

Residential Rate Options Workshop Microsoft TEAMS chat May 1, 9 a.m. to noon

We are sharing the Microsoft Teams chat for those who were in person and may not have seen all the comments and questions raised in the virtual forum. We have removed references to names that would have been in the original chat.

[8:15 AM]

8:15 AM Meeting started

[8:49 AM]

Welcome to the Residential Service Rates workshop. A friendly reminder that questions from those attending virtually will be addressed using the Chat feature. Please ensure your microphone and video are off to help with connectivity issues and limit distractions. We will begin at 9am.

[8:59 AM]

Your first slide is dated March 13, 2024. Is this intentional? Has this been presented once already?

- It should be today's date. Thanks for catching that

[9:02 AM]

Hi everyone. We're going to get started in one minute. Thanks.

[9:25 AM]

A little provocative - "Do we really need rate choices"? What if the "phased approach" had several pilot rate "tests", where customers would sign up, and savings of electricity and costs were directly evaluated. Customers would have DSM equipment provided, installed, and training, including load management, electricity use displays etc. At the end of 3 or 4 months results would be studied, and "rate design" based upon the most "effective" would be further evaluated on a broader sample?

[9:26 AM]

During previous presentation, it was mentioned that the fixed bill plus rate would be based on previous year consumption. Slide 20 of today's presentation mention that this would be based on historical consumption plus a premium. Was it updated based on workshop #2 feedbacks ? Historical is related to how many years of consumption?

[9:26 AM]

Can speak a little to how these three additional options (beyond TOU) were chosen as the ones to explore?

[9:27 AM]

Rates should encourage customers to charge cars overnight/off peak, and to switch away from fossil fuels to cleaner energy.

[9:28 AM]

What was the margin of error in the survey results? Or another way, which of the differences in preference are statistically significant?

[9:30 AM]

Rates should not penalize our most vulnerable and marginalized populations. For example, peak rate pricing assumes people can choose when to consume power. Many working folks and families have no other option except to use power between 4 and 9 p.m., the only time they are at home.

like 1

[9:30 AM]

- see page 16 of the slides

[9:31 AM]

Consider special rates for low-income households to mitigate energy poverty.

[9:31 AM]

see page 16 of the slides

- Thanks,

[9:31 AM]

When responding to these survey questions, were customers given some information to suggest whether these rates would save them money or cost them money? A flat rate sounds great unless you are in a small apartment and will end up paying more for the same energy. Do people associate a flat rate with savings with no changes? Are they assuming they will have to change their energy use to save money? Understanding motivations seems highly relevant.

like 1

[9:34 AM]

Consider special rates for low-income households to mitigate energy poverty.

- Eversource (Utility company in Massachusetts) have an interesting specific rate , designed for low-income households. Would be interesting to explore similar options.
- like 1

YES!

like 1

[9:35 AM]

Situations where customers do not properly understand a rate option are very hazardous for BC Hydro: a customer who misunderstands what they are signing up for can become a very unhappy customer when they get their bills. A rate that assumes a relatively high degree of "electricity literacy" is hazardous and potentially inequitable.

like 1

[9:35 AM]

It would be fantastic to develop a virtual tool that customers could use to apply each of these rates to their actual previous years energy use, to see what they would be paying, or how they would need to shift their energy use.

like 5

[9:37 AM]

Great comments. We're pulling out the comments and questions specific to Adam's presentation at this point. We'll look at the other comments as we get to the BC Hydro presenters.

[9:37 AM]

It would be fantastic to develop a virtual tool that customers could use to apply each of these rates to their actual previous years energy use, to see what they would be paying, or how they would need to shift their energy use.

- Yes ! 100% agree. We recommended such a tool during previous workshop and Hydro said they would be looking into it!

like 2

[9:37 AM]

I may have missed this but was this an opt-in survey, or a probability (randomized) survey?

[9:38 AM]

I may have missed this but was this an opt-in survey, or a probability (randomized) survey?

- This was a probability/randomized survey.

like 1

[9:39 AM]

Does slide 29 re low income attitude toward flat rate contradict the lico column in slide 27?

[9:40 AM]

Based on some simulations I did, all proposed new rates would lead to an increase of electricity bills in apartment units. Especially for low/moderate income folks, if not possible to have specific rate for them, short-term solutions such as temporary bill protection, as well as long-term strategies like energy assistance programs, would be interesting to be explored.

like 2

[9:41 AM]

Just to fully understand the survey methodology, were participants asked to self-report their level of understanding, or were they asked to respond to questions about rates that would evaluate their understanding?

[9:42 AM]

Low income communities are being double penalized, first they are more likely to live in energy inefficient housing, or rental housing where owners have no incentive to improve efficiency; and second they have less ability to choose when to consume power due to employment restrictions or higher occupancy rates.

like 2

[9:44 AM]

Can electric vehicles communicate with BC Hydro to avoid charging at peak times? Similarly modern electric clothes dryers?

[9:45 AM]

Can electric vehicles communicate with BC Hydro to avoid charging at peak times? Similarly modern electric clothes dryers?

- You can buy EVSE's that will do that. I have one and BC Hydro pays me \$50 a year to turn down the unit during peak times.

[9:46 AM]

Thanks

[9:46 AM]

What data do you have on the ability of customers to actually control their usage? What about 2-job households with limited load flexibility?

like 2

[9:46 AM]

Here are the details under "Smart Charger" <https://electricvehicles.bchydro.com/incentives/charger-rebates/home>

EV charger rebate program for single-family homes | Electric Vehicles | BC Hydro

[9:46 AM]

Assuming you can shift when you use power is such a privilege.

like 1

[9:47 AM]

Is slide 30 the only explanation of the Peak Rate Option? What principle(s) would be used to determine the key parameters, like the threshold for being charged a Peak Rate during an hour, how much the discount would be for non-premium-priced consumption, and how much the premium would be for premium-priced consumption?

[9:47 AM]

Is the customer survey population statistically representative of the customer pool as a whole?

[9:48 AM]

10% (211,080) households in BC are currently experiencing energy poverty, learn more here: https://www.encycanada.org/?post_type=post&p=14283020

like 1

[9:49 AM]

Can peak rates be tied to actual demand or just based on historic high demand times?

[9:49 AM]

I assume the peaks are set based on coincident peak. Did you evaluate the impact of CP shifting on non-coincident peaks?

[9:50 AM]

I'm not clear on how the purpose of the Peak Rate Option differs from the purpose of the approved TOU rate.

[9:50 AM]

would it make a difference if I spread out my usage between 4-9? after all it is the same consumption during these hours right? So will it matter if I used every appliance all together or move them around between 4-9?

[9:50 AM]

2 tier rate encourages higher use of fossil fuels. Bad!

like 2

[9:51 AM]

I've missed some previous workshops so apologies on this question: why does the TOU rate need to have a higher rate during 4-9pm? If the idea is to incentivize shifting loads to middle of the night, like EVs - wouldn't it still be a benefit to the ratepayers to just have a lower rate in the middle of the night? There could be choices here - very low rate in middle of the night with a higher rate 4-9pm, and a somewhat lower rate in the middle of the night with no rate change 4-9pm.

[9:51 AM]

On the 2-tiered rate: Do you have statistical evidence that the cost of service increases for usage in the 2d tier? Are those increases associated with generation costs? Transmission costs? Distribution costs? Other?

[9:54 AM]

seems like TOU rate with lower 4-9pm rate would encourage people to keep/get gas cooking appliances to offset the higher rate at a time when they can't change certain behaviour.

[9:54 AM]

seems like TOU rate with lower 4-9pm rate would encourage people to keep/get gas cooking appliances to offset the higher rate at a time when they can't change certain behaviour.

- sorry, higher 4-9pm rate.

[9:55 AM]

Do you know if there is any economic principle that says the pricing of a service should mimic the cost structure of the service provider in order to maximize economic efficiency? (I have never found one.)

[9:56 AM]

What kinds of devices can be controlled by BC Hydro? How common are they, and what is the cost premium? I can understand why people would have a lot of Q's about this - I do too!

[9:56 AM]

Laundry - washing with cold water requires low energy, then dry overnight/low demand time should be encouraged.

[9:56 AM]

On the fixed bill rate - how does this square with the rate making principle that rates should encourage efficient consumption on a going forward basis? (Bonbright)

like 1

[9:57 AM]

The Fixed Bill Rate seems to contain multiple components that don't necessarily jibe with an overriding purpose of customer predictability of the amount paid for electricity. For example, weather normalized means a participant might pay considerably more, or less, than during the reference year despite identical consumption.

[9:59 AM]

We also might want to start moving away from relying on StatCan's definition of low-income for utility rate design as more and more middle-income households are now experiencing energy poverty. A design that would tie the utility rate to the household's level of energy poverty would be more equitable.

heart 3

[10:01 AM]

What about some field testing, instead of questionnaires?

[10:01 AM]

It would be good if BC Hydro would be willing to model and include a rate tied to income in these materials, even though such a rate requires amendments to the Utilities Commission Act. It's not out of the question that govt. could enable such a change by Spring 2025

like 3

[10:01 AM]

Has the utility conducted or sponsored an actual demand elasticity study?

[10:04 AM]

Regarding 'more research,' I think there's two fundamentally different issues that BCH is grappling with. One is flat rate v RIB rate as the default rate. The second issue is what optional rates could be useful. For Flat rate v RIB rate, the big research question would be whether the RIB rate actually does not promote conservation anymore. For the optional rates, this whole area seems to be driven by a sense that somehow having new optional rate designs will reduce the pain of choosing between Flat rate and RIB rate.

[10:05 AM]

Hasn't Hydro already established that the RIB does not encourage conservation anymore?

like 1

[10:06 AM]

as a Hydro customer, something that still isn't clear to me is which rate and what behaviours I would need to employ to reduce my costs as much as possible if I move from gas heating and hot water to electric to reduce my carbon emissions.

[10:08 AM]

How does BCH guarantee that it will both cover all its revenue requirements and not overcharge, while allowing people to choose different rate structures?

[10:10 AM]

as a Hydro customer, something that still isn't clear to me is which rate and what behaviours I would need to employ to reduce my costs as much as possible if I move from gas heating and hot water to electric to reduce my carbon emissions.

- For what it is worth..., we moved off gas for our house and spend less now than we did with gas. A cold climate heat pump for space heating and a heat pump water heater made that happen. Even with today's rate our overall monthly cost went down.

like 1

[10:10 AM]

Does increasing the range of options tailored to different customer consumption patterns not tend to maximize free-ridership and minimize the behavioural impact of rate design?

like 1

[10:11 AM]

Not if the desired behaviour is to encourage electrification? It seems like a necessary trade-off unless you have end-use specific rates

[10:11 AM]

I don't understand the statement that low-use customers don't pay their cost of service and high-use customers over-pay. That seems to be solely an artifact of the fact that customers with low-use use less than the average. Or does BC Hydro actually have separate cost of service studies for low-use and high-use customers. My experience is that high use customers cause higher costs - the line slopes upwards.

[10:12 AM]

The majority of BC's Indigenous non profit housing are older single family homes, these homes are not energy efficient and are frequently reach the step 2 energy rate.

like 1

[10:12 AM]

I am concerned that the proposed rates might not actually incentivize electrification. BC Hydro mention during last presentation that peak rate would be the best one to achieve this goal. However, the extra charge (\$6.59/kWh above the limit) between 4-9PM might be tricky. E.g., a split heat pump consumes around 2-2.5kWh (an hour period). With the proposed threshold being 4kWh, many homes would trigger this peak charge...

[10:12 AM]

How does BCH guarantee that it will both cover all its revenue requirements and not overcharge, while allowing people to choose different rate structures?

- IN other words, I don't see how you can guarantee revenue neutrality without knowing the distribution of customers and rate choice.

[10:12 AM]

For what it is worth ..., we moved off gas for our house and spend less now then we did with gas. A cold climate heat pump for space heating and a heat pump water heater made that happen. Even with today's rate our overall monthly cost went down.

- That is really good to hear ..., and I know you spread the word on that! I think some level of certainty or information to reduce perceived risk of energy cost increases would be so great to have. Hydro has customer usage data, it doesn't seem like a huge stretch to give some potential (insert disclaimers here) utility bill changes based on changing certain equipment.

[10:14 AM]

Chris - please contact me re your costs. Very interesting ... Thx

like 1

[10:14 AM]

options are great, but you need a tool to help people choose the best option for them.

[10:15 AM]

The Time-of-Day rate encourages poor electrical design for MURBs. It essentially moves costs from BC Hydro to developers and customers. It is the worst method to apply in efforts to realize peak shaving. BC Hydro is trying to solve a problem from the wrong perspective, which ultimately results in lower costs for BC Hydro at the expense of customers.

[10:15 AM]

BCH refers to a study that it interprets as meaning that the RIB rate doesn't encourage conservation anymore. I'm not disputing that report. But the outcomes of the research depends heavily on elasticity parameters, which in turn are very difficult to estimate. What I'm saying is that IF there is a desire for more research, then in terms of the politically big issue (Flat v RIB default rate) the consumption impact retaining RIB versus the consumption impact of going to Flat would be an important topic to learn more about. It should also be noted that BCH would have applied to the BCUC several years ago to flatten the RIB default rate but for the BC government getting cold feet about the potential political blow back of the rate impact of flattening on most customers (not because of either the nuances of elasticity estimates or the notion that residential customers want "options" more than lower bills.

like 1

[10:36 AM]

then people don't necessarily need to have additional technology.

[10:36 AM]

What does BC Hydro plan to do to enable customers to track and manage peak charges? Real-time consumption data? Demand response programs? Advanced energy efficiency programs? And how does BC Hydro plan to address customer peak shifting that is uneconomic, i.e., from the customer peak to the system peak?

[10:36 AM]

Yes the Peak Savers events right?

- yes. Separately Peak Rewards is the automatic option where the hardware does it automatically and you get \$50 a year.

[10:37 AM]

If BC Hydro already has a peak rewards program, why do you need a rate that charges them - just activate the load control device.

[10:40 AM]

Slide 59. Most respondents support a transition from RIB ... but is this on the premise that the RIB default rate is disappearing and the question is immediate versus transition?

[10:41 AM]

Is BCH considering allowing customers to transition at earlier in-service dates?

[10:43 AM]

It sounds like the fixed bill concept intentionally deviates from cost to serve. Is that right?

[10:44 AM]

what does RIB stand for?

[10:44 AM]

With the smart control devices it means that BC Hydro is now working beyond their area of expertise. BC Hydro should not be entering into product sales and/or be involved in anything beyond the demarcation of the meter. BC Hydro is now impacting electrical design for buildings, which is outside their area of expertise, and therefore they do not understand the consequences.

like 1

[10:45 AM]

what does RIB stand for?

- Residential inclining block

[10:46 AM]

Thanks

[10:46 AM]

Is RIB available to condo owners?

[10:47 AM]

My preference is for a "continuing incline" rate: low users pay lower rates, and larger users causing larger costs for BCH would pay a greater rate, greatly encouraging conservation and reduced demand.

like 1

[10:47 AM]

Thank you for this explanation!

[10:53 AM]

since, based on previous comments, the act does not allow for low-income-focused rates (for now at least), does this application propose policies to avoid cut-offs for vulnerable households? Especially during winter months and extreme weather events.

[10:53 AM]

A major concern is that BC Hydro are not cognizant of their limitations. Where are the Engineers within BC Hydro fulfilling their professional obligations to inform the non-Engineers in the company when they area entering areas well outside their area of expertise?

[10:54 AM]

Does Hydro think its current proposed package would still work if the BCUC were to reject one of the rates, e.g. the Fixed Bill Plus?

[10:55 AM]

Taking a phased approach is potentially even more reason to include consideration of an income/means-tested rate for Phase 2 - in case the Province decides to remove the BCUC's current limitations

like 3

[10:57 AM]

What would be the proposed default rate? Any updates re: considering the default rate as the minimizing option

[10:59 AM]

If there is a low-income rate, in order to be revenue-neutral, would other ratepayers subsidize this rate or the shareholder?

[11:00 AM]

Side comment: when describing rates to people, research and focus groups show it is much better to frame things in a positive manner (do charge your vehicle when rates are lower) versus in a negative manner (don't do this, stop doing that).

[11:00 AM]

Rates must encourage all customers to transition away from fossil fuels!

like 2

[11:01 AM]

Rates should encourage grid tie solar!

[11:04 AM]

If step 2 is eliminated, won't the lower use segment face substantial % increases?

[11:05 AM]

Slide 63. To be clear, does Optional Flat Rate for All Customers mean that any RIB customer could switch to the same flat energy charge rate (e.g., farm use)? What are the revenue implications? Would the lost revenue be recovered from the Residential class as a whole?

[11:05 AM]

If there is a low-income rate, in order to be revenue-neutral, would other ratepayers subsidize this rate or the shareholder?

- I think that would be decided by the shareholder!

[11:13 AM]

Instead of such a massive investment of time and cost in developing new rate structures, we would suggest BC Hydro address the existing problems BC Hydro has created in the electrical construction industry. Fix the existing problems, prior to moving on to make new mistakes.

[11:13 AM]

I may be wrong, but it looks like small users, step 1, at about 10 c would move to a flat rate of 12 c. That's at 20% increase.

[11:14 AM]

Bringing my question back: am I understanding, then, that once the different rates are launched, once BC Hydro sees whether that combination of customers and rates covers its revenue requirements or not, then it will adjust rates accordingly?

[11:14 AM]

I may be wrong, but it looks like small users, step 1, at about 10 c would move to a flat rate of 12 c. That's at 20% increase.

- They would likely just stay with the RIB / two step option.

[11:16 AM]

Will BCH bring forward information on the GHG emissions impact of reducing NIA rates (given predominately diesel generation)?

like 1

[11:16 AM]

For NIA rate changes, what would be the transition period?

[11:17 AM]

For NIA rate changes, what would be the transition period?

- And what justification would there be for any transition period?

[11:18 AM]

What types of supports will BCH be providing to assist NIA customers in making rate choices?

[11:19 AM]

I would be interested in the cost/benefit study of reducing Zone 2 fuel use by BCH installing solar and deep DSM, vs rate changes to facilitate costs and emissions.

[11:23 AM]

Zone 2/NIA (First Nations communities) the only significant exception to universal residential postage-stamping of rates. Differential cost is not a defence to a violation of the Human Rights Code unless it can be demonstrated to amount to undue hardship. A few million out of a multi-billion revenue requirement certainly falls short of that standard.

[11:23 AM]

Should have been eliminated a long time ago

like 1

[11:24 AM]

And the fact that these communities are off-grid is actually a direct result of the course of colonialism

like 2

[11:25 AM]

Thank you for your responses, Chris and Shiau-Ching.

like 1

[11:29 AM]

So, for the MURB Rate 1121, the basic charge (20 cents/dwelling/day) will no longer be charged per dwelling but on a building basis? And the Steps 1 & 2 energy charges will be based on the total building consumption, and not on a dwelling basis anymore? Did I get it correct?

[11:30 AM]

thanks

[11:31 AM]

Does that affect dwelling users incentive to use less, if it's building based?

[11:32 AM]

Will the June application include a discussion of the status of these other rate options?

[11:32 AM]

re MURB, slide 70, what does "Step 1 energy threshold applies per Dwelling, if applicable" given Shiao-Ching's confirmation to Gabriel that the proposal is that Step 1 and 2 energy charges would be based on total building consumption?

[11:34 AM]

Are there changes proposed to how easy it will be or how often a customer will be able to change rates when there is more choice?

[11:34 AM]

Okay, thanks for the explanation.

[11:34 AM]

What would be the proposed default rate ? It is not clear to me. Any updates re: considering the default rate for each customer as their minimizing option ?

[11:40 AM]

Good session. Thanks folks!

[11:41 AM]

On the NIA rate it would be good to address both the revenue loss, and BCH's investment in deep DSM and solar to offset the fuel costs, and reduce costs.

[11:41 AM]

Thanks!

[11:41 AM]

Thank you for the session.

[11:41 AM]

Thank-you!

[11:41 AM]

thank you all!

[11:41 AM]

thanks!

[11:42 AM]

11:42 AM Meeting ended: 3h 40m 50s