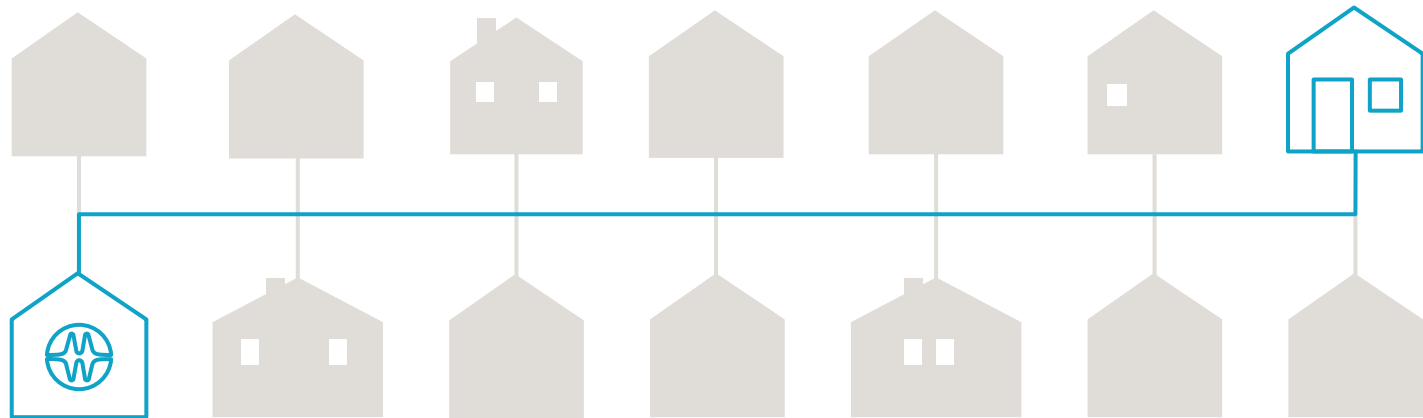# BC Hydro Net Metering Informational Webinar

February 16, 2021

Webinar agenda

1. Introductions
2. Program status
3. Survey
4. Costs and benefits
5. Future

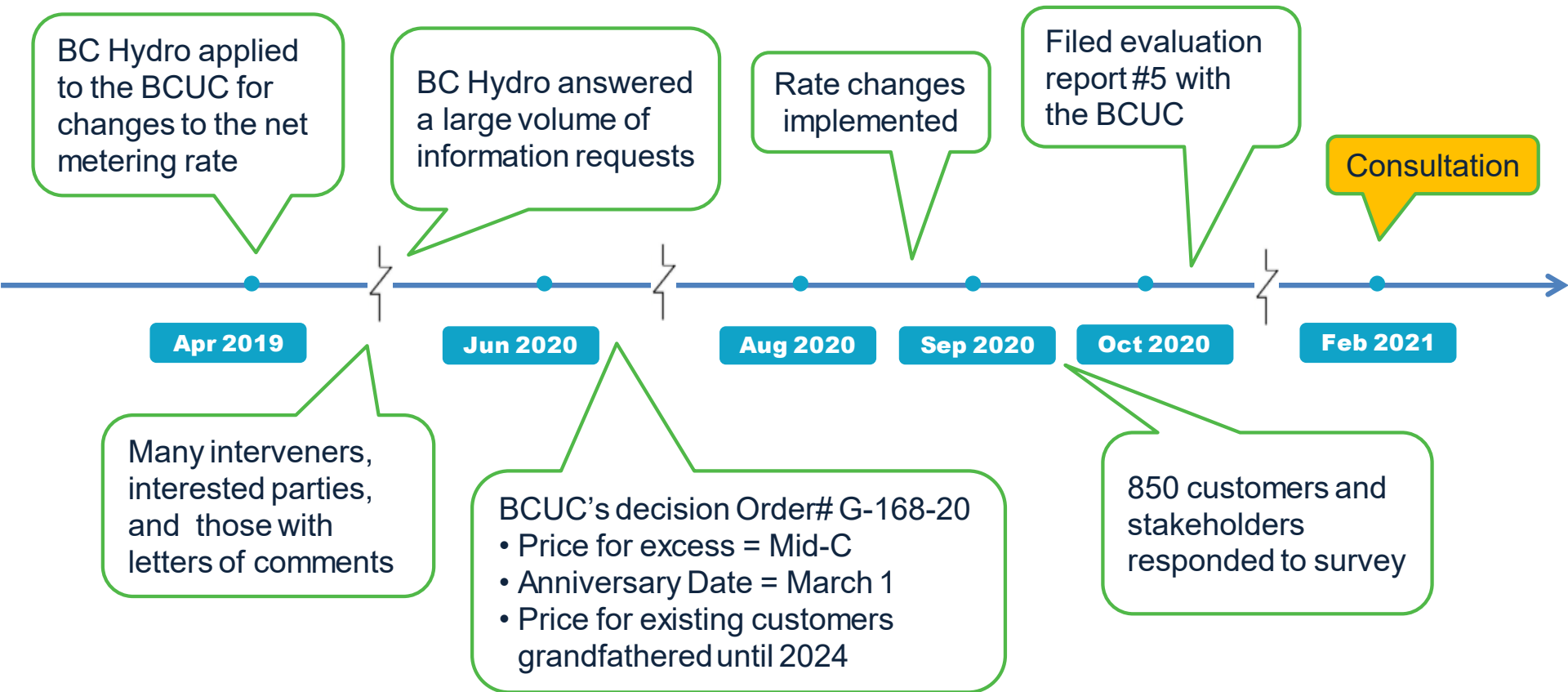**Last 30 minutes are reserved for your Questions & Answers**

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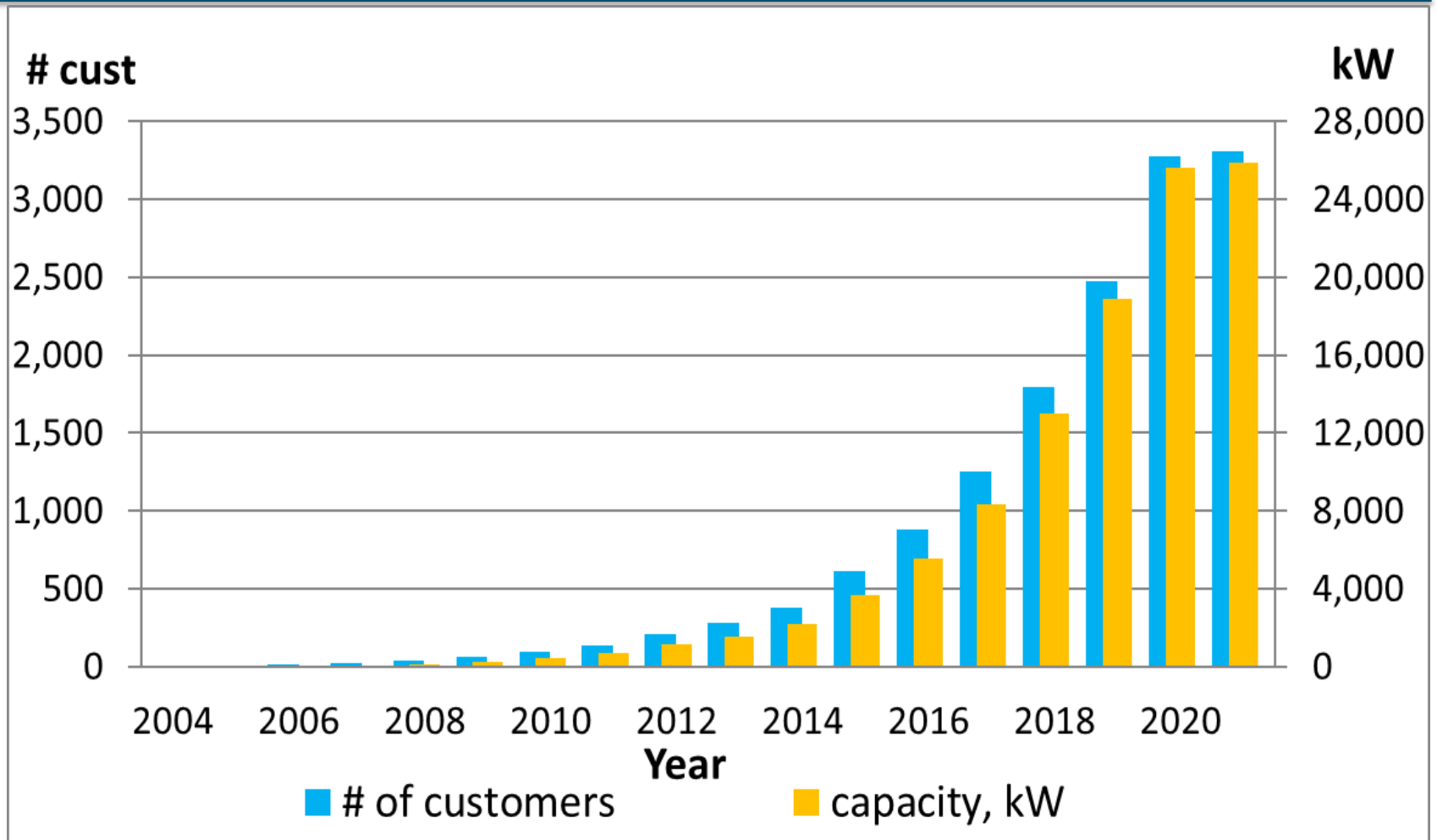Power smart

Speakers

Daren Sanders	Director, Contact Centre and Billing Operations
Anthea Jubb	Senior Regulatory Manager, Tariffs
Ken Bell	Manager, Business Innovations and Operations
Kari Baker	Manager, Customer Experience
Alevtina Akbulatova	Net Metering Program Manager
Alex Tu	Senior Strategic Technology Specialist

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Status of Net Metering program at BC Hydro

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What happened in the last 2 years

BC Hydro applied to the BCUC for changes to the net metering rate

BC Hydro answered a large volume of information requests

Rate changes implemented

Filed evaluation report #5 with the BCUC

Consultation

Apr 2019

Jun 2020

Aug 2020

Sep 2020

Oct 2020

Feb 2021

Many interveners, interested parties, and those with letters of comments

BCUC's decision Order# G-168-20
• Price for excess = Mid-C
• Anniversary Date = March 1
• Price for existing customers grandfathered until 2024

850 customers and stakeholders responded to survey

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Net metering program growth

as of February 1, 2021

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Net metering by the numbers

By number of customers

3,300 customers

- Van Island 45%
- Lower Mainland 30%
- South Interior 19%
- Northern 6%

as of February 1, 2021
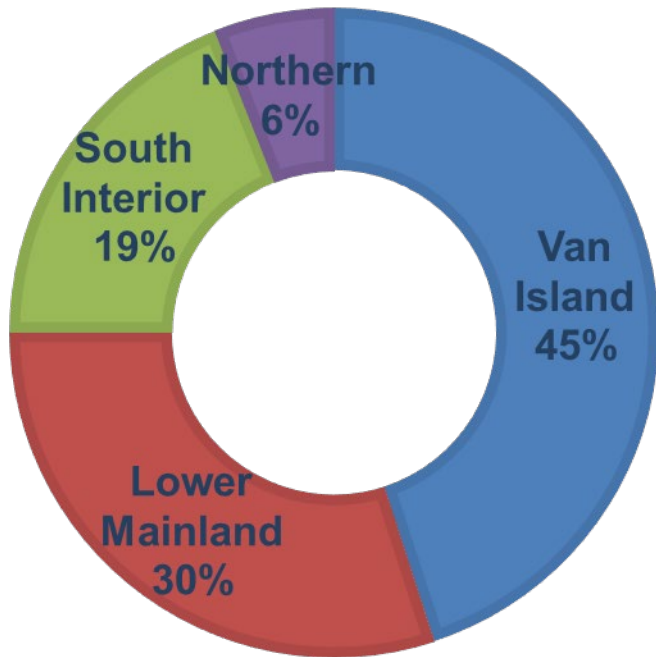
By installed capacity

Cumulative size 26 MW

- Hydro < 3%
- Others < 1%
- Solar 97%

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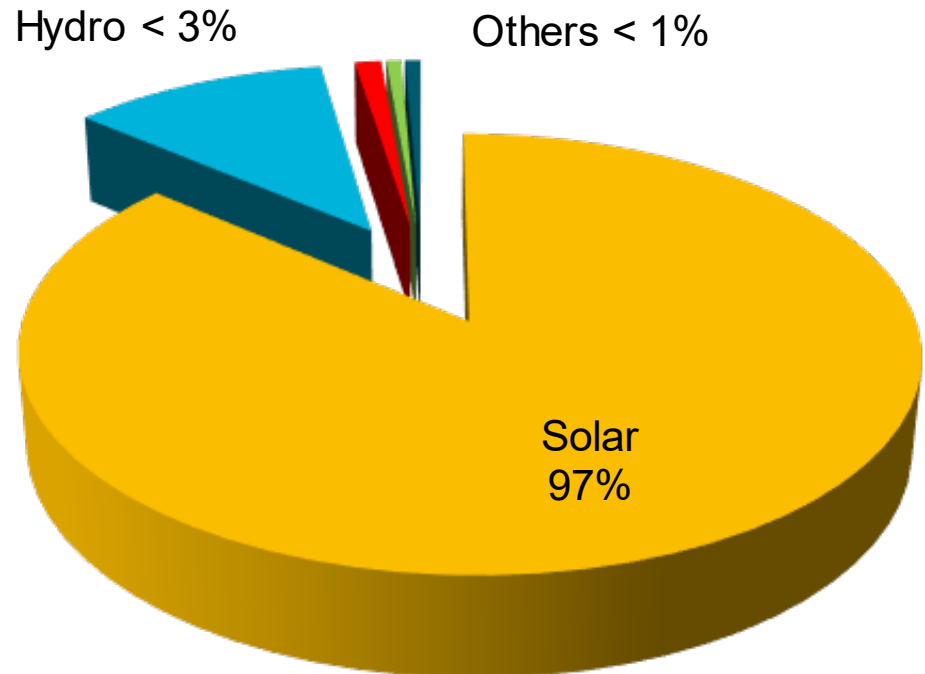
Program status

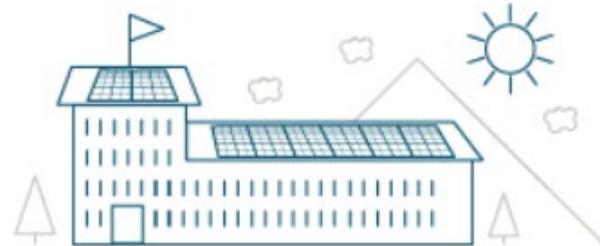Net metering is available to customers to generate electricity for own use

Simple Net Metering

Simple Net Metering

For inverter-based projects up to 27 kW in size with a self-contained revenue meter for service 200A or less

Complex Net Metering

Complex Net Metering

All other projects up to 100 kW

Net metering program is alive and growing

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Net Metering Survey Results: September 2020

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Why you participate in net metering

Doing your part for the environment

Saving money

Creating a new energy future

Is BC Hydro doing enough to support Net Metering?

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How satisfied are you?

Customer satisfaction with:

Billing	Interaction	Overall expectations	Web info
81%	64%	57%	50%
Customers: % of strongly agree and agree			

Meeting the needs of British Columbians:

Barriers	Extremely or very well	Moderately
86% yes	19%	55%
Other interested parties: %		

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What do you like/dislike most?

- Simple, clear, easy and fast

- Financial returns and offsetting your energy charge

- Energy banking and building up the generation account
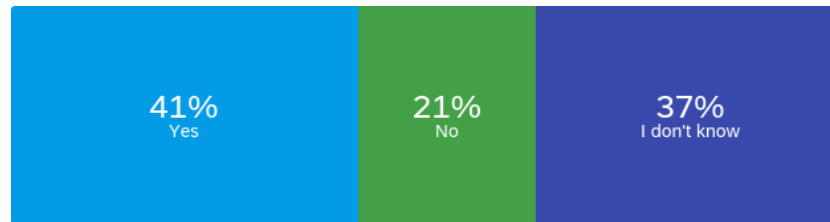
- Appreciate having the grid as back up

- Compensation

- Program structure, rules and limitations

- Confusing, understanding how the program works
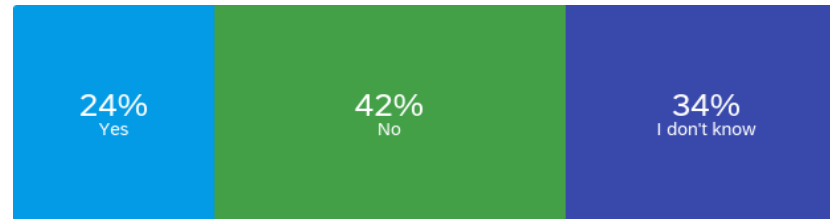
- Nothing or too soon to say

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Future program considerations

Do you support _____ as described?

Virtual net metering

Yes	No	I don't know
41%	21%	37%

Marginal cost pricing

Yes	No	I don't know
24%	42%	34%

Treatment of hydro…

Yes	No	I don't know
45%	21%	33%

Legend: Yes | No | I don't know

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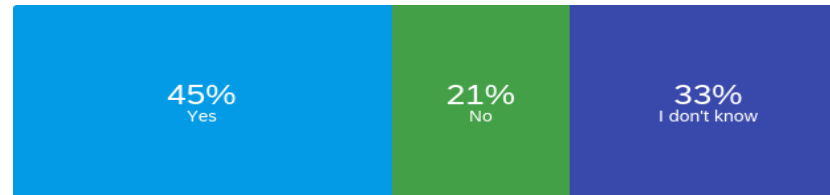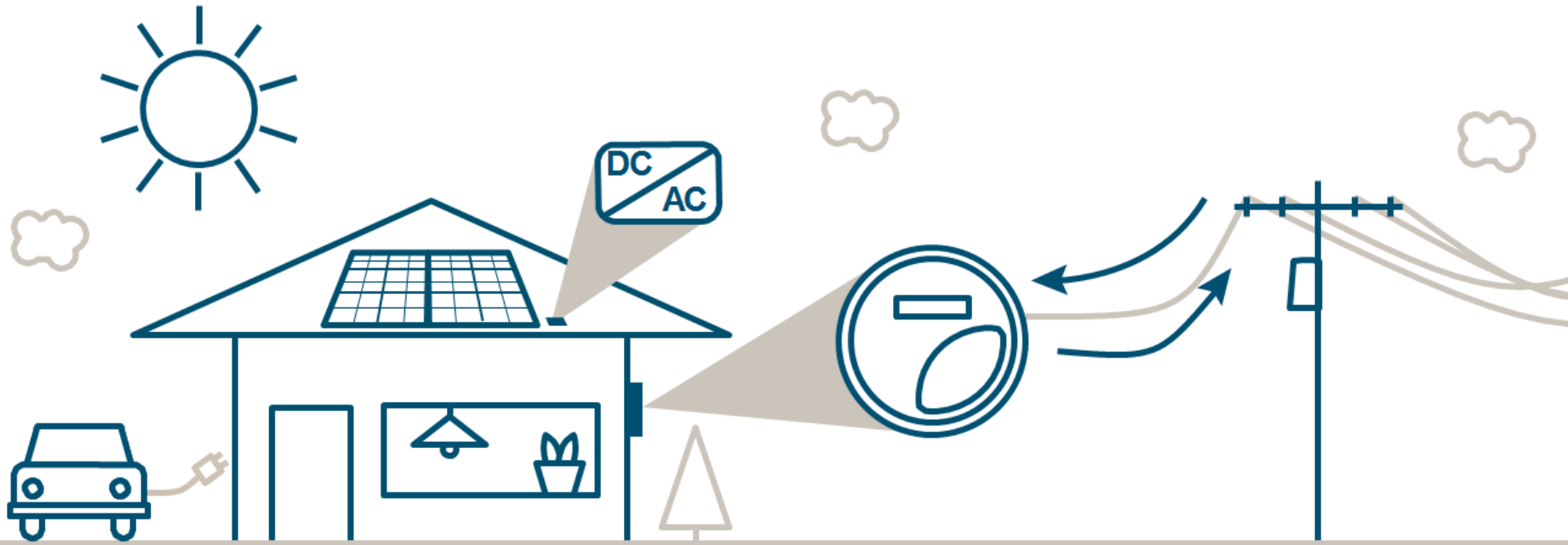
What else did you have to say?

- You would like to see us promote the program more

- You would like us to consider how net metering fits with the new energy future

- You made many suggestions about improving the application process

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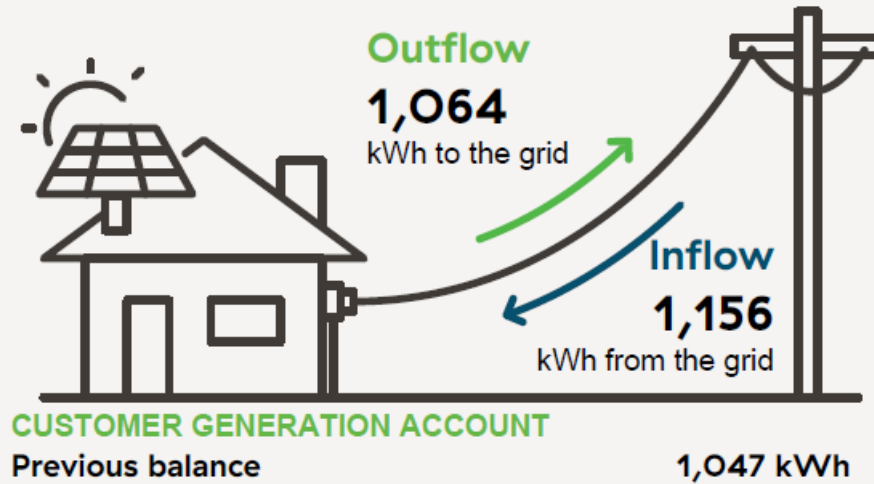# Do solar panels improve reliability?

Battery storage is required to use solar panels during a power outage

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Energy price

Your net metering this period

As a net metering customer, your smart meter runs in two directions: inflow (electricity from the grid) and outflow (electricity to the grid.) Here is how your net electricity usage is determined:
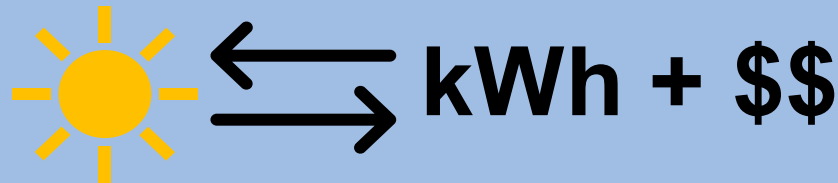
Outflow
1,064
kWh to the grid

Inflow
1,156
kWh from the grid

CUSTOMER GENERATION ACCOUNT
Previous balance   **1,047 kWh**

Residential Rate 1101

Energy Charge

Step 1   **$0.0930** per kWh
          for first 1,350 kWh

Step 2   **$0.1394** per kWh
          over 1,350 kWh

kWh + $$

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# Costs and Benefits

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Study results – average cross-subsidization per account

In F2019, BC Hydro's cost to serve RS 1289 accounts exceeded revenue and benefits across all customer and generation types

| Customer Class	Technology	Total Number of Participants	Average Cross-Subsidization per Account per year ($)
Residential	Solar	1,611	(612)
	Hydropower	7	(17,355)
Medium General Service	Solar	48	(3,940)
Large General Service	Solar	45	(66,577)

Reference: Section 6.1 BC Hydro Net Metering Evaluation Report NO. 5;

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Cost of Service Study methodology
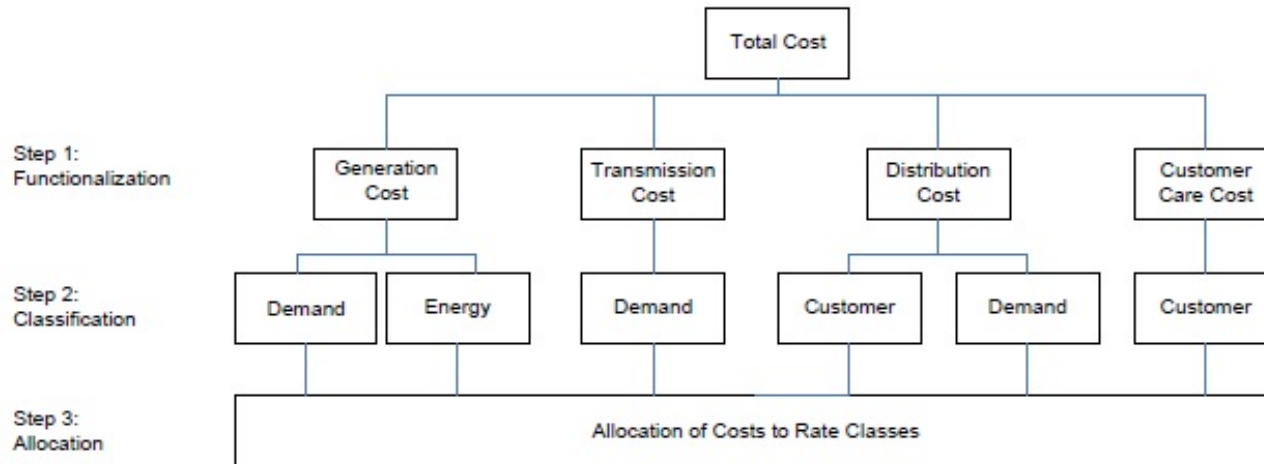
Classified Cost	Cost Allocator
Energy Related Cost	Proportion of total energy
Generation Demand Related Cost	Coincident Peak Factor
Transmission Demand Related Cost	Coincident Peak Factor
Distribution Demand Related Cost	Non-Coincident Peak Factor
Customer Related Cost	90% number of bills, 10% revenue

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24-hour load profiles of residential hydro net metering customers by Season

Source: Figure 5 in Evaluation Report #5

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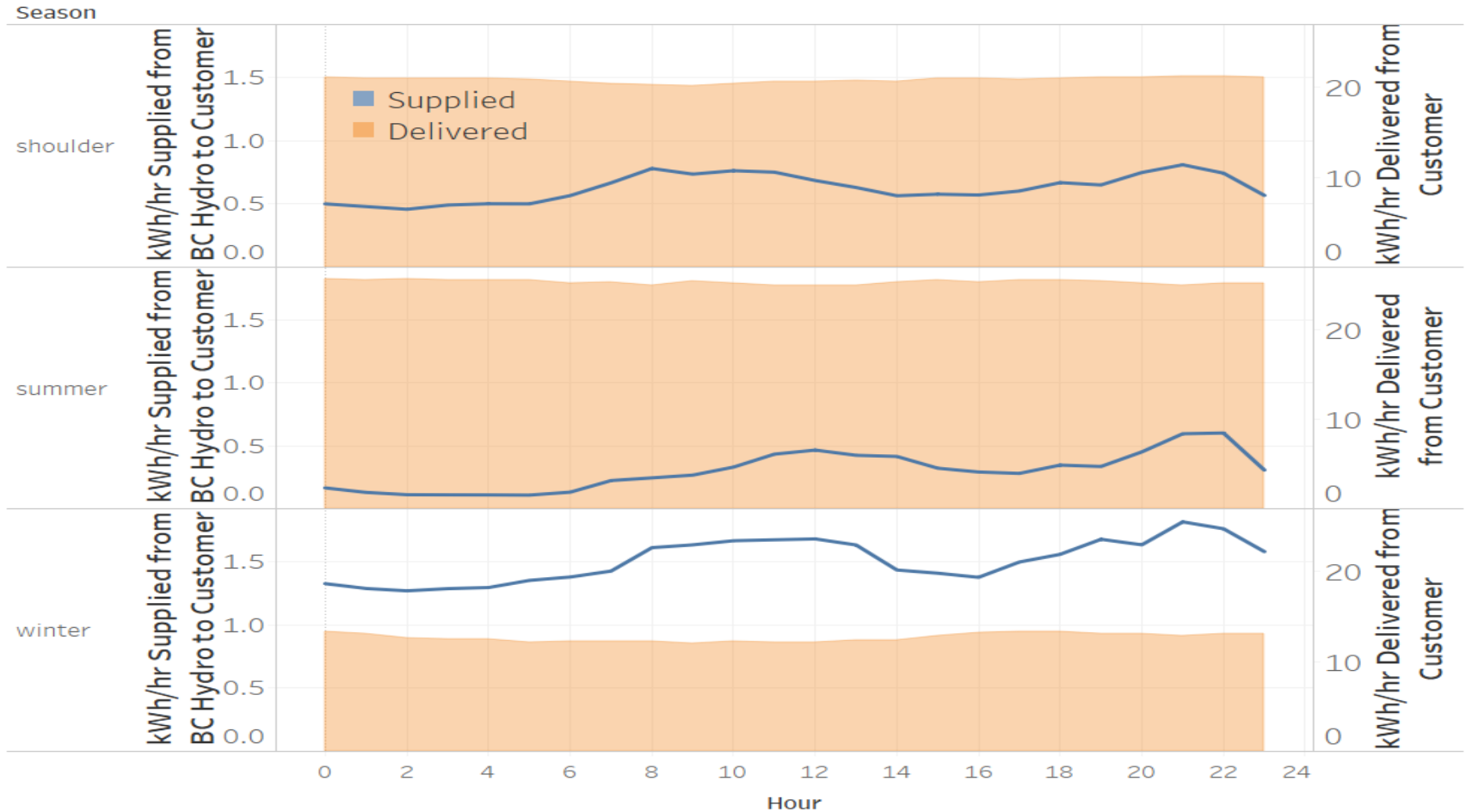
24-hour load profiles of residential solar net metering customers by season

Source: Figure 3 in Evaluation Report #5

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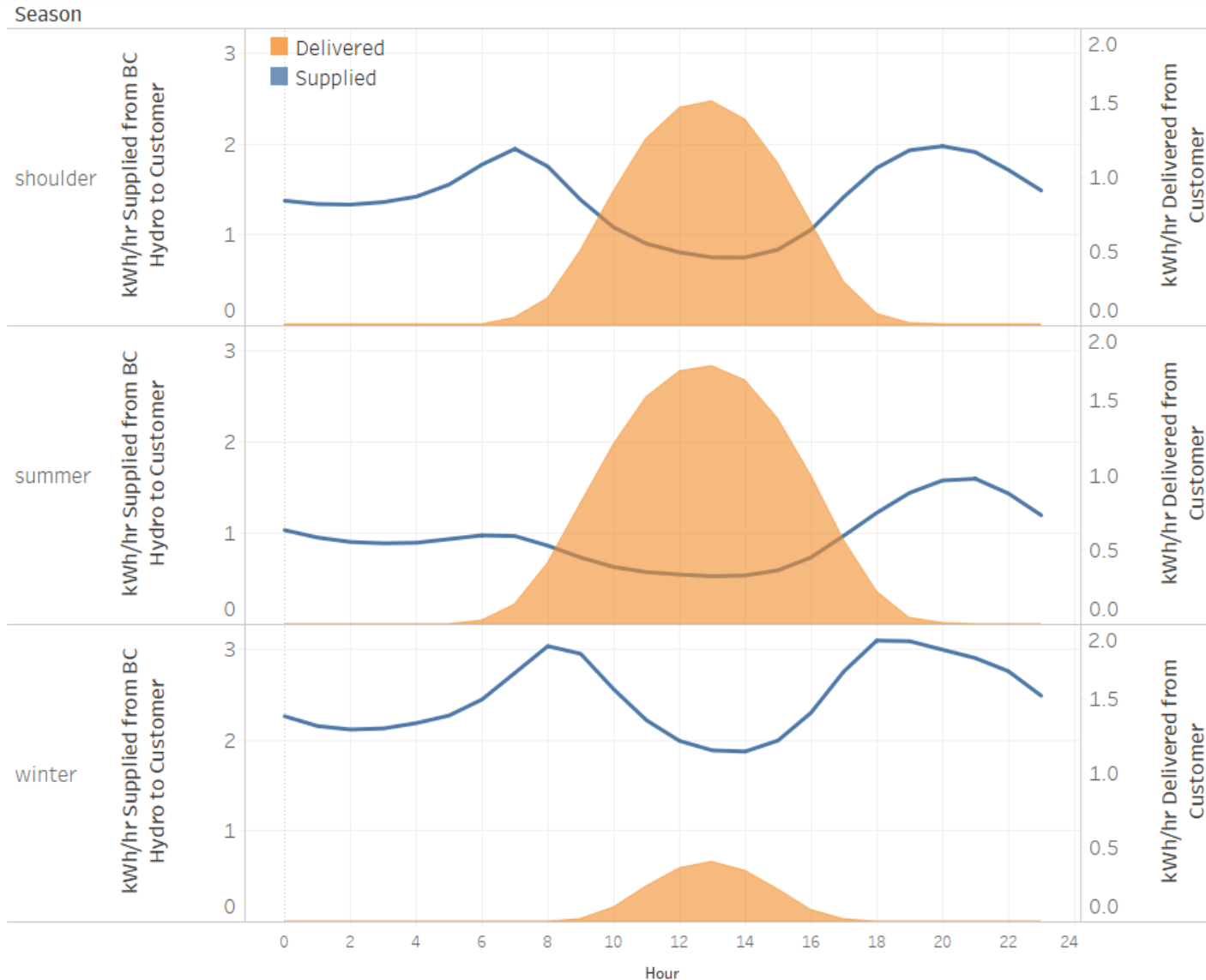
Value of compensation by credits and payments to net metering accounts

In F2019, the average compensation by BC Hydro for RS 1289 energy deliveries was 10 ¢ per kWh

- The total value of the credits in F2019 is estimated to have been $470,875, applied to 4,395 MWh of generation credit, equivalent to 10.71 ¢ per kWh.

- The total value of payments was $383,858 in F2019, applied to 3,842 MWh of accumulated Generation account balance, which is equivalent to 9.99 ¢ per kWh.

Source: Section 5.1 in Evaluation Report #5

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Market value assessment

The value of RS 1289 energy deliveries to BC Hydro ranges from 0 ¢ per kWh to 4 ¢ per kWh

Market Value of Electricity During Freshet Months (May through July)

Fiscal Year Freshet Period	Average Market Price in Heavy Load Hours (¢ per kWh)	Average Market Price in Light Load Hours (¢ per kWh)
F2016	4.2	2.9
F2017	2.7	2.0
F2018	2.5	1.0
F2019	3.9	1.5
F2020	2.8	1.9
F2021	1.7	0.5

Source: Table 14 of BC Hydro Net Metering Evaluation Report NO. 5; Heavy Load Hours are hours ending 0700 to 2200; *Light Load Hour* are hours ending 2300 to 0600.

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Future: what is next?

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Program priorities

1. Improve customer service and support

2. Establish an economically viable rate

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Future consultation

January – March 2021	February 2021	Spring – Summer 2021
• 1:1 interviews with current net metering customers as we implement operational improvements.	• Educational webinar for customers and stakeholders on the status of the program.	• Ongoing workshops and interviews via video conference for interested parties to discuss options on the evolution of RS 1289.

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If we were unable to answer your question at the webinar, please email us at net.metering@bchydro.com.

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