, must inform all new domestic consumers about MDC status, and must include information on their website as well as on late payment notices.1416

771. Additionally, while prepayment meters have always been included as an appropriate alternative payment plan, the EA now suggests that retailers strongly discourage this option due to the risk of self-disconnection. Instead, retailers should recommend bill smoothing and/or redirected payments, or as a final option, the use of bonds. If the consumer chooses to use bill smoothing, the EA recommends that the MDC remain entitled to any prompt payment discounts from the retailer.1417


1415 “For the avoidance of doubt, medical dependence on electricity could be for use of medical or other electrical equipment needed to support the treatment regime.” See EA, “Guideline on arrangements to assist medically dependent consumers”, p. 3.

1416 Electricity Authority, “Guideline on arrangements to assist medically dependent consumers”, pp. 6-7.

1417 Ibid, p. 11.
These options should be communicated to all consumers at least once a year.\textsuperscript{1418} After discussing these options with the MDC, a retailer may (with the MDC’s permission) refer the consumer to Work and Income, who will ensure that the MDC receives all financial or other assistance that is available to him/her.\textsuperscript{1419}

772. Furthermore, retailers are now required to report to the EA every year on the extent to which they have complied with the MDC Guidelines.\textsuperscript{1420} On an “as needs” basis, the EA conducts a compliance review\textsuperscript{1421}, and requests that non-compliant retailers address their issues and provide proof of their remedies.\textsuperscript{1422} In the 2012 Compliance Review, the EA found that most retailers were fully or mostly compliant; depending on the level of non-compliance in future reviews, the EA plans to introduce regulation if necessary.\textsuperscript{1423}

773. Aside from Medically Dependent Consumers, the EA also publishes guidelines to protect a newly defined group of vulnerable consumers, who are now defined as those who:

- “for reasons of age, health, or disability, the disconnection of electricity to that consumer presents a clear threat to the health or wellbeing of that domestic consumer; and/or
- it is genuinely difficult for the domestic consumer to pay his or her electricity bills because of severe financial insecurity, whether temporary or permanent”,\textsuperscript{1424} including a low income.

774. These consumers have the responsibility of identifying themselves as vulnerable, and may also nominate an alternate contact who can assist them when

\textsuperscript{1418} Electricity Authority, “Guideline on arrangements to assist medically dependent consumers”, pp. 9-10.

\textsuperscript{1419} Ibid, p. 9.

\textsuperscript{1420} Electricity Authority, “Guideline on arrangements to assist medically dependent consumers”, p. 12.

\textsuperscript{1421} Electricity Authority, “Medically dependent and vulnerable customers”.

\textsuperscript{1422} Electricity Authority, “Compliance with Electricity Authority guidelines on arrangements to assist medically dependent and vulnerable consumers”, 2002, pp. 2-4.

\textsuperscript{1423} Electricity Authority, “Guideline on arrangements to assist medically dependent consumers”, p. 12; Electricity Authority, 2012, “Compliance with Electricity Authority guidelines on arrangements to assist medically dependent and vulnerable consumers”, p. 4.

\textsuperscript{1424} Electricity Authority, “Guideline on arrangements to assist vulnerable consumers”, 1 November 2010, p. B.
they are facing challenges with their payment.1425 Meanwhile, retailers have the responsibility of communicating the identification process through their website and yearly notices, as well as informing all new consumers and those in arrears. The retailer must make “reasonable endeavours” to contact the alternate contacts, where available, and must also offer alternative payment options to the consumer, which include smoothed payments, redirected income, and prepayment.1426

When a consumer has failed to pay their bill, the retailer must “reasonably” ensure that the consumer is not an MDC, and then send a notice of disconnection at least seven days prior to disconnection, allowing an additional three days for the delivery of the notice. The notice must include information on alternative payment options, the retailer’s dispute resolution process, credit assistance, and protection for vulnerable consumers. The retailer must then send a final notice between seven days and 24 hours prior to disconnection. On the disconnection visit, the representative who goes to disconnect the property must also make an effort to advise the consumer to contact the retailer, if the retailer has not been able to communicate with the domestic consumer prior to the visit.1427

Disconnection of vulnerable consumers must not take place when reconnection on the same day would be difficult. This includes Fridays, the day before a public holiday, during extreme weather conditions, and during a civil emergency.1428

Retailers are also subject to a compliance review regarding these protection guidelines for vulnerable consumers.1429 Starting on 1 September 2014, 20 retailers voluntarily committed to assessing and reporting their compliance at six-monthly intervals to the Minister of Energy and Resources.1430

1425 Electricity Authority, “Guideline on arrangements to assist vulnerable consumers”, 1 November 2010, pp. 4, 9.

1426 Electricity Authority, “Guideline on arrangements to assist vulnerable consumers”, 1 November 2010, pp. C, 6, 10.

1427 Electricity Authority, “Guideline on arrangements to assist vulnerable consumers”, 1 November 2010, pp. 13-14.

1428 Electricity Authority, “Guideline on arrangements to assist vulnerable consumers”, 1 November 2010, p. 11.

1429 Electricity Authority, “Guideline on arrangements to assist vulnerable consumers”, 1 November 2010, p. 15.

C.X.5.ii. Fuel poverty and energy efficiency

While these guidelines are crucial protection measures, they do not yet address the issue of fuel poverty. Unlike other jurisdictions, such as the UK, New Zealand does not officially define or measure fuel poverty, which is usually defined as a situation in which “a household needs to spend more than 10 percent of its income on all household fuels to achieve a satisfactorily warm indoor environment.”1431 According to several recent studies specific to New Zealand, fuel poverty results from the combination of low incomes with fuel-inefficient homes and high electricity prices, and tends to induce self-rationing of energy consumption, such as limiting the use of hot water; financial redistribution, such as cutting back on grocery expenses; and disconnections from energy or other services.1432 Consumers most affected by energy poverty are those who spend a lot of time at home, such as the elderly, families with young children, and those with disabilities or chronic illnesses.1433 Some researchers have suggested that prepaid metering be used as a proxy by policymakers to target fuel-poor households.1434

In response to growing concerns about fuel poverty, the New Zealand government has started to investigate possible ways to define and measure this issue. In a September 2017 study, Stats NZ, the government’s independent data agency1435, stated unequivocally that “[t]here is considerable evidence to suggest that energy hardship can have detrimental outcomes” and affirmed the importance of “identify[ing] those households and people who are at most risk … and enabl[ing] more effective targeting of resources.”1436


One way in which New Zealand is already addressing fuel inefficiency is through the Energy Efficiency and Conservation Authority (“EECA”), established in 2000. The EECA is partly funded through a levy on market participants (generators, wholesalers, distributors, and retailers), as well as through the Petroleum or Engine Fuels Monitoring Levy and the gas levy. Current programs include:

- **Warm Up New Zealand**: this program provides funding for residential insulation retrofitting for low-income households or those with special medical needs.
- **Energy Spot**: the EECA administers TV advertisements covering power-saving techniques and technologies, and has inspired 37 percent of viewers to take action.

### C.X.5.iii. Outstanding arrears

For residential customers who have an “immediate and essential need” and have an outstanding payment on their electricity bill, the Work and Income department of the Ministry of Social Development may provide up to NZ$200 towards the outstanding bill, or to cover reconnection fees. To be eligible, consumers need to be at least 16 years old, reside in New Zealand, be a citizen or a permanent resident, and be under the income and asset limits.

### C.X.5.iv. Social security grant

In December 2017, the Government announced a “Winter Energy Payment” program, designed to provide financial assistance to residential consumers aged 65 or older receiving the New Zealand Superannuation pension, as well as those on other social benefit programs such as Jobseeker Support, Sole Parent support, Young Parent support, and the Emergency Benefit. Starting in the winter of 2018, roughly NZ$20–NZ$30 will be paid automatically to eligible recipients every week during the winter months to keep their home warm. The program is expected to reach a million residents, nearly a fifth of New Zealand's current population of 4.9 million.

---


1439 EECA, “Warm Up New Zealand: Funding for insulation”.

1440 EECA, “Energy Spot”.


1442 Hon Dr Megan Woods and Hon Carmel Sepuloni, “Winter energy payments to keep a million Kiwis warm and healthy”, 14 December 2017, accessed 4 April 2018.
C.X.5.v. Low-use consumers

783. In 2004, New Zealand introduced a Low Fixed Charge Tariff regulation, requiring retailers to offer a tariff option of which the fixed charges must not exceed NZ$0.30/day excluding GST for the average consumer, defined as those who use 8,000 kWh of electricity per year. The total tariff must be designed such that these average consumers will “pay no more per year on a low fixed charge tariff option than on any alternative tariff option.” 1445 This regulation is intended to assist low-use consumers and promote conservation of energy. To fulfil this obligation, a retailer can elect to offer either a split-charging (dual billing) option, whereby the network and the retailer each bill the customer directly with their respective charges, or a bundled option. 1446 This regulation was expanded in 2008 to target more consumers by introducing regional variation, raising the eligibility threshold in the Lower South region to 9,000 kWh per year. 1447

784. The low fixed charge tariff is highly popular. In 2015, 48 percent of residential connections were on a low fixed charge contract. This figure increased in 2016, with 52 percent of the residential market, or 920,000 connections, on low fixed charge contracts as at 31 December 2016. 1448

785. The market effects of this regulation have been a “long-standing topic of discussion” in the industry. 1449 In 2015, following concerns expressed by industry participants and consumer representatives, the EA requested the Retail Advisory Group to examine the effects of the Low Fixed Charge Tariff regulation on competition and efficiency. While the study found no empirical evidence of any adverse effects on competition, the Retail Advisory Group noted that small retailers complained about compliance costs, and that the regulation created inefficiencies by

---


distorting consumer behavior via artificially reducing fixed charges and inducing artificially higher variable charges. \(^{1450}\)

In March 2018, the Minister of Energy and Resources announced the terms of reference for an upcoming retail power price review that will be carried out by an Expert Advisory Group that will be assembled for this review. \(^{1451}\) The terms of reference include the consideration of the impact of low fixed charge regulations, and the final report will be delivered to the Energy and Resources Minister in May 2019. \(^{1452}\)

The Electricity Network Association, the industry membership body representing local electricity distribution businesses, \(^{1453}\) has voiced strong support for the removal of low fixed charges. In their view, these charges represent a cross-subsidy from high energy users to low energy users. The ENA argues that as higher-income consumers purchase energy efficient technologies and insulation, as well as solar panels, they will use less electricity from the grid, while low-income households will struggle to reduce their usage. In addition to inducing unhealthy behaviour due to fuel poverty, the low fixed charges are effectively a cross-subsidy from low-income households to high-income households. \(^{1454}\)

**C.X.6. Promotion of competition**

**C.X.6.i. Cap on switching times**

When retail competition was introduced in 1999, the switching process was tedious and took a long time to be completed – in January 2003, after improvements were made, a switch still took 200 days on average. \(^{1455,1456}\) In 2010, New Zealand introduced legislation requiring that customer switching take no more than ten business days, and that at least half of those transfers be completed within five

---


\(^{1454}\) Electricity Network Association, “Why the Low Fixed Charge regulations should be removed”, 29 March 2018, accessed 5 April 2018.

\(^{1455}\) Electricity Authority, “Celebrating 20 years of New Zealand’s wholesale electricity market”, 5 October 2016, accessed 28 March 2018, p. 3.

Switching is handled by a central registry of every customer point of connection, and now takes only three to four days, on average. The process does not involve a third party to verify the switch: the registry manager assists the gaining and losing retailers in executing the transfer.

C.X.6.ii. Saves and win-backs

In the electricity market, unlike other industry sectors, a losing retailer receives advance notice that a customer intends to switch to another retailer prior to the completion of the transfer. In this case, the losing retailer could attempt to “save” the customer and persuade them to cancel their switch request. Win-backs are similar to saves, except the losing retailer wins back the customer from the gaining retailer after the transfer is complete. While saves and win-backs can be seen as a healthy feature of market competition, they reduce retailer profitability because gaining retailers end up being unable to secure the new customer despite incurring campaign costs. They can also discourage small and new retailers who may feel that they cannot compete with larger, more established retailers.

In December 2013, the EA launched an investigation into the competitive effects of saves and win-backs. Following a consultation with retailers, in January 2015 the EA amended the Electricity Industry Participation Code of 2010 to allow retailers to opt-in to be protected from saves, but not win-backs, by losing retailers. Losing retailers were prohibited from initiating contact with the customer to make

---


offers while the transfer was being processed, if the gaining retailer has elected to receive “switch save protection”. Losing retailers are still allowed to offer enticements if the customer initiates the contact. This amendment was enacted to promote confidence in retailers that they are operating on a “level playing field”. Retailers who opt-in are prohibited from initiating saves itself, and must maintain their status (opted-in or cancelled) for a minimum of 12 months. The EA publishes the names of the retailers who have opted in.

791. In August 2017, the EA conducted a post-implementation review of the 2015 amendments to the Code. The review found that the number of saves fell but the number of win-backs increased, and there was neither a positive nor negative effect on retail competition.

C.X.6.iii. Transparency surrounding price changes

792. The EA publishes guidelines pertaining to communication between retailers and consumers, and between distributors and retailers, about price changes. To reduce confusion, as well as improve confidence and engagement in the market, the provisions of the guideline include matters such as (i) showing tariff levels before and after the price change, (ii) identifying different components such as energy charges and network charges, and (iii) publishing a representative sample of bills online. This information should be made available each time a retailer or distributor communicates with its customers directly or makes a public statement concerning a price change.

793. The EA monitors compliance levels and publicly identifies those participants who comply in “effective, efficient, and innovative ways,” as well as those participants who are deemed to be non-compliant. If needed, the EA will take further action, such as mandating the guidelines, or sharing their results with the Commerce Commission to enforce the Fair Trading Act of 1986.


C.X.6.iv. Absence of default tariff

Prior to May 2015, several retailers included an auto-renewal clause in their retail contracts. In response to complaints that the Commerce Commission received over the years from consumers, the Fair Trading Act of 1986 was amended in March 2015 to allow the Commission to prohibit “unfair” contract terms and pursue criminal prosecution in the event of non-compliance. 1471

In May 2015, during its review of unfair terms in electricity contracts, one “unfair” term that the Commission reviewed was contract auto-renewal. Taking into consideration the value to consumers of the convenience of having their contract automatically renewed, the Commission decided to prohibit auto-renewals only if an early termination fee would be applicable to the renewal term. Following this decision, retailers either dropped their auto-renewal clause, or amended it to ensure that early termination fees would not apply. 1472

Other retailers do not specify any events that will follow the termination of the contract. Thus, unlike other jurisdictions, New Zealand does not have a default tariff. 1473

C.X.6.v. Requirements to open a retail business

In New Zealand, unlike other jurisdictions, there are no prescriptive requirements that a prospective entrant must meet. Most notably, there are no licensing requirements in order to enter the market. 1474

The only condition that the EA states is that the entrant “comply with existing generic consumer protection legislation and any relevant standards and codes of practice under other legislation.” This refers specifically to the Electricity Industry Act 2010, the Electricity Industry Participation Code 2010, the Fair Trading Act 1986, the Consumers Guarantee Act 1993, and the Privacy Act 1993. 1475

Through the monitoring power of the EA, the alignment reviews with guidelines, and the wide availability of market information on the EA’s Electricity

---


Market Information portal, it is believed that market participants are compelled to “operate in the collective interest of the market as well as themselves.”

C.X.6.vi. Reducing gentailer concentration through asset swaps

The 2009 review of the electricity market launched by the Minister for Energy and Resources found that the geographic concentration of the state-owned gentailers was suppressing retail competition. More specifically, Genesis and Mighty River Power did not have generation in the South Island, whereas Meridian had little generation in the North Island. Because of this geographic imbalance, these gentailers focused their retail efforts regionally.

To address this issue, the Government ordered physical and virtual asset swaps. The Government ordered the physical swap of two hydro plants from Meridian to Genesis, and a gas turbine owned by the Crown to Meridian, as well as virtual asset swaps via long-term hedge contracts between Genesis and Meridian, and between Mighty River Power and Meridian. These actions reduced regional concentration and balanced the retail bases in the two islands, thus encouraging competition among the retail arms of these gentailers.

C.X.6.vii. Saveawatt and the Big Winter Switch

Saveawatt is an energy brokerage and consultancy in New Zealand. Since 2009, it has been serving around 1,500 commercial clients by hosting monthly bulk tender processes with 25 retailers and negotiating lower energy rates and higher prompt payment discounts. 90 percent of Saveawatt’s commercial customers have saved at least 10 percent on their electricity and gas expenditure by switching to their new fixed-price contract, while some customers have saved over 40 percent. Saveawatt only charges a portion of the customer’s savings, thus receiving no payment if they do not successfully create savings for their customers.

In 2016, Saveawatt expanded its services to residential customers in the electricity market by launching a mobile app-based “personal power assistant” called

---


1480 Saveawatt, “Here’s our story”, accessed 1 April 2018.

1481 Saveawatt, “We help businesses reduce energy costs by up to 25 percent”, accessed 30 March 2018.
Frank. Customers only need to download the app, upload a photo of their latest bill, and approve the new plans that the app returns. Both the app and the service are free for customers – Saveawatt charges a fee to retailers in return for their marketing cost savings. \(^{1482}\) \(^{1483}\) For medically dependent households, Saveawatt will communicate the necessary details to the gaining retailer. \(^{1484}\)

804. In May 2017, Saveawatt partnered with news outlet Stuff.co.nz to deliver the Big Winter Switch campaign for residential customers. \(^{1485}\) The campaign involved a bulk tender process and drew roughly 10,000 participants. After the campaign ended, Consumer NZ found that the negotiated rates were generally cheaper than the national average, but did not provide cheaper deals to all of the participants. \(^{1486}\)

**C.X.7. Outcome of retail competition**

**C.X.7.i. Retailer market shares and HHI**

805. As of February 2018, there were 37 retailers serving residential consumers, and 35 retailers serving small and medium sized businesses. The five largest retailers in the residential consumer segment, with market shares by connection points ranging from 9 percent to 20 percent, collectively dominate 78 percent of the market, while the remaining 32 retailers share the remaining 22 percent. The same five retailers, with market shares ranging from 8 percent to 22 percent, comprise 83 percent of the market for small and medium enterprises, while the rest of the retailers share the remaining 17 percent of the market. \(^{1487}\)

806. The HHI in the retail electricity market has shown a steady decline, but is still relatively concentrated: across all consumer segments, the HHI was 6,394 on 1 January 2004 and is now 2,534 as of February 2018. More specifically, the HHI in the residential market segment is currently 2,584, while that in the small and medium enterprise market segment is 2,687. \(^{1488}\)

---

1482 Saveawatt, “Meet Frank – your personal power assistant”, accessed 1 April 2018.


1485 Big Winter Switch, “New Zealand's Big Winter Switch”, accessed 1 April 2018.

1486 Consumer NZ, “Big Winter Switch’ offers are here”, 30 June 2017, accessed 1 April 2018.


C.X.7.ii. Consumer engagement

Almost all homes have at least four retailers from which they can choose. In 2009, the switching rate across all customer classes was 12.2 percent. In the year ending 31 December 2017, the residential switching rate was 22.1 percent, while the switching rate among small and medium sized businesses was 13.3 percent. The distinct switching rates, which only includes one switch per connection point, are lower, at 18.5 percent and 13.0 percent, respectively, indicating that some consumers switch retailers more than once a year.

Additionally, every year since 2011, the EA conducts national surveys to measure engagement and satisfaction levels among the residential and small commercial segments of the retail electricity market. The surveys are conducted online. The 2016 survey provides insight into consumer engagement with the market via other means than switching retailers: 12 percent of the 1,200 participants had switched to a different plan with their existing retailer, 30 percent had investigated different offers and decided not to switch, and 36 percent had reviewed their current plan and decided not to switch.

By far, the most popular ways to access information were through the existing retailer (63 percent) and through price comparison websites (61 percent). General advertising followed at 14 percent.

C.X.7.iii. Consumer satisfaction

The same 2016 survey found that 69 percent of the participants reported that they were “satisfied” with their electricity retailer. This result is average compared to the same consumers’ satisfaction results in other industries, ranging from insurance (60 percent) to banking (82 percent).

Customers also expressed confidence in their options: 67 percent of consumers in the same survey felt they could “choose a deal that [was] right” for their

---


household, and 57 percent felt that they “[had] all the information [they] need[ed] to compare the different offers.”1495

**C.X.7.iv. Innovation and product diversity**

812. The retail electricity market in New Zealand has a high degree of innovation, both in their business models as well as their product offerings. These include pricing options such as an “all you can eat” pilot, spot pricing, “free hour of power”, and time-of-use pricing. They also include innovative products and services, such as peer-to-peer retailing, real-time price alerts and usage monitoring, and weekly billing.1496

**C.X.7.v. Prepayment meter uptake**

813. At the end of 2016, there were 40,000 residential consumers on prepayment meters, representing 2.2 percent of the market. This figure was eight percent lower than that of the previous year.1497

**C.X.8. Price Monitoring**

814. In New Zealand, the Ministry of Business, Innovation & Employment (MBIE) publishes the following reports in regards to retail electricity prices in New Zealand:

- “Sales–based Electricity Costs” – this quarterly report is designed for the MBIE to monitor national residential electricity costs. MBIE calculates average cost per kilowatt-hour paid by residential consumers by collecting total value of sales data, the total volume of electricity sold data, and the number of connections data from electricity retailers. Electricity sales information is collected from retailers through the MBIE Quarterly Retail Sales Survey, which must be submitted by retailers.1498 The average residential electricity cost paid by customers per kWh is derived by dividing the dollar value of residential electricity sales by the number of kWh electricity sold to residential customers. Note that the sales data reflects any prompt discounts actually claimed by customers, as well as multi-fuel and online discounts, incentive and retention payments received, and rates paid by customers on fixed term

---


1498 For the template of the survey, please see Ministry of Business, Innovation & Employment, “*Quarterly Retail Sales Survey*”, accessed 18 May 2018.
plans. The report includes: nominal residential cost per kWh, real residential cost per kWh and average annual household consumption and expenditure.\textsuperscript{1499}

- “Quarterly Survey of Domestic Electricity Prices” (QSDEP) – The QSDEP monitors publicly advertised tariffs on a particular date. According to MBIE, the purpose of this is to provide an indicator of how recent price increases are likely to impact consumers. Note that this report does not reflect what customers have actually paid for electricity in any particular period, as the QSDEP only models one type of customer in each city or town. The report is constructed using New Zealand’s PCW and only limited selections of publicly advertised retail tariffs are surveyed for around 40 towns and cities across New Zealand. Prices are surveyed as a snapshot at the mid-point of each quarter (15 February, 15 May, 15 August, and 15 November each year). The average prices are quoted for a representative consumer using around 22 kWh per day (8,000 kWh of electricity per year). An average regional price across all retailers is published, weighted by the retailers’ market share.\textsuperscript{1500}


\textsuperscript{1500} Ministry of Business, Innovation & Employment, “Quarterly Survey of Domestic Electricity Prices”, 15 February, 2018, accessed 14 May 2018