Advanced Wires Rates

Phase 02 – Local Voice

(Qualitative Conversations)

Prepared for:
EPCOR Distribution & Transmission Inc.

Prepared by:
Stone – Olafson

October, 2025

Purpose and Approach

Purpose

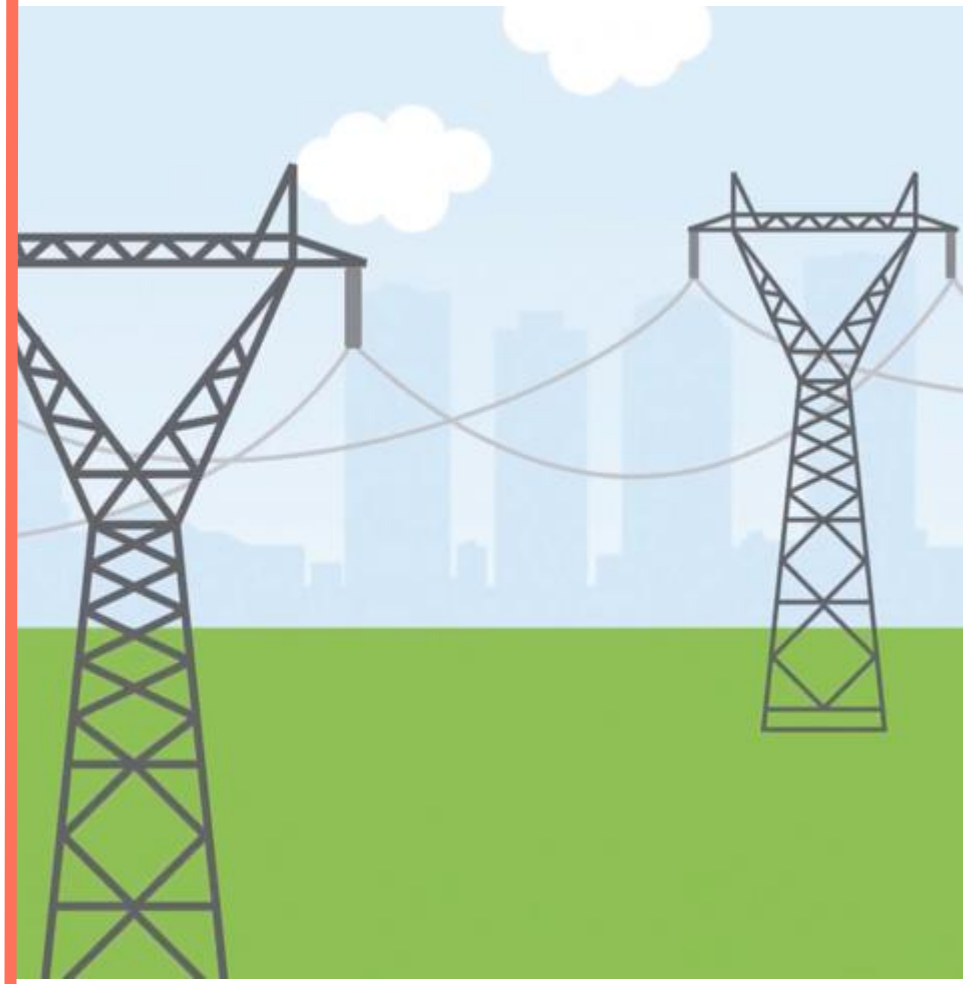
On July 11, 2022, the Alberta Utilities Commission (AUC) issued Decision 27018-D01-2022 in EPCOR Distribution & Transmission Inc.'s Phase 2 Distribution Tariff Application. In that decision, the Commission directed EDTI to commence a feasibility study to determine the scope and cost to build and implement a metering system that is able to measure demand for residential and small commercial customers, and to identify alternatives to provide demand-based billing.

As part of this initiative, EPCOR Distribution & Transmission Inc. would like to obtain feedback on customers' overall opinions on advance rates, both in general and exploring possible specific structures such as time of use (TOU), and their potential impact on electricity usage.

Specific research objectives included:

- Exploring current knowledge and perceptions of advanced rates for wire charges and different application options
- Identifying key values and priorities around electricity consumption for residential customers
- Assessing the motivations and barriers for customers to use less energy or use it at optimal times (propensity for action)
- Investigating understanding and urgency to act in response to the introduction of advanced wire rates (market readiness)

Learnings from this qualitative round of research will inform the next stage of the project, a quantitative engagement with the public and small businesses.



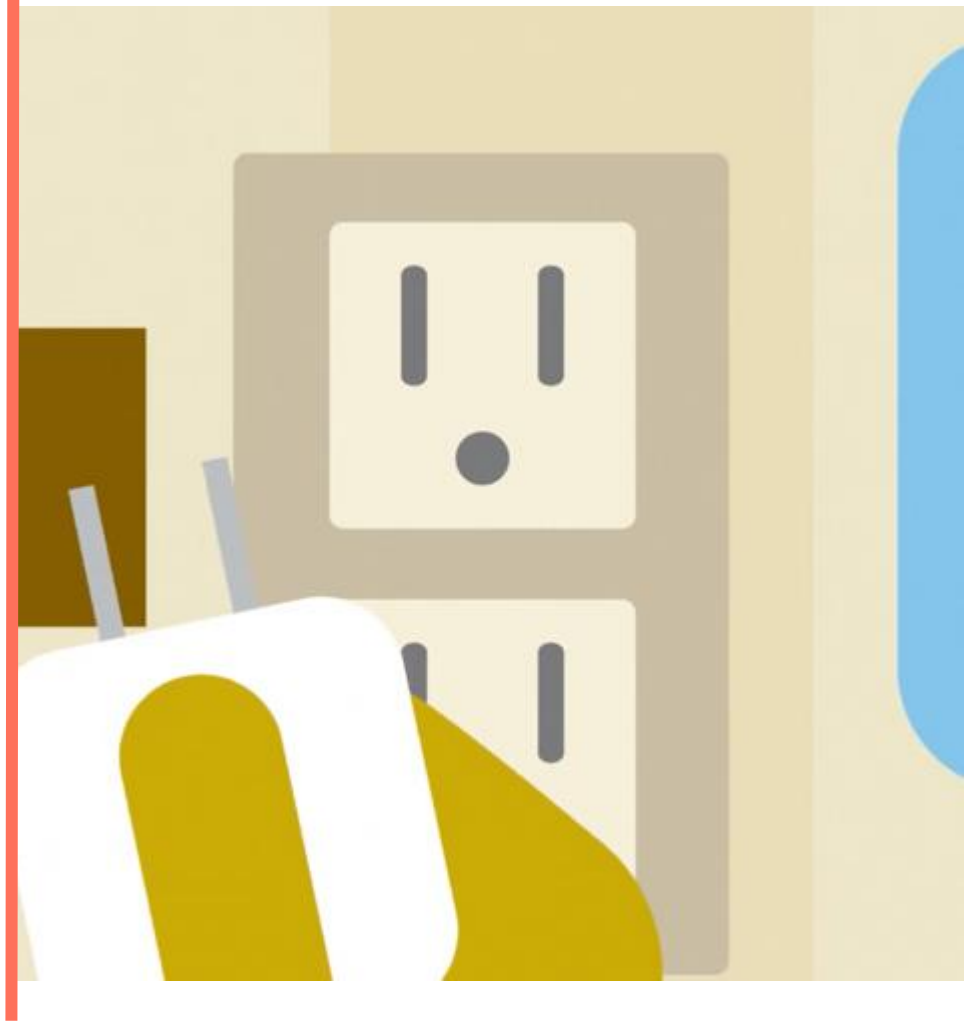
Purpose and Approach

Approach

Four in-person focus groups took place September 10 and 11, 2025 in Edmonton. Each group included 8 participants, with a mix of age, gender, geographic area in Edmonton, number of people living in the household, and type of household (own/rent and single-family, townhouse, duplex, apartment, etc.). Each session lasted approximately 2 hours. Participants were provided an incentive of $125 for their time.

We spoke to four audiences:

1. **EPCOR customers with high electricity needs** (own EV, have solar panels and/or have higher than average electricity consumption)
2. **EPCOR customers who are motivated by sustainable/ responsible electricity use** (have solar panels and/or review electricity bill regularly and make efforts to minimize consumption to be good environmental stewards)
3. **EPCOR customers who are cost sensitive** (actively try to minimize their consumption, and/or plan hops to find the best or lowest rates to reduce the cost of their overall bill)
4. **Non-EPCOR customers** (mix of high electricity needs, desire to minimize consumption to manage costs or improve sustainability).



The Story on One Page

> *So, this peak demand charges, these are imposed by the utility provider, right? So why it is not going to be controlled by the government? This is very confusing.*

The story on one page

1 System understanding is low

Current knowledge and awareness of energy usage and how they are charged is **extremely low** (although there are strong negative perceptions). There is even less knowledge about Advanced Rates Systems, thus any introduction of a new rate structure will require strong educational materials.

2 Cost drives attention and action

There is acknowledgement that a lot of people are having a tough time financially right now; **values and priorities** are centred around cost savings.

Many want to do what is right and acknowledge their social responsibility, however, it is not the main driver for most.

3 No urgent concerns about the grid

Motivations and barriers for decreasing energy usage are not about saving the grid. The Edmonton grid is perceived to be very strong and secure.

Rather saving money and social responsibility rise to the top.

4 Start now to prepare the market for change

Edmontonians are **not yet ready for advanced wire rates**, however, there are some potential first steps that would start to prepare the market, namely, bill changes, defining different charges, and working with government and other utility companies.

Market Context

Market Context

To fully understand reactions to, and readiness to adopt, proposed advanced wire rate billing structures, it is important to acknowledge the context from which these options are viewed.

01 Billing complexity with cost frustration

The electrical distribution system is not well understood. Aside from individuals who had invested in solar panels and have access to enhanced monitoring tools and apps, research participants are not well informed on the various line items on their bill (including distribution charges, their use, or how they are calculated). The various line items in the bill are felt to be confusing, with several participants in each group questioning if it was done intentionally to hide the significant cost impact.

02 Apathy / lack of relevance

Grid performance is not perceived to be an important issue for customers to be informed about. Rarely in Edmonton's recent history have there been examples of the electricity grid reaching (or being at risk of reaching) maximum capacity and causing an interruption of services. Therefore, it is not an urgent or top of mind issue.

"But I am so frustrated with the utilities companies over the last 3 years especially. … with everything going on in the world and we're getting charged from every angle. And even the utilities, the basic necessities of life. Yeah. They're now holding over our heads like we're a third-world country."

Market Context

03 Skepticism and lack of trust

There is significant skepticism about utility company motives and the move to advanced rate structures. Research participants are wary of their intentions; current distribution charges and administrative line items are perceived to be “profit lines” and new rate structures are expected to benefit the utility’s bottom line. They are not perceived to be a way to encourage more responsible electricity use.

04 Peak demand and consumption are conflated and confused

Even after explaining the difference between overall demand and peak demand, and the impact of each, research participants conflate the terms. They begin discussing peak demand and how to reduce strain on the electrical grid, but the conversation transitions into discussions about how to *reduce* overall consumption. It was difficult for research participants to understand or focus on how changing *when* electricity is consumed will benefit the system.

Even with a thorough explanation of the two terms (with visual aids), and repeated redirecting of the discussion, research participants move back and forth between the two issues without clarity or intention.

“Like so it's like what is the administration charge actually for? Like could you give me an encyclopedia that tells me what exactly is the transmission charge for, that that's different than a distribution charge?”

Market Context

05 Ability to influence electrical usage is limited

Those who have made attempts to reduce their electricity consumption or electrical bill have found it very difficult to do so. From taking extended holidays with little to no electrical consumption to unplugging all electrical appliances unless they are in active use, customers indicate the most they could reduce their electrical bill is by a small increment. There is little belief that residential customers can achieve significant savings through their own behaviour change.

06 Focusing on residential demand will have little overall impact

Throughout the focus group discussions, research participants challenge the introduction of advanced rates for residential customers. Without similar incentives for industrial and commercial customers, the initiative is expected to be ineffective for the system overall. However, when they hear that residential use accounts for approximately 20% of the city's electricity use, they agree they have a role to play. Communicating the significance of residential use, and impact on the grid, will be important to develop buy-in and encourage behaviour change.

"We were out of the country for over a month, and our bill went down like by a couple of dollars. I mean if that doesn't change anything, nothing will."

"But the the element that's missing is that we do not see industrial and business commercial use here. And that's what is the majority of consumption."

Market Context

07 Lack of understanding of the need for distribution fees

When considering the costs of electrical distribution systems, research participants tend to think about capital or construction costs only. They do not consider, and will even argue about the need for, ongoing maintenance, repairs, or expansion and the related expenses. Similarly, for those with solar panels, or low elect

08 Customers want to do the right thing

In spite of frustration over complexity, costs, and feeling their behaviour has little impact, there was also an undercurrent of wanting to do “the right thing” – be prudent, avoid waste, ensure there is “fairness” and affordability for all Edmontonians (particularly those who are at-risk). In many cases, simply knowing there is a need and/or collective benefit was motivating. Many Edmontonians are aware that some of their fellow citizens are in challenging times and expressed concern for them.

“So, if I am not consuming electricity, why am I paying distribution charges and transmission?”

Use and Value of Electricity Bills

New Charges:

Distribution Charge	17.73	
Transmission Charge	1.94	
Transmission Deferral Rider K Apr2022 kWh	0.14	
Transmission True-Up Rider J Jan2022 kWh	0.07	CR
Balancing Pool Allocation Rider	0.13	
Local Access Fee Edmonton	0.55	
Subtotal of Delivery Charges	**$20.42**	
GST (reg. 837273630RT) at 5% on $31.77	1.59	
Your total electricity charges	**$33.36**	

Stone — Olafson

Use and Value of Electricity Bills

The current prescribed bill format is confusing

- Participants consistently report confusion and frustration with electricity bills.
- Bills are not providing the *"right"* information. They do not provide enough detail to analyze usage, but they provide details on charges and riders that are a small percentage of the bill and are believe to be *"flat rates"* that customers have little to no ability to influence.
- Bills are lacking an explanation of what the individual charges or line items related to.
- Customers do not understand what distribution and transmission charges are for, or how they are calculated.

Bill structure provides inadequate information

- Electrical utility bills, first and foremost, present information on the cost of electricity usage. Similarly, residents evaluate their bill based on the expense incurred during the billing period. Bills provided only cursory information on the amount of electricity being consumed.
- There is insufficient information on electricity bills to identify what the major drivers of electricity consumption are or to monitor how changes in usage patterns affect total use.
- Current bills do not give customers any information on when they are utilizing the most electricity or how to identify where there are opportunities to have significant impact on overall or peak consumption.
- Research participants want to monitor how consumption rates change from period to period, from year to year, and how changes in weather temperature impact consumption.

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"From month to month, my bill can go up a lot, and I have no idea why. Then the next month it is down and I haven't done anything different."

"As part of a school exercise for my daughter we unplugged everything in the house to monitor … vampire power. To use any appliance, you had to plug it in. We did it for like 2 months and our bill changed by maybe $5 or $10."

"I don't have two hours.
Or wish to spend two hours looking at my bill every month."

"I know I know that the number of people that actually look at their bills is quite low."

"Why not just have a section on the bill to be like, if you're interested in reducing your bill, here are a few things you can do."

Alternate bill layouts

Opportunities for bill improvement

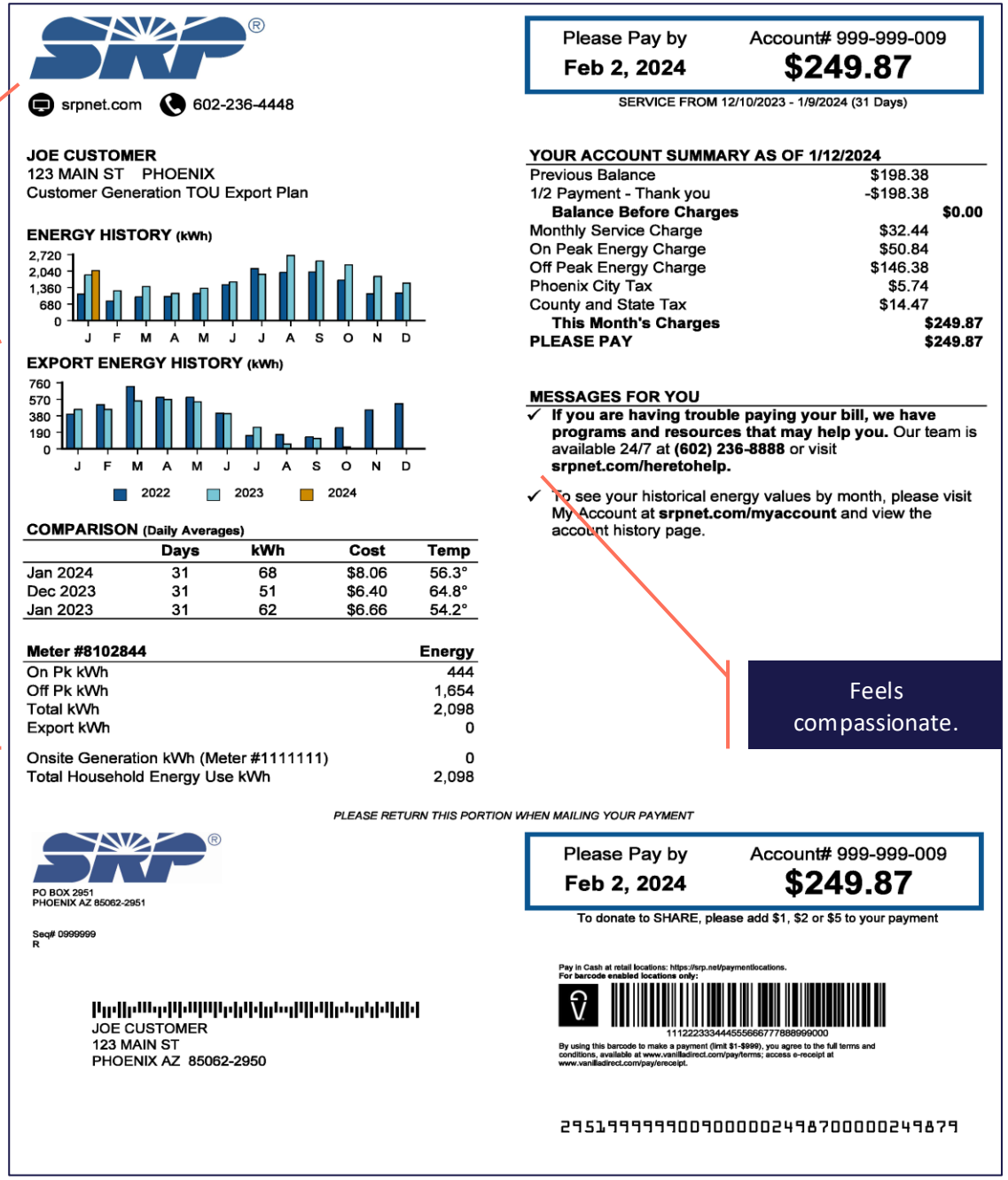
- Research participants were shown different examples of electricity bills.
- Overall, there is a preference for bills that appear clear and simple:
  - Breakdown between fixed charges and variable charges
  - Graphs that compare month to month and year over year usage
  - Recording important contextual information like time of use and temperature
  - Large font
  - Simple layout and colour use
  - Colour coding to to improve readability and understanding
- Salt River Project bills were considered to be the easiest to read and have the most information. It is appreciated for the clear presentation of information and one page design.

Overall, well organized and easy to read.

Month to month & year over year comparisons.

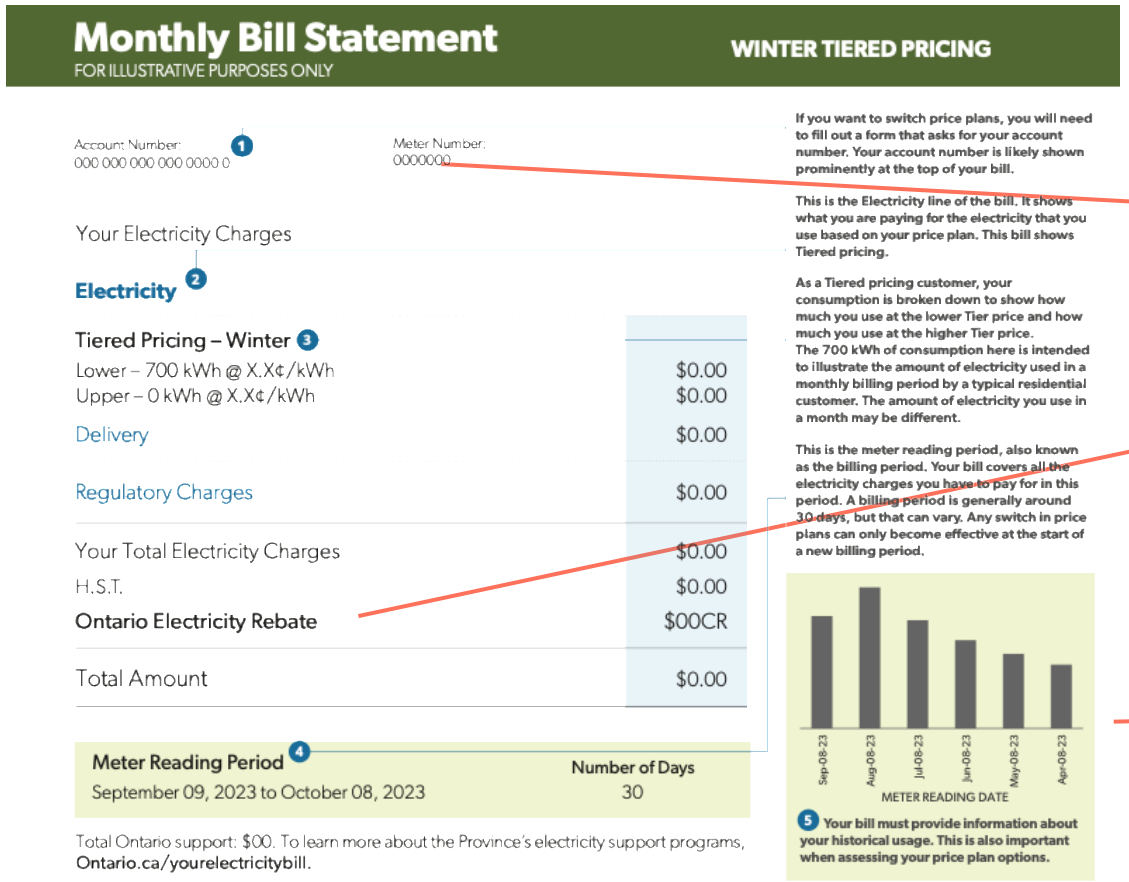
Simple chart with key details.

Can monitor when energy consumption happens.



Feels compassionate.

Alternate bill layouts



Monthly Bill Statement
FOR ILLUSTRATIVE PURPOSES ONLY

WINTER TIERED PRICING

Account Number: 1
000 000 000 000 0000 0

Meter Number:
0000000

Your Electricity Charges

Electricity 2

Tiered Pricing – Winter 3	
Lower – 700 kWh @ X.X¢/kWh	$0.00
Upper – 0 kWh @ X.X¢/kWh	$0.00
Delivery	$0.00
Regulatory Charges	$0.00
Your Total Electricity Charges	$0.00
H.S.T.	$0.00
Ontario Electricity Rebate	$00CR
Total Amount	$0.00

Meter Reading Period 4

September 09, 2023 to October 08, 2023	Number of Days 30

Total Ontario support: $00. To learn more about the Province's electricity support programs, Ontario.ca/yourelectricitybill.

If you want to switch price plans, you will need to fill out a form that asks for your account number. Your account number is likely shown prominently at the top of your bill.

This is the Electricity line of the bill. It shows what you are paying for the electricity that you use based on your price plan. This bill shows Tiered pricing.

As a Tiered pricing customer, your consumption is broken down to show how much you use at the lower Tier price and how much you use at the higher Tier price. The 700 kWh of consumption here is intended to illustrate the amount of electricity used in a monthly billing period by a typical residential customer. The amount of electricity you use in a month may be different.

This is the meter reading period, also known as the billing period. Your bill covers all the electricity charges you have to pay for in this period. A billing period is generally around 30 days, but that can vary. Any switch in price plans can only become effective at the start of a new billing period.

5 **Your bill must provide information about your historical usage. This is also important when assessing your price plan options.**

Appreciate the clean and simple layout.

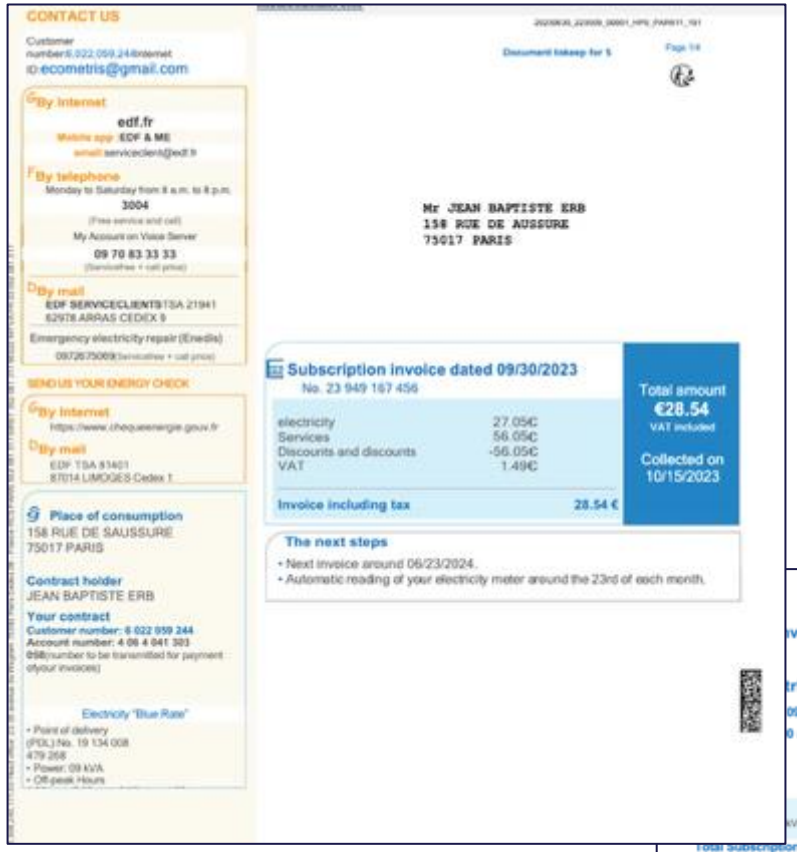
Overall, very little information provided about usage.

Attracted to term 'rebate'.
Want to learn more about how to access rebates.

No comparison numbers from previous years.

Alternate bill layouts

Overall, a cluttered and visually overwhelming design.


CONTACT US

Customer number: 6 022 059 244 Internet
ID: ecometris@gmail.com

By Internet
edf.fr
Mobile app: EDF & ME
email: serviceclient@edf.fr

By telephone
Monday to Saturday from 8 a.m. to 8 p.m.
3004
(Free service and cost)
My Account on Voice Server
09 70 83 33 33
(Service/other + cost price)

By mail
EDF SERVICECLIENTS TSA 21941
62978 ARRAS CEDEX 9

Emergency electricity repair (Enedis)
09726750 69 (service/other + cost price)

SEND US YOUR ENERGY CHECK

By Internet
https://www.chequeenergie.gouv.fr

By mail
EDF TSA 81401
87014 LIMOGES Cedex 1

Place of consumption
158 RUE DE SAUSSURE
75017 PARIS

Contract holder
JEAN BAPTISTE ERB

Your contract
Customer number: 6 022 059 244
Account number: 4 06 4 041 303
058(number to be transmitted for payment of your invoices)

Electricity "Blue Rate"
• Point of delivery (PDL) No. 19 134 008 479 268
• Power: 09 kVA
• Off-peak Hours

Document to keep for 5 Page 1/4

Mr JEAN BAPTISTE ERB
158 RUE DE AUSSURE
75017 PARIS

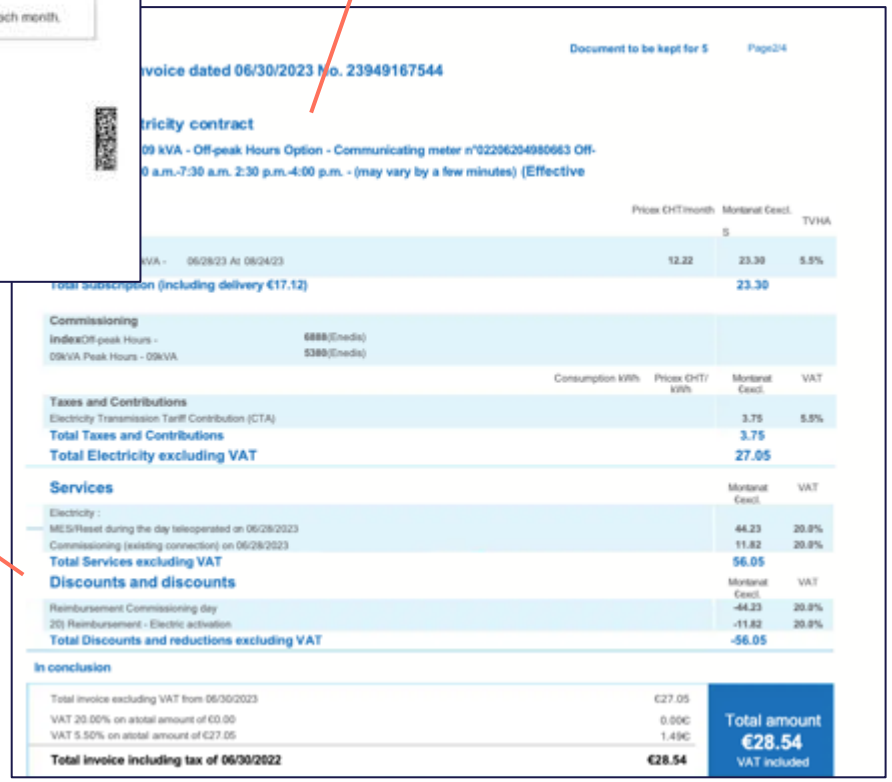
Subscription invoice dated 09/30/2023
No. 23 949 167 456

electricity	27.05€
Services	56.05€
Discounts and discounts	-56.05€
VAT	1.49€
Invoice including tax	28.54 €

Total amount
€28.54
VAT included
Collected on 10/15/2023

The next steps
• Next invoice around 06/23/2024.
• Automatic reading of your electricity meter around the 23rd of each month.

Like reminder of off-peak hours; good reminder of the desired behaviour.


Document to be kept for 5 Page 2/4

voice dated 06/30/2023 No. 23949167544

tricity contract

09 kVA - Off-peak Hours Option - Communicating meter n°02206204980663 Off-
0 a.m.-7:30 a.m. 2:30 p.m.-4:00 p.m. - (may vary by a few minutes) (Effective

	Prices CHT/month	Montant Cexcl.	TVHA
		5	
kVA - 06/28/23 At 08/24/23	12.22	23.30	5.5%
Total subscription (including delivery €17.12)		23.30	

Commissioning
index Off-peak Hours - 6888(Enedis)
09kVA Peak Hours - 09kVA 5380(Enedis)

	Consumption kWh	Prices CHT/ kWh	Montant Cexcl.	VAT
Taxes and Contributions				
Electricity Transmission Tariff Contribution (CTA)			3.75	5.5%
Total Taxes and Contributions			3.75	
Total Electricity excluding VAT			27.05	

Services

	Montant Cexcl.	VAT
Electricity :		
MES/Reset during the day teleoperated on 06/28/2023	44.23	20.0%
Commissioning (existing connection) on 06/28/2023	11.82	20.0%
Total Services excluding VAT	56.05	

Discounts and discounts

	Montant Cexcl.	VAT
Reimbursement Commissioning day	-44.23	20.0%
20) Reimbursement - Electric activation	-11.82	20.0%
Total Discounts and reductions excluding VAT	-56.05	

In conclusion

Total invoice excluding VAT from 06/30/2023	€27.05	Total amount €28.54 VAT included
VAT 20.00% on atotal amount of €0.00	0.00€	
VAT 5.50% on atotal amount of €27.05	1.49€	
Total invoice including tax of 06/30/2022	**€28.54**	

Attracted to term 'discount' and want to understand how to access.

Market Readiness for Advanced Wire Rates

The market is not ready

Lack of understanding of their role

- People don't want to be wasteful and believe they are already being responsible consumers.
- Participants perceive they have little ability to influence their bill overall. Past actions have not resulted in significant differences in cost (which is how they evaluate usage).
- Lack of awareness of which appliances and activities consume the most electricity.
- Many don't understand how changing when they use electricity will benefit the system and consequently don't see the role they have to play.

"If we all use the dryer later, that just moves the peak. It doesn't get rid of it."

Need better and more timely information

- Electricity customers, with the exception of those using solar, do not have access to information that will inform behaviour change.
- Participants indicate they would need more information to better understand the usage patterns in the home and where there are opportunities for meaningful change. The information people ask for includes:
    - When electricity is being consumed overall
    - Breakdown by outlet/ area of the home/ breaker as to what appliances are using electricity and when
    - Which appliances use the most electricity
    - How to use appliances most effectively
    - Suggestions on how to reduce or reschedule electricity consumption
    - Real time apps that send notifications when usage is high/ above average.

"I was told it was better to keep the AC on all day… that it take more energy to cool the house off than it does to keep it at an even level."

"If you want me to change how much I use at a time, there has to be a way to know when I am getting close to my max."

The market is not ready

Meaningful motivation and incentives are essential

- Participants indicate that any incentives or cost savings will need to offset the challenges (hassle, stress, or lifestyle impact) of introducing the new rate structure.
- Savings (or potential of cost increases) need to be substantial to motivate participation or behaviour change. Research participants indicate that they may notice and question a cost decrease of $10, but it is expected to be somewhere between $20 to $40 to encourage behaviour change.
- When people reflect on the advanced rates being applied to the distribution charge, they do not expect they would notice an increase or benefit from savings, because the distribution portion of their bill is only a fraction of the overall bill.
- Participants are generally more positive about, and interested in, opportunities to receive a savings, discount, or rebate. It appears that the opportunity to save money on their bill is more motivating than the concern of incurring a penalty or fee increase.
- Of the people participating in the focus groups, the people who are motivated to change usage behaviour to reduce pressure on the grid are also familiar with distribution charges and their purpose and believe they have a role to play in lessening the impact on the electrical grid. These individuals have also already taken action by investing in solar panels and are monitoring their peak consumption times.

"It (a savings of $10) isn't worth much of a headache."

"It's not a smart way to spend my time, but if you incentivize it with a little bit of even if it's a small amount of money, I'm not going to be able to let it go."

"Like if I know that I'm I could potentially save some money, like then like I'll subconsciously like take a shower like Yes. like an hour later and blow-dry my hair and cut that hour."

"Well, on the social responsibility, it's like you, you have the social responsibility not to be overriding the system's capacity and because you did not follow your social responsibility, you're going to be penalized for a whole month."

Reactions to Proposed Rate Structures

Stone — Olafson

Reactions to Proposed Rate Structures

Not in the customer's best interest

- Research participants do not see value for themselves with the introduction of advanced rate structures.
- Participants do not intuitively see a connection between the new rate structures and positively influencing consumer behaviour. Instead, it is perceived to be a way for utilities to generate more money for their bottom line.
- While they are pessimistic about their ability to reduce the amount of their electricity bills – even perceived significant efforts in the past have only resulted in small savings on their bills – they are very concerned that the new rate structures will result in significantly higher costs for them. They are quick to envision the worst-case scenario and believe it will result in noticeably higher costs that they will have little ability to influence.
- The proposed rate structures are perceived as punitive; consumers will be punished for even small increases in peak capacity use. There is interest in seeing structures that reward them for reducing electrical use rather than penalizing them for exceeding the planned amount.
- There is little familiarity overall with advanced rate structures. Substantial explanation is required before participants are comfortable discussing the options.

"This is just about the bottom line for them."

"But there are a lot of things that we could do that would be able to help with the system demand where it's like if FPL [Florida Power & Light] was subsidizing residential solar or the government, which used to, actually got rebates on it. That would greatly reduce the demand, especially during these times when the sun's up for today."

"This is very much affecting people's everyday lives and how to pay their bills. So when this says, peak rates may change based on the season of the time of year, they got to be very upfront about what else it is going to be."

Reactions to Proposed Rate Structures

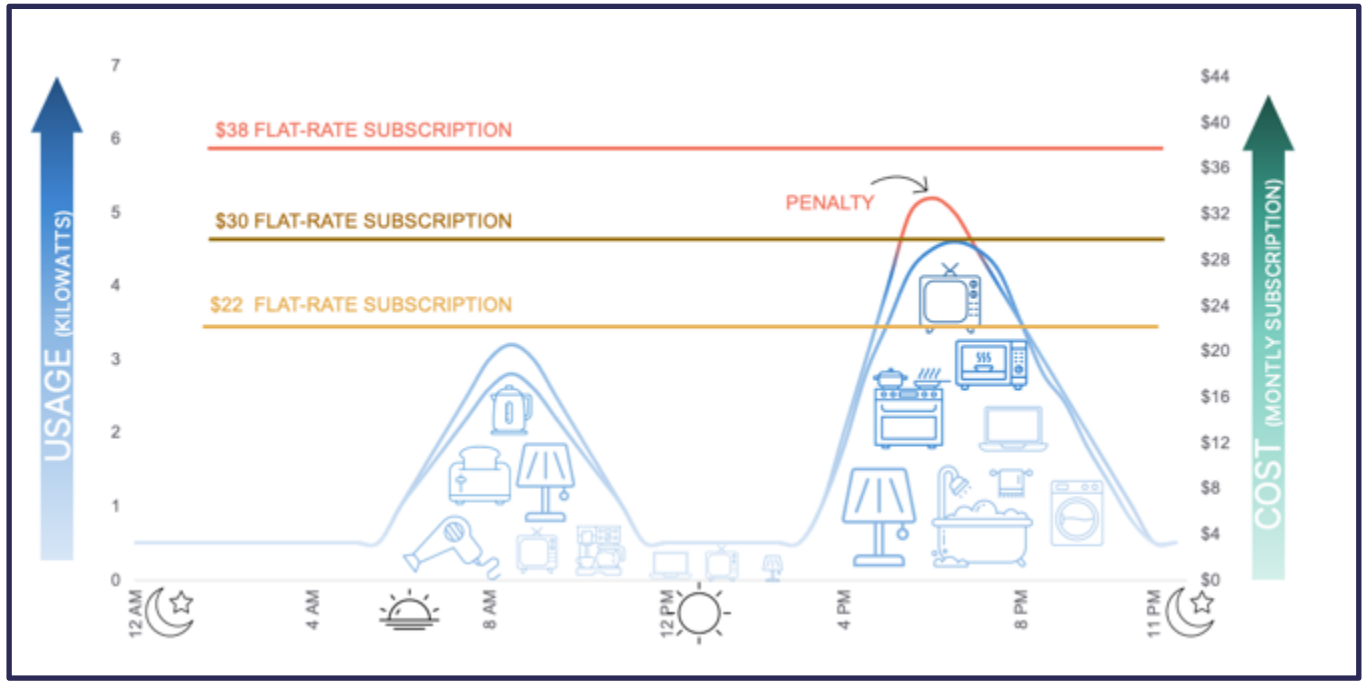
Option 1: Demand Subscription

Customers choose a subscription that dictates the maximum demand for electricity they agree to stay below throughout the billing cycle.

If the customer exceeds that maximum demand level, they will move to the next highest subscription level (or the subscription level that includes the demand level reached in the billing cycle). Each progressive subscription level will have a higher $/kW price.

Reaction to Proposed Rate Structures

Option 1: Demand Subscription



MODERATE SUPPORT

Pros:

- Predictable bills; easier for budgeting and less stressful.
- Feeling of control due to ability to choose tiers.
- Some see fairness in “pay for what you select.”
- Can feel familiar as the structure is similar to some cell phone data plans.

Cons:

- Anxiety over being penalized for going over by a small amount - concern about lack of credit for unused “allowance.”
- Inability to manage in real time - no way to monitor usage to see if they are on track to ”go over.”
- Reactionary – even a small overage will have significant bill implication.
- Complexity if tiers are not transparent or adjustable - monthly resets without annual or seasonal smoothing are viewed as unfair.
- Potential to encourage more use of electricity: risk people overuse electricity to “get their subscription’s worth.”

Reactions to Proposed Rate Structures

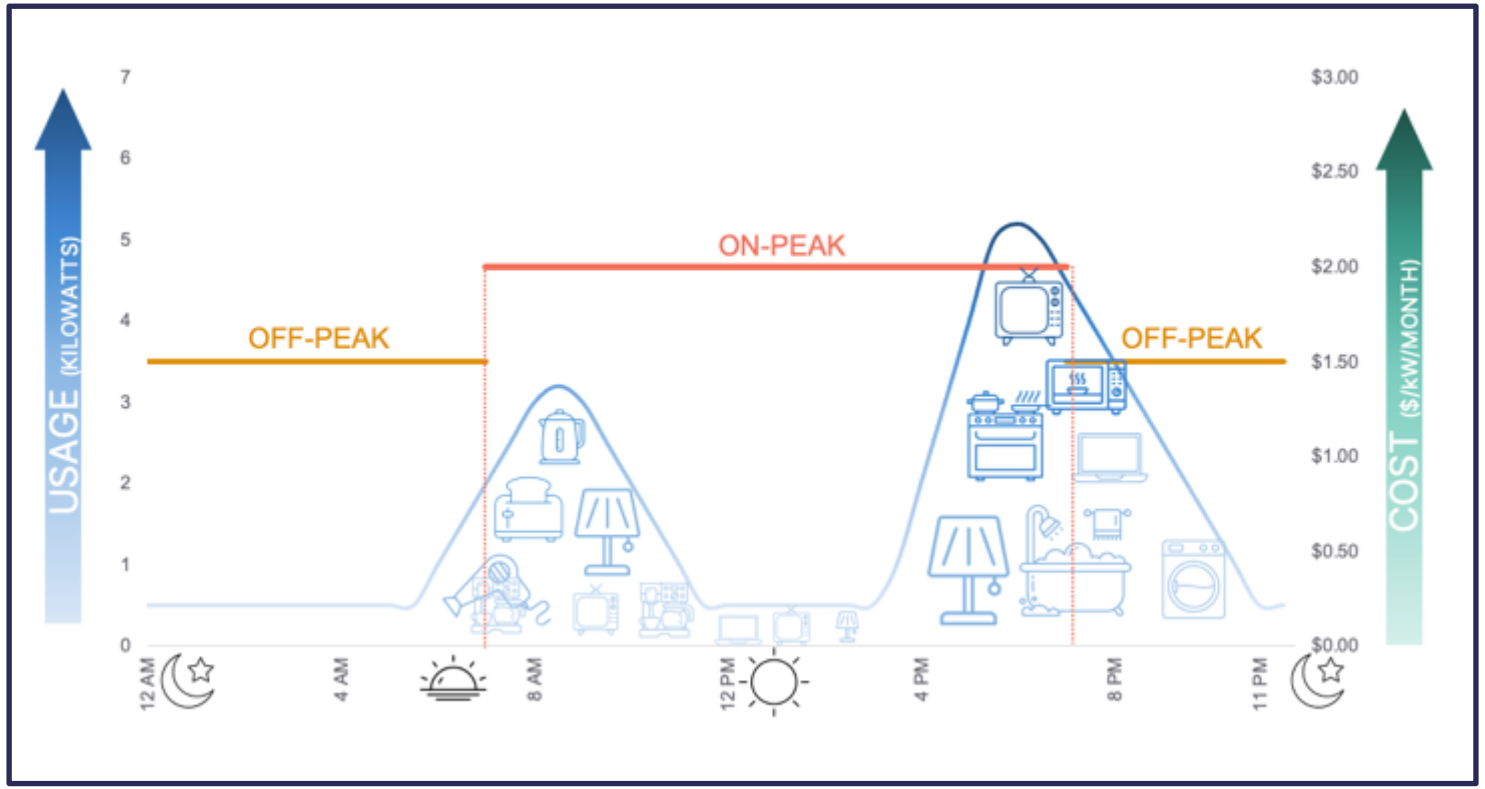
Option 2: Time-of-Use

On-peak and off-peak periods are established with different $/kWh prices. On-peak rates are higher. Peak rates may change based on season/ time of year. Monthly bills are based on the amount of energy consumed in each of the on-peak and off-peak periods during the billing cycle.

Off-peak	Weekdays 7pm – 7am Weekends and holidays all day	7.5cents/kWh
On-peak	Weekdays 7am – 7pm	15.8 cents/kWh

Reaction to Proposed Rate Structures

Option 2: Time-of Use Rates



MIXED SUPPORT

Pros:

- Familiar to those with Ontario experience.
- Rewards those who can easily shift loads (retirees, flexible workers).
- Perceived as slightly more fair than the peak demand pricing, as it provides visible choices/ clear path to managing cost.
- Weekend is off-peak, giving most people freedom to complete chores when it works for their schedule.

Cons:

- Penalizes shift workers, large families, and those unable to shift loads (families, people with disabilities/ care workers)
- Only works if the difference between on- and off-peak is significant enough; but then can feel punitive.
- Perceived risk "herding" of everyone to new peaks with no real change to the system.

Reactions to Proposed Rate Structures

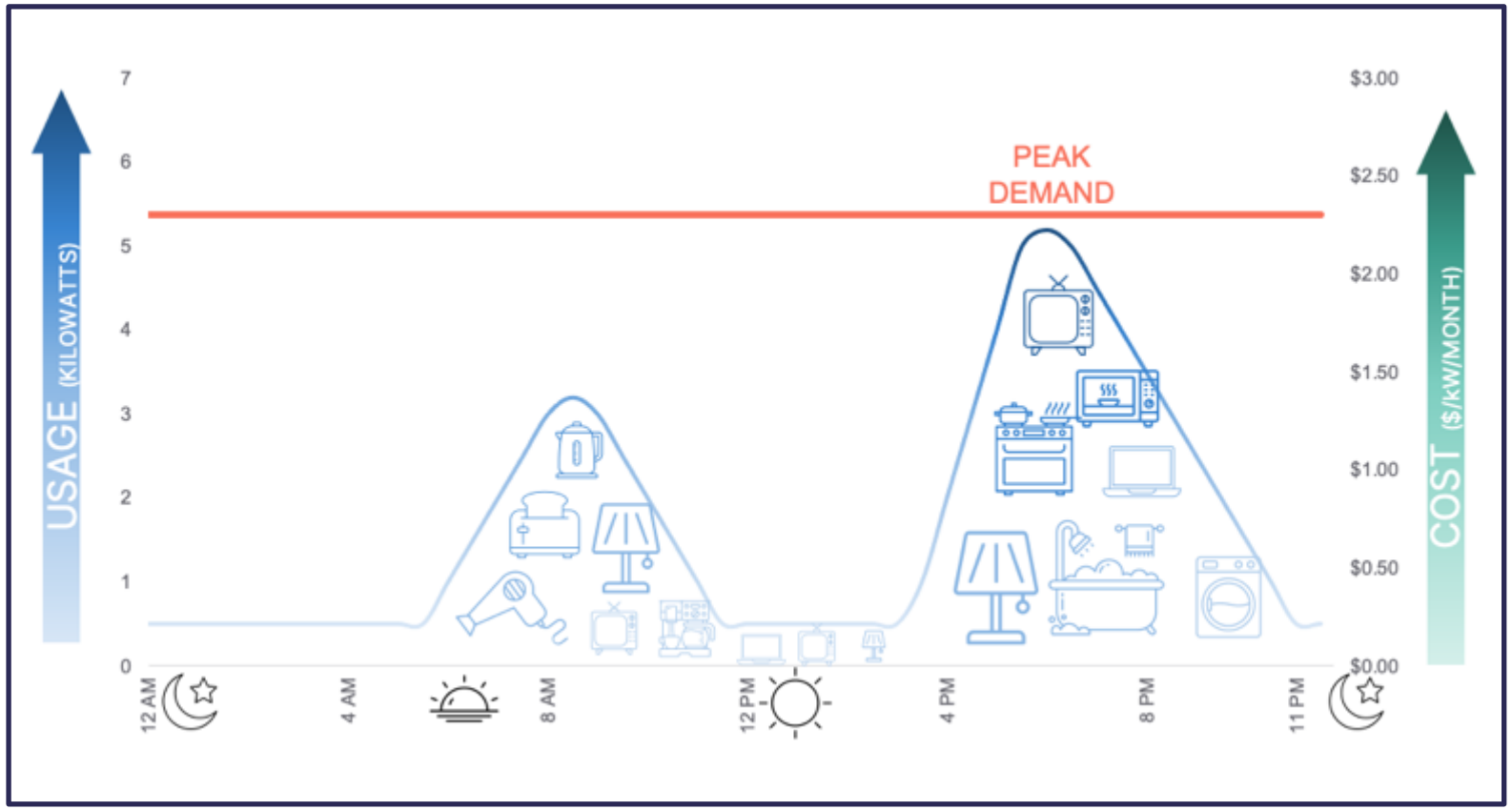
Option 3: Peak Demand Charges

Fees are imposed by the utility provider based on the highest rate of energy consumption during the billing period. In other words, the cost of delivering electricity for the billing period is set based on the moment of the highest metered demand from the billing period. The cost will change monthly based on the peak demand from the period.

The cost of delivering electricity reflects the capacity needed by the distribution system (or electrical grid) to meet the customer's peak demand.

Reaction to Proposed Rate Structures

Option 3: Peak Demand Charges



LEAST POPULAR

Pros:

- Incentivizes spreading usage and can help grid stability conceptually.

Cons:

- Deeply unpopular; seen as punitive—one spike (e.g., extra AC during a heatwave) can "ruin" a month's bill.
- Perception that they cannot plan/ budget – expect significant fluctuation. For those who maintain a tight budget, this unpredictability is very stressful.
- Removes sense of control; penalizes for unavoidable needs.
- Feels unfair.

Implications

Stone — Olafson

Considerations for Edmonton

If Advanced Rates are Further Explored:

- Continue to engage with customers while plans are in the development stage to understand the motivations and barriers to engaging. Use that understanding to refine plans so they are easy to understand, monitor, and will motivate behaviour change.
- Develop educational materials to explain the need for rate changes:
    - Distribution and transmission: infrastructure (what they are) and system costs (why the fees are needed/ what they are used for specifically including repairs, maintenance and system expansion)
    - The need to manage peak consumption levels to improve grid stability
    - The need to increase system efficiency (reduce peak demand levels) thereby the delay grid expansion
    - Consider revising customer bills to be reflective of TOU, comparisons to past usage, and educating what line items mean.
- Support customers to make informed decisions:
    - Communication on ways to reduce peak consumption and generally conserve (what efforts or activities will have the most significant payback)
    - Provide real-time, detailed, usage data on consumption levels and patterns
    - Develop online tools or apps for real-time usage monitoring and alerts
- Similar to what we found in the jurisdictional market scan, research participants don't understand how this could work for, or be implemented by, just one utility company. The expectation is that it would be part of a system-wide change. Thus, there is a desire for coordination, unified voice, and clarity of direction.
- In short, what Edmontonians expect is very consistent with the critical success features we found in the market discovery research in phase 1 (see next slide as a reminder).

Jurisdictional Scan Key Findings:

Summary of Critical Success Factors

Alternative Rate Pilots & Implementation

Success Factors:	Causes of Issues or Mixed Results:
Joint gov/regulator-DFO leadership	Unilateral or siloed oversight
Intensive, tailored customer education	Limited, one-way, or technical communication
Structured pilots and iterative feedback	Rushed, untested, or poorly monitored rollout
Simple, transparent rate design	Overly complex, confusing structures
Customer protections (bill guarantees)	Absence of opt-outs or risk mitigation
Ongoing support and responsiveness	Lack of post-rollout education/support
Proactive equity measures	Ignoring vulnerable group impacts

Understanding People

It’s what we do.