BC Hydro Integrated Resource Plan

Technical Advisory Committee Meeting #3a Summary Notes June 18, 2020

Meeting	Technical Advisory Committee – Meeting #3a Capacity Focused Rate Design Options & Demand Side Management Options
Date	June 18, 2020 – 1:00 p.m. to 3:00 p.m.
Location	Webex Virtual Meeting
Committee attendees (participants and alternates)	BC Hydro – Committee Chair & Presenter – Kathy Lee BC Hydro – Committee Moderator & Presenter – Basil Stumborg Association of Major Power Consumers (AMPC) – Carlo Dal Monte BC Public Interest Advisory Council (BCPIAC/BCOAPO) – Irina Lis BC Public Interest Advisory Council (BCPIAC/BCOAPO) – Leigha Worth BC Sustainable Energy Association (BCSEA) – Thomas Hackney Commercial Energy Consumers Association of BC (CEC) – David Craig Commercial Energy Consumer Association of BC (CEC) – Janet Rhodes FortisBC (Electric) – Mike Hopkins Ministry of Energy and Mines (MEM) – Warren Walsh MoveUP – Jim Quail
BC Hydro attendees	Anthea Jubb – Presenter Paulus Mau – Presenter Eddie Young – Presenter Kristin Hanlon – Presentation support Tony Chu – Presentation support Kala O'Riordain – Presentation support Arsia Assadipour Bill Clendinning Sanjaya De Zoysa Dale Flood Fred James Margo Sadler Chris Sandve Amanda Ward Anne Wilson
Meeting materials	Presentation slides

Welcome & Introduction
Presented by Basil Stumborg (Slides 1-15)

Summary of Comments

Technical Advisory Group (TAC) participants asked questions about demand-side management (DSM) and how various conservation programs would align with load expansion or attraction programs, such as electrification or electric vehicle (EV) initiatives, and how both concepts will present themselves in the IRP. Specifically, are the conservation goals of Power Smart, and the load growth from the Government of B.C.'s CleanBC initiative, in alignment.

Secondary points of discussion included policy impacts to low income households, load shifting initiatives, like time-of-use rates, and how they could be used as a capacity supply-side option in the IRP by incenting users to shift electricity use to non-peak times.

Finally, there was discussion around timing of the IRP, and how its release would be in policy alignment with other instruments like Government of B.C.'s Comprehensive Review of BC Hydro Phase 2 Report.

Capacity Focused Rate Design Options
Presented by Anthea Jubb / Paulus Mau (Slides 16-24)

Summary of Comments

BC Hydro walked through capacity-focused rate designs, and what would be in scope for an IRP, and what would not.

TAC participants had several follow-up questions about the optionality of participating in time-of-use rates, and how customers could benefit from this option, while not being unduly harmed if they cannot participate. There was further comments and discussions about the value to BC Hydro of reducing our system capacity peak.

There were several questions that dealt with specific details about the structure and design of rates that were outside of the scope of this IRP but are in scope for BC Hydro's next applicable rate design application.

Q&A Notes

Q: Is BC Hydro is examining time-of-use on both a default rate (with a possible opt out) and an optional basis (would require customers to actively opt in)?

A: Confirmed, we are examining both options.

Q: What forms of capacity savings are most valuable to BC Hydro?

A: We are interested in reducing our system peak demand, which is, typically, during a winter evening.

Q: Is BC Hydro hoping to save investment in transmission/distribution facilities or generation by reducing capacity peak?

A: Effectively designed capacity focused rates can assist in deferring capital investments in all areas.

Q: Why is there no optional peak time rebate for commercial customers?

A: We are not planning peak time rebate-type rates in this IRP, since some of BC Hydro's capacity focused DSM programs address these goals.

Q: How will the rates related recommendations in Phase 2 review be included in the IRP?

A: BC Hydro is anticipating rate design concepts coming out of the Phase 2 of the Government Review, and BC Hydro may want to advance them over the near term and in advance of the completion of the IRP. For example, a time-of-use rate for EV charging services, may come sooner than the filing of the IRP. We have not fully confirmed a timeframe.

Q: Would you consider separating between system cost and energy cost – which may allow customers to acquire energy at lower cost – such as at different times of the day regionally?

A: We will consider that submission, specifically if this would be a "postage stamp" rate or other type of rate option.

Demand Side Management Options
Presented by Eddie Young / Kristin Hanlon (Slides 25-45)

Summary of Comments

BC Hydro presented several slides on demand-side management in the IRP. Participants were very engaged on demand-response topics, such as reducing winter peak and load curtailment programs. Energy options, like solar distributed generation, also generated discussion as a potential resource option.

TAC participants had a high level of interest in electrification initiatives and potential coordination with DSM initiatives.

Q&A Notes

Q: One of the significant possible outcomes from the Government of B.C.'s Comprehensive Review Phase 2 is a strong mandate to BC Hydro to pursue low-carbon electrification to help meet the CleanBC goals. Will Hydro work on a low-carbon electrification Potential Review as part of the IRP?

A: We are waiting for the issuance of the Phase 2 Report but in the meantime, we have a model like the energy efficiency Conservation Potential (CPR) model where we can look at the potential for electrification for a limited number of end-use cases. We are starting to update the model, which should be ready just after the release of the Phase 2 Report.

Q: Is there a distinction between DSM (which dis-incents consumption) and encouraging more efficient use? Isn't dis-incenting demand for electricity counter-productive to electrification?

A: BC Hydro feels that DSM programs and low carbon electrification are complimentary concepts. You can add new load through low-carbon electrification and you can do it efficiently. This aligns with DSM programs which encourages existing load to be more efficient. To the extent customers are taking on more load they want bill savings opportunities. Demand-side management can be complimentary in this regard.

Q: Does your market potential forecast introduction of efficiency standards? Given they will occur in the future, are you estimates "over estimating"?

A: No – it only includes codes and standards that are planned or announced. We can adjust our baselines as other standards become firmer in the future.

Q: Why is peak saver limited to residential customers?

A: Load curtailment is similar to peak saver (in that both allow BC Hydro to give notice to reduce load). We have load curtailment programs for large commercial customers. Under normal circumstances, BC Hydro can typically provide day-ahead notice for commercial customers about the need to curtail load.

Q: Could you provide more details on solar generation?

A: BC Hydro is modelling adoption rates for solar generation. This helps us consider how incentives and capital costs will impact uptake for solar distributive generation.

Session Schedule & Next Steps
Presented by Basil Stumborg (Slides 46-48)

To conclude the session, BC Hydro conducted a roundtable of all participants as an opportunity for them to summarize their feedback, which is provided in the table below.

Consideration of TAC Meeting Feedback

TAC Member Feedback	Consideration
How would BC Hydro ensure that it does not pay far more for energy delivered through solar net metering than the value of the energy at the time when it is delivered?	We will take this question away and circulate a response.
Is BC Hydro looking at a rate to encourage electric vehicle charging stations?	Yes, and BC Hydro may advance this earlier than the IRP. One of those we are looking to advance is an Electric Vehicle Charging Station rate option.
Time-of-Use residential rates remains a large concern.	Specific questions about time-of-use rate design are more in scope for BC Hydro's next applicable rate design application.
Does BC Hydro provide 24-hour notice to customers for load curtailment?	The notice period is a program design issue. Based on our past pilots, a day-ahead notice was typically expected. However, sudden changes in operational requirements may shorten the notice period (e.g. one-hour notice).
With the IRP, we could look at the fact that industrial customers will have excess connected capacity. So from a demand response perspective, there may be an opportunity to be considered.	Those types of discussions are in scope for this IRP.
Will winter 2020 represent a change in the load profile with so many working from home. Is the peak load time now 12 hours rather than 4 or 5 hours?	BC Hydro will review this closely as more results come in from our consumption demand in the COVID environment.