Welcome to BC Hydro's

2024 Rate Design Applications (RDA) Workshop

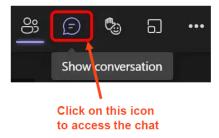
We'll be getting started shortly

How to participate

- Let us know you're here. Please enter your first name, last name, and organization in the chat.
- Video and microphone have been turned off to save bandwidth and eliminate background noise
- The chat function is available for questions and comments
- A copy of this presentation will made available following this session

Technical issues?

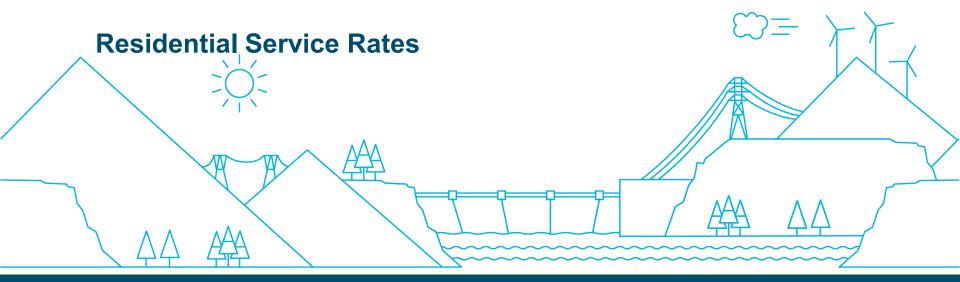
Send an email to bchydroregulatoryfeedback@bchydro.com



BC Hydro 2024

Rate Design Applications

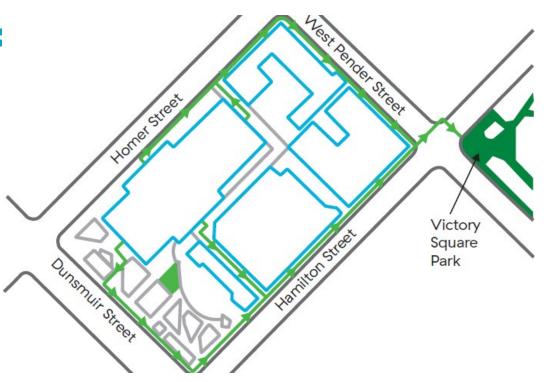
Workshop 4 – Session 1



Safety -

Muster Location:

Victory Square





Next

We are grateful to be meeting today on the unceded traditional territory of the Musqueam, Squamish and Tsleil-Waututh First Nations

Next

Agenda

Time	Topic	Presenter
9:00 – 9:10 am	Welcome	Jen Thompson, Facilitator
9:10 – 9:30 am	Rates and Regulatory Overview	Chris Sandve, Chief Regulatory Officer
9:30 – 10:00 am	Customer Research Findings – April 2024	Adam DiPaula, Managing Director, The Sentis Group
10:00 – 10:20 am	Workshop #2 Feedback	Cynthia Curll, Regulatory Manager
10:20 – 10:50 am	Application Proposal and Timeline	Shiau-Ching Chou, Senior Regulatory Manager
10:50 – 11:00 am	Next Steps	Chris Sandve, Chief Regulatory Officer

Next

Steps

Findings

Feedback

Rates and Regulatory Overview

Chris Sandve

Chief Regulatory Officer



BCUC Decision (from Pricing Principles Application)

- BC Hydro was directed to file an application for changes to Residential Inclining Block (RIB) Rate by June 30, 2024.
- Must include evaluation of <u>potential changes to</u>, <u>or elimination of</u>, <u>the RIB Rate</u> considering:
 - Alignment with marginal costs and cost of service
 - How the revised rate design supports government policy of electrification and decarbonization
 - Whether revised rate design provides greater flexibility to modify rates over time or add optional rates



Next

2024 Applications

Residential Rates

- Update RIB Rate
- Introduce 1-2 more optional rates
- Other updates

Net Metering Rate

- Update Net Metering rate
 - Optional Net Metering TOU Rate
- Other updates

Non-Integrated Area Rates

- Residential rates
- Commercial rates
- Distribution extension charges

Tariffs Terms & Conditions

- Tariffs terms and conditions
- Standard charges

Distribution Extension Policy

- Update distribution extension charges
- Standard connection charges

Target Filing Date: June 28, 2024

Residential Rates Engagement

2024 2023 Oct - Nov Feb - Mar Apr – May Survey Survey One-on-One Interviews **Customers** Digital Dialogue Workshop Session #1 Workshop Session #3 Workshop Session #2 **Stakeholders** Target Filing Date: June 28, 2024



Next

Our Progress Since March 2024 Workshop

- 1. Phase 2 customer and workshop feedback results
- 2. Further rate design refinement and consideration of rates to advance based on Phase 2 feedback
- 3. Engagement with non-integrated area communities
- 4. Transition and implementation



Next

Objectives for this morning's session

- Share our customer research and workshop feedback from March/April
- Provide an update on our proposed Application approach
- Discuss Timeline and Implementation
- Review next steps



Next

Current Rate Offers

Zone I

Inclining Block Rate



Two-tier pricing with a higher energy charge for consumption above a set threshold. Intended to encourage conservation. Most residential customers are on this rate.

Flat Rate



A fixed energy charge for all electricity consumed. Available to approximately 14,500 eligible Zone I farms residential customers



Time-of-Day Rate



12

Encourages customers to shift consumption from BC Hydro's system peak hours. (Approved by the BCUC in December 2023. To be launched in June 2024)

Zone IB

Flat Rate

Approximately 650 (Bella Bella) residential customers are on the same Zone I flat rate

Zone II

Higher Inclining Block Rate

Higher two-tiered pricing than Zone I rate. Tier 1 is the same as flat rate. energy charge.

Customer Research Findings

Adam DiPaula, Managing Partner

The Sentis Group









The BC Hydro Rate Design Engagement initiative explores customer perceptions and preferences for various rate design concepts. Phase 2 of this research is comprised of a quantitative survey to test residential customer perceptions of a specific set of rate design concepts.

- Flat Rate
- Peak Rate
- Two-Tiered Rate

- Time-of-day Rate
- Fixed Bill Rate

Phase 2: Rate Design Options Survey



Phase 1: Exploratory Rate Design Survey



Phase 2: Rate Design Options Survey April 2024



Phase 2: Qualitative IDIs & Focus Groups May 2024



APPROACH





Email Survey (Account Holders)

BC Hydro customers were invited via email to participate in an **18-minute email-to-online survey**.

Panel Survey (not included in this presentation)

BC Renters without a BC Hydro account. To qualify, panelists had to:

- a) rent their current residence
- b) reside in a household that receives electricity service from BC Hydro, and
- not receive a bill directly from BC Hydro

The surveys were in field from April 2-8, 2024.

Survey Responses

	Dates	Method	Invitations Sent	Completed Surveys	Response Rate	Margin of Error (95%)
SE II	April 2-8	Email Survey	40,000	1,938	5%	±2.2%
April 2-8 2024	Panel Survey	-	109	-	±9.4%	
SEI	Oct 26 – Nov 5	Email Survey	15,995	1,020	6%	±3.2%
Oct 26 – Nov 5 2023	Panel Survey	-	103	-	±9.7%	

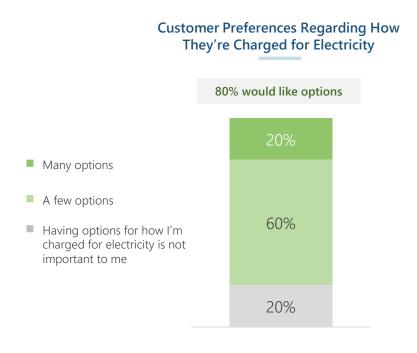


Results weighted by region to accurately reflect BC Hydro's total residential customer base.



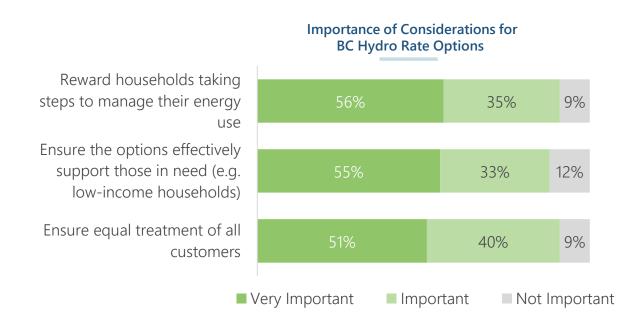
Customer Preferences Regarding How They're Charged for Electricity (from Phase 1)





Perceived Importance of Rate Option Considerations





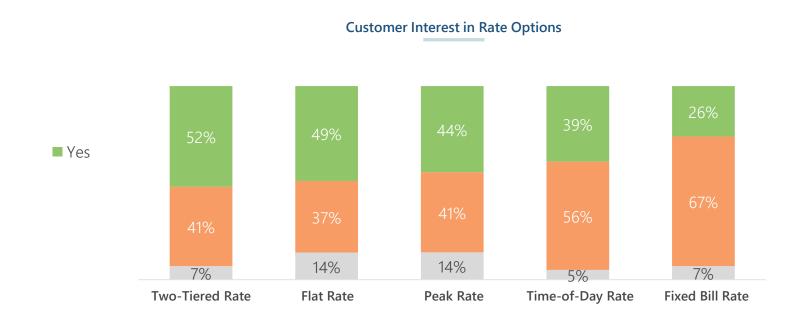
Rates Concepts Explored in this Survey



Two-Tiered Rate (Current)	Flat Rate	Peak Rate	Time-of-Day Rate (Approved)	Fixed Bill Rate
Two tier pricing with a higher energy charge for consumption above a set threshold.	Fixed cents per kWh rate for all electricity usage.	Lower rate per kWh plus a peak charge for highest hour of consumption. Save by avoiding surges in use.	Encourages customers to shift consumption from peak hours to overnight hours in return for savings. Can be added to a base rate.	Pay a fixed monthly charge for electricity. Calculated based on historical weather-normalized consumption plus a risk premium. Ability for BC Hydro to control certain end-uses (e.g., smart thermostats).

Summary of Rate Options

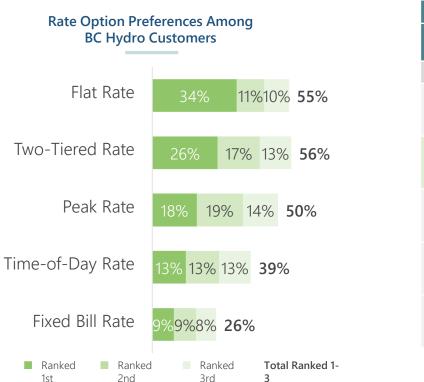




Top Rate Options







that ended at that opinion					
	% of Bills	StatCa	n LICO		
0%	50% or less	More than 50%	100%	Yes	No
428	364	292	383	115	1,154
24%	33%	34%	36%	46%	30%
37%	30%	19%	14%	17%	28%
18%	19%	17%	24%	18%	20%
11%	11%	19%	16%	5%	14%
9%	8%	11%	10%	14%	8%

Significantly higher than other subgroup(s)

Flat Rate: single energy charge. / Two-Tiered Rate: lower energy charge for a certain amount and a higher energy charge for anything above. / Peak Rate: lower energy charge with a one-time "Peak Charge" for the hour you had the highest consumption between 4 to 9 pm in a monthly billing period. You will only be charged if the hour you had the highest consumption exceeds a threshold during on-peak hours (4 – 9 pm). Save if you can spread out your electricity use. / Fixed Bill Rate: equal monthly bills and enroll with an eligible smart control device. / Time-of-Day Rate: "add-on" to the Flat, Two-Tiered or Peak Rate base rate options. Save if you can shift usage out of on-peak hours (4-9 pm) to overnight hours.

C2a. Which of the following options work best for your household? Please rank up to three, starting with 1 being the top choice.

Reasons for Rate Option Preference First Choice



First Choice of Rate Option

Reasons for Preferred Rate Option	Flat Rate	Two-Tiered Rate	Peak Rate	Fixed Bill Rate	Time-of-Day Rate
Base: Customers Selecting Rate Option as Top Choice	(660)	(508)	(344)	(166)	(260)
It is simple and easy to understand	66%	54%	27%	50%	40%
It helps me budget my electricity costs	40%	18%	20%	72%	20%
It helps me manage my household electricity use better	22%	26%	41%	21%	46%
It gives me opportunities to save money	18%	42%	65%	24%	65%
It encourages me to conserve energy	17%	49%	55%	20%	42%
Other	14%	12%	4%	4%	7%

Top reason(s)

Reasons for Not Preferring Rate Option



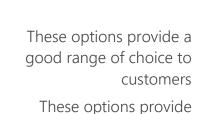
Rate Option(s) Not Selected

	Tate option(s) <u>i.vs.</u> selected				
Reasons for Not Preferring Rate Option(s)	Flat Rate	Two-Tiered Rate	Peak Rate	Fixed Bill Rate	Time-of-Day Rate
Base: Customers Not Selecting Rate Option in Top 3	(873)	(868)	(962)	(1,435)	(1,168)
It does not give me opportunities to save money	46%	22%	19%	34%	18%
It does not support energy conservation	37%	13%	12%	27%	8%
I would be more interested if I can see how much I can save with this option	34%	26%	25%	28%	26%
I am not able to change how I use electricity due to lifestyle needs	21%	38%	43%	24%	48%
The bill savings are not worth the effort	8%	16%	19%	12%	17%
It is too complicated to understand	7%	17%	24%	9%	18%
Other	7%	11%	11%	13%	9%

Top reason(s)

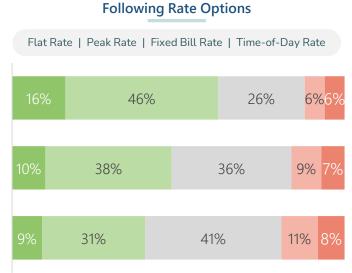
Perception of Range of Options





customers with good opportunities to save money

These options are fair and equitable for customers



Customer Perception of Range of



■ Strongly Agree ■ Agree ■ Neutral ■ Disagree ■ Strongly Disagree



Flat Rate Interest

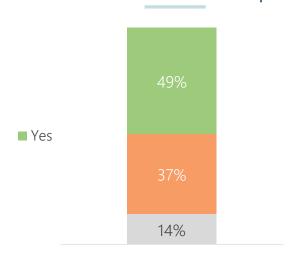


Flat Rate Explanation

Under a Flat Rate, you would be charged the same rate for every unit (kWh) of electricity you use. As more customers use more electricity, it is a great choice for people who don't want to worry about how much electricity they're using, or when they're using it. Customers who have electric heating, drive electric vehicles, live in colder areas, or have larger households could benefit from this rate.

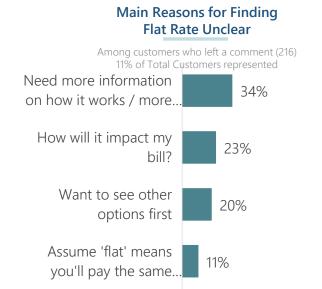


Customer Interest in Flat Rate Option



Flat Rate Comments





10%

Example Comments

"We currently use less electricity than others, I wonder if this will be more or less expensive for us."

"We don't use that much electricity in our apt so if I was to be charged a flat rate the same as someone in a house then **that wouldn't benefit me**."

"How is this different from now? To my understanding, this is currently how we are charged."

I thought I already paid a

flat rate / how is it..

Flat Rate Interest by Subgroup



% Interested in Flat Rate Option

Income Group

Stat Can Low Income	Not Low Income
(115)	(1,154)
49%	51%

Consumption Quartile

Bottom Quartile	2 nd Quartile	3 rd Quartile	Top Quartile
(368)	(366)	(367)	(366)
43%	44%	54%	58%

Region

Lower Mainland	Vancouver Island	Southern Interior	North
(947)	(626)	(231)	(134)
48%	50%	51%	51%

Main Source for Space Heating

Electricity	Natural Gas
(1,060)	(719)
53%	45%

Type of Home

Single- Detached / Duplex	Triplex / Townhome / Row Home	Apartment / Condo	Other
(1,152)	(196)	(510)	(80)
50%	49%	46%	45%

Own an EV

Yes	No	Plan to Get One
(213)	(1,582)	(143)
53%	47%	56%

Relatively higher than counterpart(s)

Relatively lower than counterpart(s)

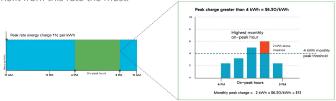
R1a. Would you be interested in this option?

Peak Rate Interest



Peak Rate Explanation

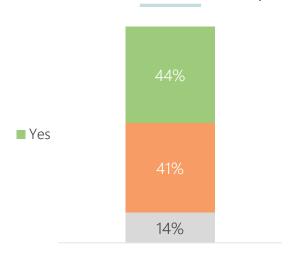
Now, imagine that you can get a discount on the previously described flat rate and in exchange you may pay a one-time peak charge for the hour you had the highest consumption between 4 pm to 9 pm in a monthly billing period. You will only be charged this peak charge if the hour you had the highest consumption exceeds a threshold. In other words, if you can spread out your electricity use and avoid using all appliances or charging your EV during the same hour, you can save from the lower energy charge and pay little or no peak charge. Customers who have lower consumption or can spread out their electricity use can benefit from this rate the most



*Peak rate energy charge is lower than the energy charge under the Flat Rate (12¢ per kWh) on the previous page.

In the example above, say on October 15th for the hour 7-8 pm, usage was the highest of the entire monthly billing period, and the one-time peak charge for October would be \$13.

Customer Interest in Peak Rate Option

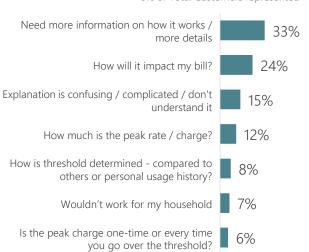


Peak Rate Comments



Main Reasons for Finding Peak Rate Unclear

Among customers who left a comment (166) 8% of Total Customers represented



Example Comments

"How much more will it cost me? It's fine that the peak hour gets peak rates, but does that mean the other 23 hours in that day and 30 remaining days will compensate with a lower cost?"

"Is my usage compared to a universal baseline, or is it just if my personal usage between 4pm and 9pm is higher than my usage outside of that window? How much can I use above the baseline without getting charged the extra fee? Do I get charged the fee if I go over the baseline once, or if I do it repeatedly?"

"The amount for the peak rate - it is unclear if it is the same each month or will vary based on the usage."

"What is the threshold? Is it the same usage threshold that currently exists or is it lower?"

Peak Rate Interest by Subgroup



% Interested in Peak Rate Option

Income Group

Stat Can Low Income	Not Low Income
(115)	(1,154)
51%	49%

Consumption Quartile

Bottom Quartile	2 nd Quartile	3 rd Quartile	Top Quartile
(368)	(366)	(367)	(366)
42%	48%	51%	51%

Region

Lower Mainland	Vancouver Island	Southern Interior	North
(947)	(626)	(231)	(134)
45%	46%	44%	35%

Main Source for Space Heating

Electricity	Natural Gas
(1,060)	(719)
44%	46%

Type of Home

Single- Detached / Duplex	Triplex / Townhome / Row Home	Apartment / Condo	Other
(1,152)	(196)	(510)	(80)
46%	45%	41%	39%

Own an EV

Yes	No	Plan to Get One
(213)	(1,582)	(143)
57%	41%	60%

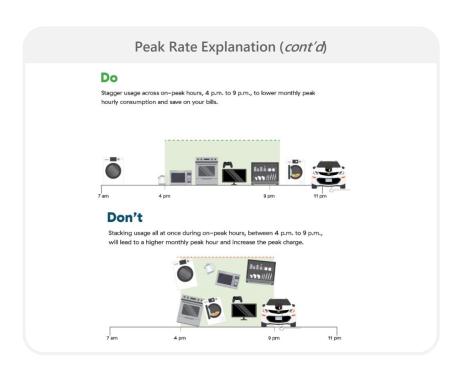
Relatively higher than counterpart(s)

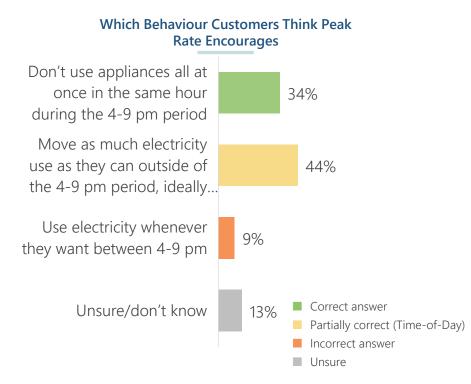
Relatively lower than counterpart(s)

R2d. Would you be interested in this option?

Peak Rate: Behaviour it's Trying to Influence

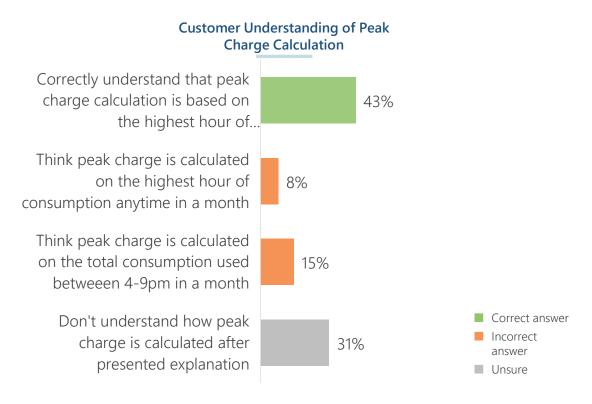






Peak Rate: Understanding of Peak Charge





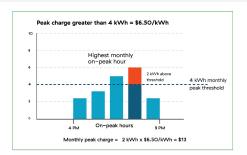
Peak Rate Initial Energy Block Options



Customers expressing interested in the peak rate option were randomly split into two groups and shown supplemental information on the peak rate.

Half were shown the peak rate with an initial free block of energy, and the other half were shown the peak rate with an initial \$1/kWh block.

Group A: Free Block Explanation

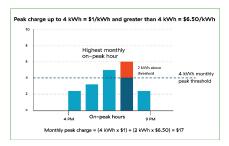


In the example we just looked at, the one-time peak charge only applies to energy consumed above a certain threshold (orange) for that highest on-peak hour in the monthly billing period. Anything up to the threshold (dark blue) doesn't have a peak charge applied to it and you pay a lower energy charge for all your consumption.

Does a "free" block of energy consumed for that highest use hour during the 4-9 pm period in a monthly billing period make you more likely to choose this rate?

In the example above, say on October 15th for the hour 7-8 pm, this was the peak hour for the monthly billing period. The peak charge for that one hour would be free of charge, up to 4 kWh (dark blue). Average customers only use slightly more than 4 kWh in the winter months and some customers never use more than 4 kWh all year round.

Group B: \$1 / kWh Block Explanation



In the example we just looked at, the one-time peak charge only applies to energy consumed above a certain threshold (orange) for that highest on-peak hour in the monthly billing period.

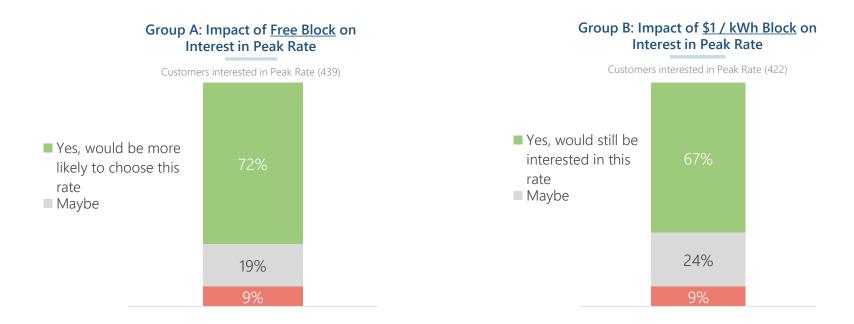
Now, let's consider if there was a low charge, e.g. \$1 for each unit of energy (kWh) of the first block (dark blue), and then a higher amount per kWh (orange) for anything above that threshold, and you pay a lower energy charge for all your consumption.

Would you still be interested in this rate?

In the example above, say on October 15th for the hour 7-8 pm, this was the peak hour for the monthly billing period. The peak charge for that one hour would be \$1, up to 4kWh (dark blue). Average customers only use slightly more than 4 kWh in the winter months and some customers never use more than 4 kWh all year round.

Peak Rate Initial Energy Block Options (Among Customers Interested)



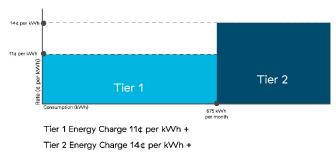


Two-Tiered Rate Interest

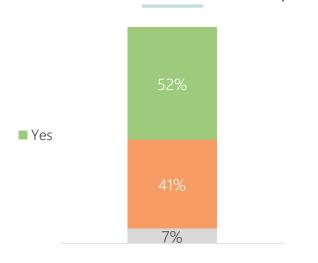


Two-Tiered Rate Explanation

Now, consider a rate where you can get a discount on the previously described flat rate for electricity consumption up to a certain amount of energy used. Once you go over that amount, you are charged a higher rate (i.e., higher than the initial flat rate shown). This rate benefits lower consumption customers, small households, or those living in apartments or condominiums.



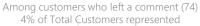
Customer Interest in Two-Tiered Rate Option

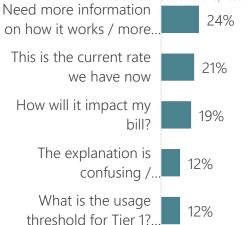


Two-Tiered Rate Comments



Main Reasons for Finding Two-Tiered Rate Unclear





Is it realistic for a household to stay in...

Example Comments

"It would **depend on how much I am currently using**, particularly in months where AC is needed...it seems likely this option will result in very high charges during such periods."

"Aren't we already on this system? **It's very difficult to stay in Tier 1.** It's a joke really. I've tried desperately to get Tier 1 my whole bill it's impossible. Unless you want to freeze in your own home."

"At what kw/h does the rate change? That affects my decision. Your chart does not tell me. Therefore, I can't make an informed decision."

Two-Tiered Rate Interest by Subgroup



% Interested in Two-Tiered Rate Option

Income Group

Stat Can Low Income	Not Low Income
(115)	(1,154)
62%	56%

Consumption Quartile

Bottom Quartile	2 nd Quartile	3 rd Quartile	Top Quartile
(368)	(366)	(367)	(366)
69%	63%	48%	29%

Region

Lower Mainland	Vancouver Island	Southern Interior	North
(947)	(626)	(231)	(134)
54%	49%	52%	46%

Main Source for Space Heating

Electricity	Natural Gas
(1,060)	(719)
52%	53%

Type of Home

Single- Detached / Duplex	Triplex / Townhome / Row Home	Apartment / Condo	Other
(1,152)	(196)	(510)	(80)
42%	56%	69%	67%

Own an EV

Yes	No	Plan to Get One
(213)	(1,582)	(143)
40%	54%	50%

Relatively higher than counterpart(s)

Relatively lower than counterpart(s)

R3a. Would you be interested in this option?

Time-of-Day Rate Interest



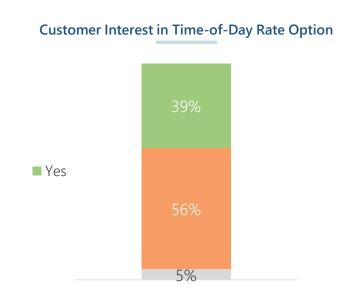
Time-of-Day Rate Explanation

Now, on top of any of the base rate options above (Flat, Peak, or Two-Tiered Rate), you have the option to select a Time-of-Day option for further bill savings.

Customers who select this option will have their bill calculated as the sum of 1) the base rate and 2) time-of-day charges.

For time-of-day charges, any usage during overnight hours (11 pm to 7 am) will receive a 5-cent discount, and any usage during on-peak hours (4 pm to 9 pm) will receive a 5-cent surcharge.

Customers can save if they can shift some of their usage during the on-peak hours to other hours during the day. This benefits households with EV chargers and those who can shift some of their electricity use outside of on-peak hours (4 pm to 9 pm).



Time-of-Day Rate Interest by Subgroup



% Interested in Time-of-Day Rate Option

Income Group

Stat Can Low Income	Not Low Income
(115)	(1,154)
38%	44%

Consumption Quartile

Bottom Quartile	2 nd Quartile	3 rd Quartile	Top Quartile
(368)	(366)	(367)	(366)
34%	40%	44%	46%

Region

Lower Mainland	Vancouver Island	Southern Interior	North
(947)	(626)	(231)	(134)
39%	43%	38%	25%

Main Source for Space Heating

Electricity	Natural Gas
(1,060)	(719)
38%	40%

Type of Home

Single- Detached / Duplex	Triplex / Townhome / Row Home	Apartment / Condo	Other
(1,152)	(196)	(510)	(80)
41%	40%	34%	38%

Own an EV

Yes	No	Plan to Get One
(213)	(1,582)	(143)
66%	33%	55%

Relatively higher than counterpart(s)

Relatively lower than counterpart(s)

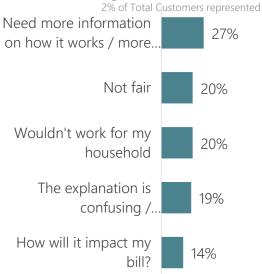
R4a. Would you be interested in this option?

Time-of-Day Rate Comments



Main Reasons for Finding Time-of-Day Rate Unclear

Among customers who left a comment (51) 2% of Total Gustomers represented



Example Comments

"It seems that this really is only of value to EV users and pushes other users into potentially unsafe behaviours such as running appliances while sleeping. There are so many factors that we can't change around usage in the on-peak hours that this option seems like it could be very expensive.

"I am not sure, **a lot of energy use I can't shift out of 4-9pm**, mainly cooking dinner. I have kids, I can't just not cook or always use a BBQ or toaster oven. I already do laundry during the day when I am working from home. And 4-8pm is the only time they can watch TV during the week."

"Other than charging an EV between 11pm and 7am what else could I use while I am sleeping (certainly not my oven or TV or washing machine.. I need to be awake to use theses things)."

Fixed Bill Rate Interest



Fixed Bill Rate Explanation

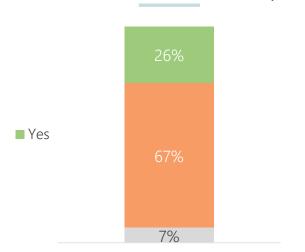


For customers who like predictability, this plan offers them a fixed bill each monthly billing period based on their previous year's consumption. Customers pay the same amount every month.

Because we want customers to benefit from the fixed bill without having to worry about any outstanding amounts based on their actual usage at the end of the year, customers on this plan would need to allow BC Hydro to remotely adjust eligible smart control device settings during "peak events" (about 20 times per year and up to 4 hours each time) when our system needs additional capacity to deliver electricity to customers. Customers can override these adjustments anytime. Customers could enroll with their own eligible smart control device or have the option to purchase one at a discount from BC Hydro.

This rate plan is different from the standalone Equal Payment Plan which currently has an end of year bill reconciliation for any usage over or under the monthly fixed amount.

Customer Interest in Fixed Bill Rate Option



% Interested in Fixed Bill Rate

Customers On EPP	Customers <u>Not</u> on EPP
510	957
37%	23%

Fixed Bill Rate Interest by Subgroup



% Interested in Fixed Bill Rate Rate Option

Income Group

Stat Can Low Income	Not Low Income
(115)	(1,154)
40%	29%

Consumption Quartile

Bottom Quartile	2 nd Quartile	3 rd Quartile	Top Quartile	
(368)	(366)	(367)	(366)	
27%	23%	28%	33%	

Region

Lower Mainland	Vancouver Island	Southern Interior	North
(947)	(626)	(231)	(134)
26%	26%	25%	31%

Main Source for Space Heating

Electricity	Natural Gas
(1,060)	(719)
27%	26%

Type of Home

Single- Detached / Duplex	Triplex / Townhome / Row Home	Apartment / Condo	Other
(1,152)	(196)	(510)	(80)
25%	32%	27%	28%

Own an EV

Yes	No	Plan to Get One
(213)	(1,582)	(143)
24%	26%	32%

Relatively higher than counterpart(s)

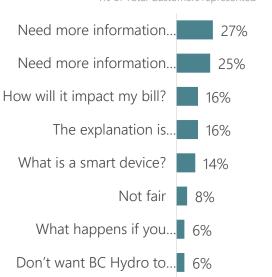
Relatively lower than counterpart(s)

Fixed Bill Rate Comments



Main Reasons for Finding Fixed Bill Rate Unclear

Among customers who left a comment (70) 4% of Total Customers represented



Example Comments

"There is no adjustment of the rate or reconciliation if we use less than you estimate we will? What does "adjust settings" mean? You will shut off electricity to my house because you want to give it somewhere else?

"What smart control device settings would be adjusted, and how?"

Is the smart control device the smart meter I already have or is this an additional device and who owns / uses it? What is involved in overriding adjustments? Is this another electronic device that crashes, needs to be updated and probably has another incomprehensible remote?"

"What are the penalties of overriding these adjustments?"

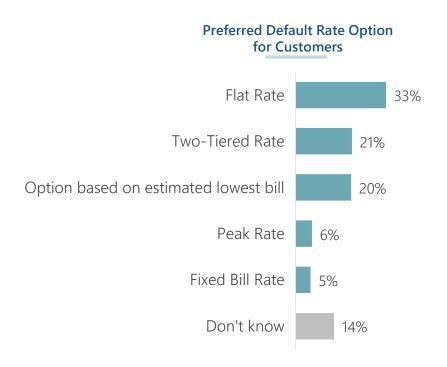




Implementation Plan

Default Rate Preference





Base: Total Customers (1,938)

We want to make sure customers have the opportunity and resources available to choose a new rate option most suitable to them. There will be a rate selection period where customers can have the time to explore the range of options available and make their selection. If the customers do not choose an option, they can be automatically transitioned to a default rate, or the estimated lowest bill option based on their past consumption.

Reasons for Default Rate Preference

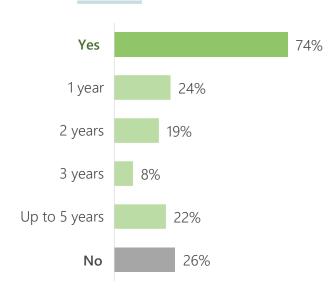


Top Reasons for Preferred Default Rate	Flat Rate	Two-Tier Rate	Option Based on Lowest Estimated Bill	Peak Rate	Fixed Bill Rate
Base (Customers Choose Rate Option as Default Rate):	(325)	(262)	(230)	(61)	(56)
Simple / easy to understand	46%	25%	5%	11%	22%
Fair / pay for what you use	24%	15%	10%	8%	8%
More predictable / easiest for household budgeting	10%	2%	-	-	57%
Good starting point / baseline	8%	2%	5%	-	-
Good for those who are less informed about rates / their usage	8%	4%	15%	-	4%
Doesn't require shifting use	7%	3%	2%	-	-
Current system / what customers are familiar with	6%	27%	1%	4%	9%
Helps ensure customers get the rate that works best for them / most savings	5%	8%	37%	10%	1%
Makes customers aware of their electricity use / will lead to energy savings	3%	7%	3%	19%	-
Encourages conservation / incentive to use less power	2%	39%	4%	19%	-
Would help seniors / low-income / people with disabilities	2%	2%	7%	1%	6%
Minimizes large swings in bills	2%	1%	2%	-	6%
Appropriate for BC Hydro to make default choice that will save customers money	1%	-	22%	-	-
Encourages customers to decrease peak use / best option for managing system capacity	-	2%	1%	31%	1%

Transitioning from Current Two-Tier RIB Rate









Next steps: Phase 2 Qualitative Research



As a part of BC Hydro's rate design initiative, Sentis will also be conducting indepth interviews and a focus group through May 2024 in order to...

- Engage more deeply with customers on the rate designs to test understanding, acceptance and barriers to adoption
- Get feedback on the RIB rate and transition plan to include or not include RIB
- Gain insights to landlords' decision making and influence over electricity rates for rental units



In-Depth Interviews (IDIs) – Residential Customers

- 25 virtual interviews conducted via Teams
- 30 minutes (participants receive \$65 incentive)
- Pre-read material to be provided

Recruiting a mix of...

- · Retired vs. working
- BC Hydro incomequalified vs. nonincome-qualified
 - Own vs. rent



Focus Group - Landlords

- 1 focus group with 6-8 participants
- 1.5 hours (participants receive \$100 incentive)

Region	Target # Interviews
Lower Mainland	10
Single-Detached / Duplex	5
Apt/Condo	5
Vancouver Island	6
Single-Detached / Duplex	4
Apt/Condo	2
Southern Interior	5
North	4
Focus Group	
Landlords (6-8)	1 Focus Group

Workshop Session #2 Feedback

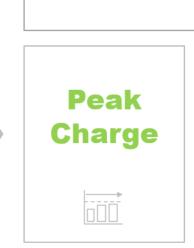
Cynthia Curll

Regulatory Manager



At our March workshop, we presented rate options for feedback

Relative to the Flat rate, these optional rates offer customers bill savings opportunities through behavioural changes.





Flat



Stakeholders shared their feedback on the rate options

75 attendees with multiple people representing the same organization



11 feedback forms completed

2 letters were submitted



What do you think about rate choices?

What level of support do you have for each option?

What is the future of the RIB rate?



Next

The Results

62% agreed the rate choices presented to advance are good options.

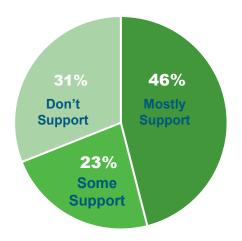
Rate Choices	Flat	Fixed Bill Plus	Peak Charge
Fully/Mostly Support	46%	39%	54%
Somewhat Support	23%	15%	23%
Barely/Don't Support	31%	46%	23%



Next

Flat Rate

46% support expanding the availability of the existing flat rate.

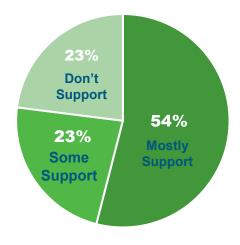


Support Don't Support Good to have this for people who like Simple, not great for conservation. something simple. No price signals for conservation. Great for heat pumps and EVs. Doesn't match cost for high demand BC Hydro shouldn't punish people for times of the day. using more electricity after moving Concerned about bill impacts to lowaway from fossil fuels. consumption customers. A fairer rate that is more costreflective.

Next

Peak Charge Rate

54% support introducing a peak charge rate option.

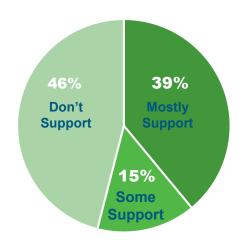


I believe this is great for helping Hydro off-set peak loads. Simple, includes strong conservation. Has good potential to mitigate bill impacts for low-income urban apartment customers. I don't believe this will help heat pump customers. Concerns with consumers understanding this rate.

Next

Fixed Bill Plus

39% support introducing a Fixed Bill Plus option.



Support Don't Support Simple, includes some conservation. I don't like the idea of the utility I'd like to see further "plus" energy company controlling a home's smart efficiency and demand reduction devices measures that help compensate It's good for people on a tight budget, customers who have increased load. but this segment likely doesn't have This appears to be a reasonable option smart devices. to provide customers. Lack of annual true-up is problematic.

Mostly benefits wealthy customers.

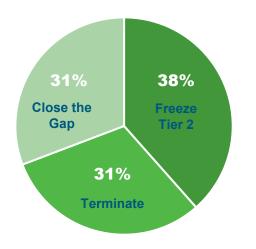


58

Findings

The Future of the RIB Rate

Most respondents support a transition period for the RIB rate in some form.



- RIB rate becomes Flat by Fiscal 2028
- Most respondents prefer immediate termination when new options are available, or phase out between 1-3 years



"Three year minimum to avoid undue rate-shock for those customers who have benefited from RIB. Four years would probably be ok. Five is perhaps delaying the benefit of eliminating RIB too much."

Next

Application Proposal & Timeline

Shiau-Ching Chou

Senior Regulatory Manager



What We Have Explored...













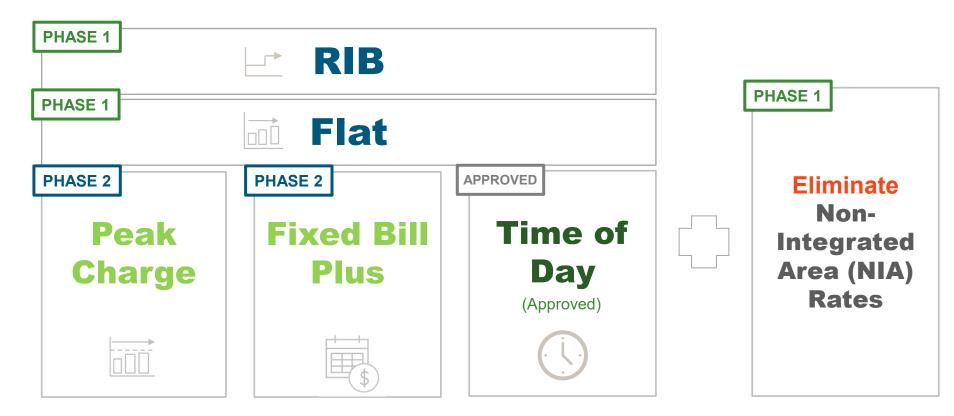


Eliminate Non-Integrated **Area Rates**

BC Hydro

Power smart

Filing Plan – Two Phases



Next

Phase I: Apply June 2024, Effective April 2025

Build a foundation for customer choices

Continue RIB Rate and Apply Pricing Principles – Foundation for customer choices

Continue to apply pricing principles to allow pricing adjustments to occur as general rate increases are known.

Optional Flat Rate for All Customers - Encourage electrification, improve affordability

Expand the Availability of an <u>existing</u> flat rate to all customers.

Eliminate Higher NIA Rates - Enhance equity, improve affordability, advance reconciliation

- Offer the same residential and commercial rates to NIA customers.
- Recover moderate revenue loss from all customers.

Eliminate Residential Multi-Unit Rates - Improve cost alignment

• Reduce basic charge for Residential Multi-Unit buildings receiving service through one account.



Next

RIB Rate Pricing Principles

How revenue general rate increases / decreases are applied to the three elements of the RIB rate:

- Basic Charge
- Step 1 Energy Charge
- Step 2 Energy Charge

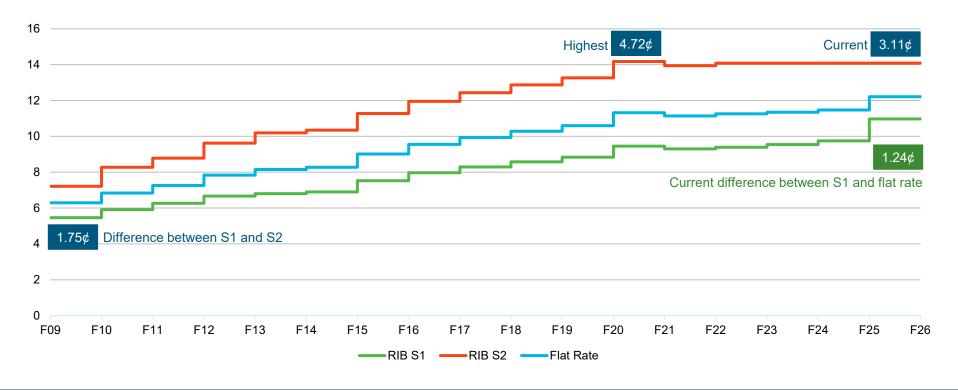
The current approved pricing principles will expire March 2025.

Fiscal Year	BCUC Order	Pricing Principle
F2009 - F2010	<u>G-124-08</u>	Approval of RIB Rate
F2011	<u>G-180-10</u>	Apply RRA % equally
F2012 - F2014	<u>G-45-11</u>	Step 2 increased to higher of RRA % or up to 10% bill impact
F2015 – F2016	<u>G-13-14</u>	
F2017 – F2019	<u>G-5-17</u>	Apply DDA 9/ oqually
F2020	<u>G-214-18</u>	Apply RRA % equally
F2021 – F2022	<u>G-62-20</u>	
F2023	<u>G-210-22</u>	Apply RRA % to Basic ChargeMaintain Step 2
F2024	<u>G-140-23</u>	 Apply rate increase to Step 1 to earn the fiscal year's forecasted revenue had RRA %
F2025	<u>G-61-24</u>	been applied equally

Next

RIB Energy Charges History

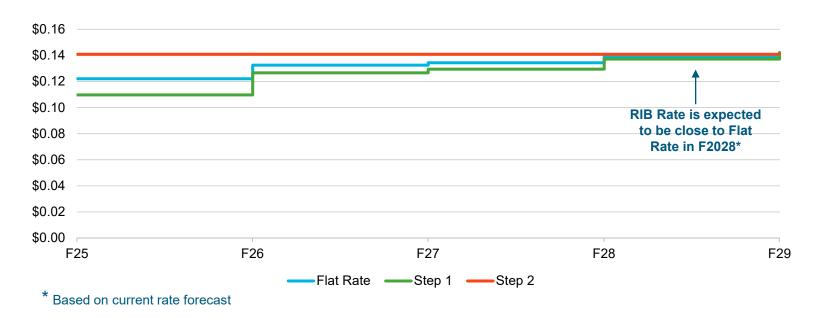
Step 1 and Step 2 gap increased significantly before F2023





Continue the RIB Rate & Apply Pricing Principles

Freeze Step 2 Energy Charge and Apply General Rate Changes Until RIB Rate = Optional Flat Rate



Feedback

Optional Flat Rate

By offering Optional Flat Rate, RIB Rate is no longer a mandatory rate

- BC Hydro's default Residential rate prior to the introduction of RIB Rate.
- Existing rate for approximately 15,000 Zone I farms and Zone IB Residential customers.



Basic Charge 24.03¢ per day



Next

Steps

Welcome

Optional Flat Rate Revenue Loss Recovery

Approximately 25% of customers with annual consumption greater than 13,500 kWh are expected to save under the Optional Flat Rate

Who might benefit?

- ✓ Electrically heated homes
- ✓ Customer with EVs
- ✓ Homes with secondary suites
- ✓ Large households
- ✓ Homes with no access to natural gas.
- ✓ Remote homes

- Revenue loss is expected to be temporary (F2026 and F2027).
- Based on current rate forecast, maximum revenue loss in F2026 is \$26M (if all benefiting customers opt-in).
- Experience in other jurisdictions suggests that not all customers will switch all at once even if they can benefit. For example, 7% of Ontario residents switched to a RIB rate three years after RIB was reintroduced as an option.

Temporary revenue loss to be recovered from all Residential Customers

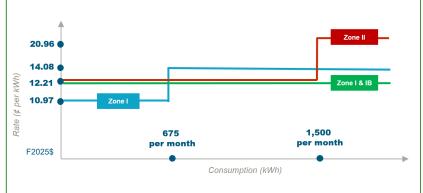


Next

Eliminate Higher NIA Rates

Residential

- Allow Residential customers (~5,700 accounts) to choose between the flat rate or RIB Rate.
- Almost all customers could have bill savings.



F2026 Estimated Revenue Loss: ~\$900K

Commercial

- Zone II rates were introduced in 1967.
- Medium and large commercial customers (~80 accounts)
 - Almost all are expected to have significant bill savings.
 - A handful of low load factor customers are expected to have bill increases.
- Small commercial customers (~1,200 accounts)

 - ~2/3 with very low or no consumption are expected to have moderate bill increases (<\$25/year).

F2026 Estimated Revenue Loss: ~\$1.4M

Next

Steps

Moderate revenue loss to be recovered from all ratepayers



Eliminate Residential Multi-Unit Rates

Eliminate basic charge multiplier and multiple Step 1 thresholds

Current Multi-Unit Residential Rates

Rate Schedule (RS)	# of Accounts	Total # of Dwellings	Avg Savings per Dwelling	Total Revenue Impact
RS 1121 (Zone I)	1,253	16,581	\$59	\$ (985,637)
RS 1161 (Zone IB)	15	51	\$66	\$ (3,357)
RS 1127 (Zone II)	4	31	\$159	\$ (4,917)

- Apply to Residential Premises contain more than 2 Dwellings
- Basic charge applies per Dwelling
- Step 1 energy threshold applies per Dwelling, if applicable

- > Eliminate basic charge multiplier to improve alignment to customer related costs
- ➤ Eliminate multiple Step 1 thresholds as individual Dwelling residents cannot see the price signal
- BC Hydro's proposed Electric Tariff amendment to section 4.4.1 will minimize new multi-unit rate customers.

Next

Steps

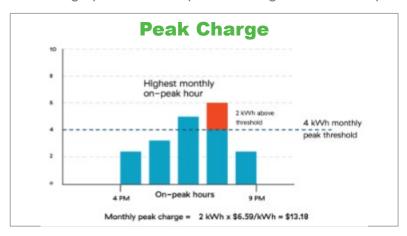
Moderate revenue loss to be recovered from All Residential Customers

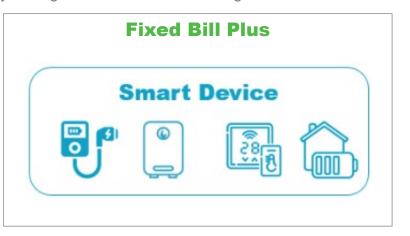
Phase II: Early 2025

Expand customer choices

Additional Optional Rates - Advance customer choices, encourage capacity savings

- Flat rate provides foundation choices provide savings rather than increases from RIB rate transition
- More time to develop options and pricing to suit customer needs and preferences
- Encourage peak consumption shifting to achieve capacity savings set out in the 2021 Integrated Resource Plan.





Next

Illustrative Transition & Implementation

Optional Rate Mandatory Rate F2025 F2026 F2027 F2028 **Residential Inclining Block (RIB) Rate Time-of-Day Rate Flat Rate Optional Flat Rate NIA Rates New Optional Rates Peak Charge Fixed Bill Plus Multi-Unit Rates** Other....

Multiple mandatory rates



The same rate options for all

Next

Next Steps

Chris Sandve

Chief Regulatory Officer



Our Proposal

- Expand the availability of RS 1151 an existing flat energy charge rate to all Residential customers
- Apply integrated area Residential and General Service rates to the Non-Integrated areas
- Reduce the Basic Charge for Multi-Unit Residential buildings receiving electricity service through one account
- Continue to apply pricing principles to the RIB rate to freeze the step 2 energy charge and to recover any revenue shortfall resulting from the step 2 energy charge freeze and the above changes through increases to the step 1 energy charge and the Basic Charge such that the RIB rate charges equal the RS 1151 rate charges as of fiscal 2028 (i.e., April 1, 2027)
- Establish a foundation to enable the introduction of more optional rates over time



Next

Next Steps





Closing Remarks

- BC Hydro values your participation and feedback on our rate design
- Please contact BC Hydro Regulatory Group with any questions about the regulatory or engagement process at <u>bchydroregulatoryfeedback@bchydro.com</u>
- An email will be sent early next week providing a link to the online feedback form



Application Proposal

& Timeline

