#### BC Hydro Rate Design Application Meeting with BCCMC

6005 Hwy 17 A, Delta, BC

1PM TO 2 P.M.

TYPE OF MEETING	RDA Meeting: BC Cranberry Marketing Commission	
FACILITATOR	Dani Ryan, BCH	
PARTICIPANTS	Jack Brown (Chair), Jeff Hamilton, Jack DeWit, Todd May, Bob Mitchell, Diane Driessen	
BC HYDRO ATTENDEES	Dani Ryan, Regulatory Specialist and Fay Thompson, Stakeholder Engagement	
AGENDA	<ol> <li>Welcome &amp; Introductions</li> <li>Feedback and Questions during BC Hydro's presentation.</li> <li>Closing comments.</li> <li>Next steps.</li> </ol>	

MEETING MINUTES		
ABBREVIATIONS	ALRAgricultural Land Reserve BCCMCBC Cranberry Marketing Commission BCH BC Hydro BCUCBC Utilities Commission	COSCost of Service IPPIndependent Power Producer RDARate Design Application RIBResidential Inclining Block
1 Walcomo a	ad Introductions	

1. Welcome and Introductions

SUMMARY

Diane Driessen opened the meeting by welcoming everyone and thanking participants for attending.

**Dani Ryan** reviewed the agenda and objectives and presented background on the 2015 RDA and past regulatory proceedings that may be of interest to agricultural customers. She provided an overview of current farm and irrigation rates and customer characteristics, introduced issues under consideration for the 2015 RDA filing, and discussed next steps.

2. Feedback & Questions during BCH's Presentation

2015-JUNE-15

All – questions and discussion on BCH's presentation.

	FEEDBACK	RESPONSE
1.	Slide 6 The RIB rate is unfair to general population because only small users (apartment dwellers) benefit. Conservation is a valid goal, but BCH shouldn't manipulate customers to save energy.	BCH is also reviewing the RIB as part of the 2015 RDA. BCH is unlikely to pursue alternative rate design because RIB rate is achieving conservation.
2.	Slide 9 Grow operations use a lot of electricity.	
3.	<b>Slide 10</b> Recognition that irrigation is a seasonal rate. Attendees are careful to 'flip the switch' to avoid paying higher rates outside the irrigation season. Attendees sometimes request extensions to the rate, and requests are generally met. Acknowledgement that irrigation is sometimes required outside the typical seasons, such as to pump high levels of rainwater off grass pastures or to manage dyke systems.	

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4.	Slide 13 Does BCH draw power from Alberta?	Powerex, a BCH subsidiary, markets electricity for profit, helping to keep BCH's rates low. This includes buying and selling power in the western North American electricity market (including Alberta) when it will deliver an economic benefit to BCH ratepayers.
5.	Slide 16 Rates are complicated and many farmers pay more than one rate. How does BCH make sure customers are paying the right rate? What happens if a hobby farmer starts commercial activities	BCH relies on customers informing us that they're eligible for RS 1151 (the Residential Exempt Rate) and of any changes to their circumstances. We believe some farms would benefit from being on a commercial rate, rather tha the residential exempt rate, but do not have a process to review individual customers' rates other than at their request.
6.	Slide 19 It would be easiest to put every farm on commercial rates. Changes to ALR will increase the number of residences on farm land, so customers will be adding additional residential metering anyway.	In that case, residential consumption would have to be metered separately, and there is a cost to installing separate metering.
	Some people are taking advantage of residential farm status to lower their property taxes and BCH bills: customers should have to prove they have a farm exemption to get the exempt rate.	BCH is examining rate eligibility criteria as part of this review.
	Farmers could irrigate at non-peak times to help BCH – but different farmers need to irrigate at different times of day. Farmer education about peak use would be helpful.	BCH is not introducing optional time-of-use rates at this time as part of the RDA. With smart meter data we could look at more specialized rate designs in the future.
7.	<b>Slide 21</b> If BCH pulled the irrigation rate farmers would just slot in elsewhere. Some have stopped using the irrigation rate anyway because they've been penalized when they forget to turn off supply at the end of the irrigation period.	
	The \$1 million under recovered by the irrigation rate is such a small part of BCH's revenue – why bother reviewing it?	Revenue/Cost ratio is one measure of a rate's "fairness". The irrigation rate currently recovers 85 per cent of COS - but other rates over recover.
8.	Slide 22 What percentage of energy comes from IPPs?	Approximately 20 per cent. This information can be found at bchydro.com/IPP.
	Closing Comments	
gatio		DA with the BCUC in September 2015, and that the farm and shave been determined and so will not be part of Module 1 DA online, and provide feedback to BCH.

# **BC HYDRO'S RATE DESIGN APPLICATION** FARM AND IRRIGATION CUSTOMER ISSUES

### Presentation to the BC Cranberry Marketing Commission (BCCMC)

June 15, 2015



### AGENDA

- Background on BC Hydro's 2015 Rate Design Application (RDA)
- Farm and irrigation customers' statistics, characteristics and rates
- Issues to consider as part of the RDA
- Next steps

# **TODAY'S OBJECTIVES**

- To inform, educate, and identify issues
- To answer questions
- To hear your concerns



### **RDA BACKGROUND**

- BC Hydro is a regulated entity and its rates are approved by the BC Utilities Commission (BCUC)
- An RDA is a broad examination of all rates and tariff policies and one of the first steps is a Cost of Service analysis
- The last rate design application was in 2007
- Specialized rate design applications have taken place since 2007
  - Residential Inclining Block rate (RIB) 2008
  - Large General Service rate (LGS) 2010



## 2015 RDA SCOPE

- RDA focus is updating/amending rates and terms and conditions of service
- All 7 customer classes: Residential, Small General Service (SGS), Medium General Service (MGS), LGS, Irrigation, Street Lighting and Transmission
- Cost of Service, and fair cost recovery among rate classes (rebalancing)
- Transmission and Distribution extension policies
- Electric Tariff terms and conditions



## **FARM / IRRIGATION REGULATORY CONTEXT**

#### 2007 BC Hydro RDA

- BCUC noted that farms take service under a variety of rate schedules and recommended that BC Hydro develop a rate strategy for its agricultural customers, in consultation with stakeholders
- BCUC was concerned that farm service for domestic and commercial uses be provided under appropriate rate schedules
- BCUC directed consideration of whether irrigation rates are appropriate for non-farm customers i.e. municipal pumping and golf courses



### **FARM / IRRIGATION REGULATORY CONTEXT**

#### 2008 BC Hydro RIB Rate Application

- RS 1151 flat rate created exempted farms from the RIB.
- BC Hydro stated it would review conservation rates for farm customers when similar rates considered for SGS customers

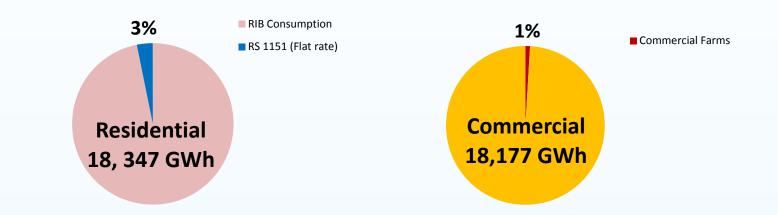
#### 2014 FortisBC Farm Exemption from RIB Rate Application

 BCUC directed a review of farm rate options, including those that could encourage energy conservation, and an exploration of the costs / benefits of separately metering a single family dwelling from the rest of the farm



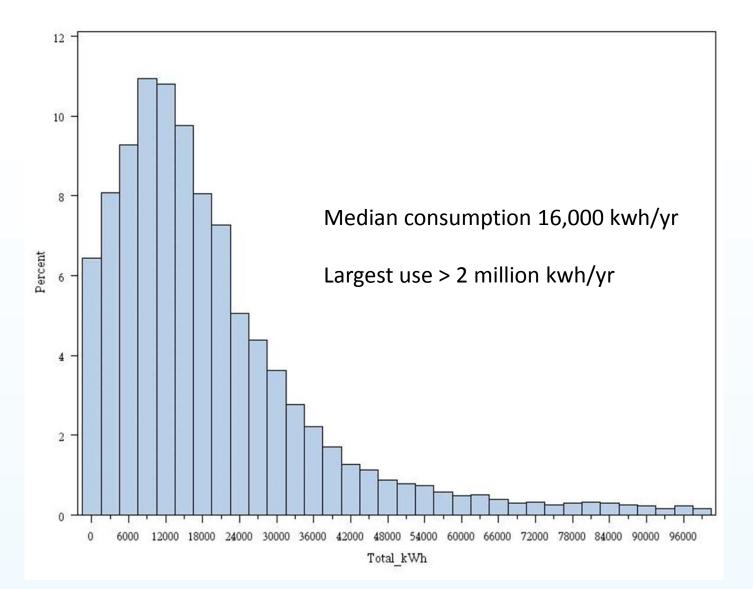
#### FARM CUSTOMER STATISTICS

	Number of Farms	Farm Energy Sales (GWh)	Total Rate Class Sales (GWh)	Farm Sales % of Rate Class Sales
Residential	16,900	600	18,347	3%
Commercial	1,900	170	18,177	1%
Irrigation	3,000	70	70	100%
Total	21,800	840	36,594	

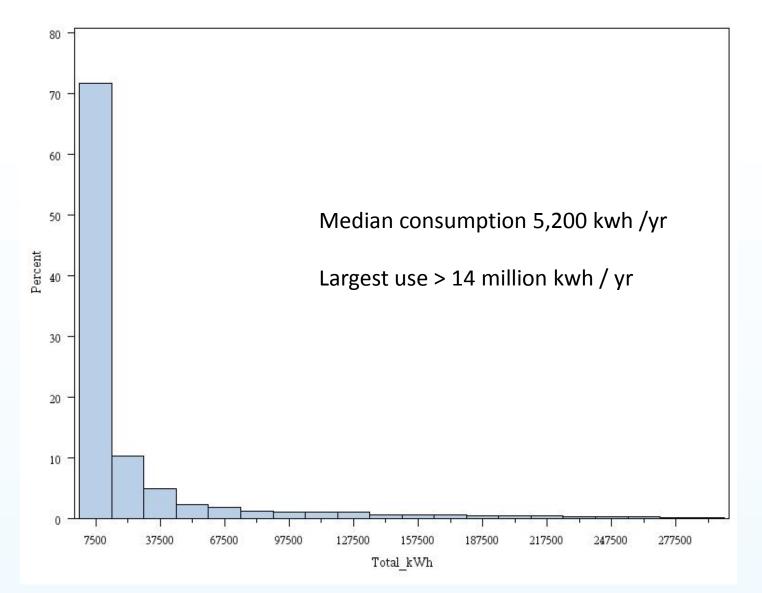




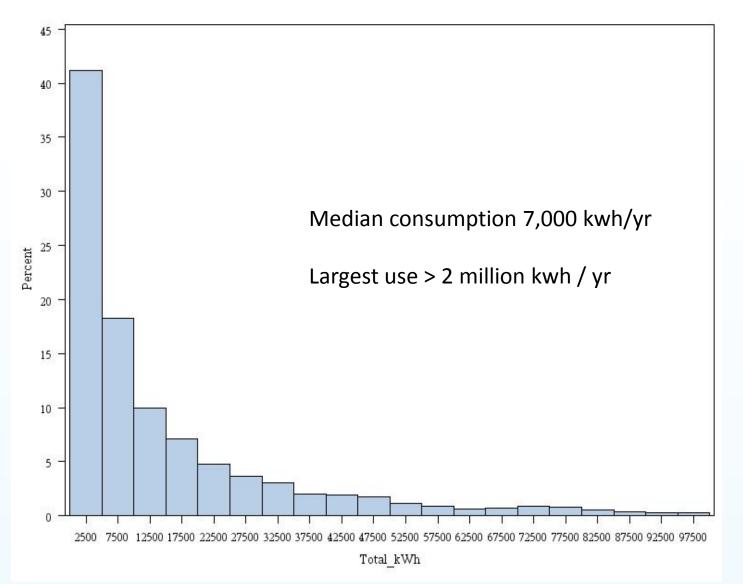
#### **RESIDENTIAL FARMS**



#### **COMMERCIAL FARMS**

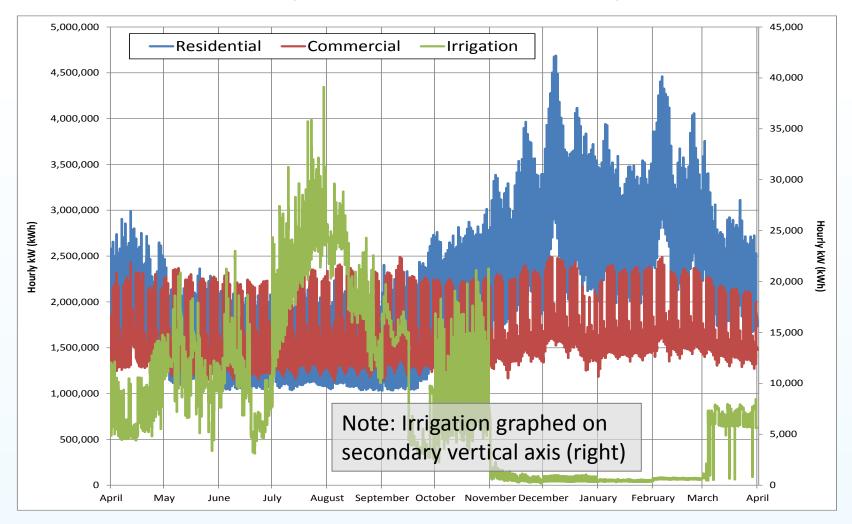


#### **IRRIGATION CUSTOMERS**



#### **COINCIDENT PEAK LOAD**

Almost 50% of BC Hydro's costs are dependent on <u>when</u> customers use electricity rather than <u>how much</u> they use



### **NON-COINCIDENT PEAK LOAD**

Distribution costs are driven by peak loads in specific areas and on specific circuits.

A portion of BC Hydro's distribution system is built to support summer-peaking load.

Substation Peaks	Number of Substations	Percent of Substations
Winter Peaking	188	85%
Summer Peaking	25	12%
Dual Peaking	6	3%

Given the seasonal burden on some distribution assets, it makes sense to assign non-coincident peak load costs to summer-peaking users of the system including irrigation customers.



#### **EXISTING RATES FOR FARMS**

- 2007 RDA decision noted that farms take service under a variety of rate schedules and expressed concern that farms be served on appropriate residential / commercial rates
- Tariff classification of residential vs. commercial farms is not clear
- In most cases, residential farm loads are mixed use with a single point of metering such that all consumption (single family dwelling + farm load) is billed at a residential rate



### **RESIDENTIAL EXEMPT RATE (RS 1151)**

Customers can qualify for RS 1151 if they DO NOT:

- 1) use electricity in any dwelling other than a Single Family Dwelling
- 2) process products from other farms
- 3) use electricity for commercial purposes not ordinarily done on a farm (e.g. no boarding of animals belonging to others); or
- 4) have more than a small roadside stand to sell their products.
- Criteria can be difficult to apply consistently and are somewhat open to interpretation (i.e. what's the size cut-off for a "small roadside stand"?)
- BC Hydro requests that residential customers provide a copy of their Property Assessment to validate farm classification



### **RESIDENTIAL EXEMPT RATE (RS 1151)**

Larger residential RS 1151 customers are given the option to be billed at MGS (demand > 35 kW) or LGS rates (demand > 150 kW).

Although MGS and LGS rates have demand charges (\$/kW), they have lower energy costs and some larger farm customers could be better off being billed at commercial rates.

Customer group	F2016 Rates	
Residential (RS 1151)	9.55 ¢/kWh	
SGS	10.73 ¢/kWh	
MGS	8.98 ¢/kWh (+ demand \$)	Averages calculated
LGS	5.79 ¢/kWh (+ demand \$)	from tiered
Irrigation	5.16 ¢/kWh	rates



### **RESIDENTIAL EXEMPT RATE (RS 1151)**

- Despite optionality, there are more than 550 residential farm customers on residential service that qualify for and may be better off being billed at a commercial rate.
- The largest residential farm customer has a peak load approaching 500 kW, while a normal single family house has a peak load around 8 kW.

Customer Size	# of RS 1151 accounts	
0 to 25 kW	16,004	
25 kW to 35 kW	393	
35 kW to 150 kW	516	Eligible for MGS
Over 150 kW	46	Eligible for LGS



#### **RESIDENTIAL FARM ISSUES TO BE ADDRESSED**

1. Should residential farms continue to be exempt from the RIB rate or any other farm-specific conservation rate?

Residential farm customers use on average 50% more than RIB rate customers annually

- 2. Should BC Hydro change the eligibility criteria for the exempt RS 1151 flat rate?
- 3. Should larger farms be required to be billed at commercial rates? Should all farms be billed at commercial rates?

Even with the current option to take service at a commercial rate, many larger residential farms are presently being billed at the residential rate which may cost more

4. Should BC Hydro require separate metering for farm and residential use? Dependent on size of farm?



### **COMMERCIAL FARM RATES**

- Commercial farm customers are billed on either SGS, MGS, or LGS rates and BC Hydro consultation with stakeholders on these rates is on-going
- Commercial rates are being explored as part of module 1 of the RDA and the outcome will inform the review of farm customer issues in module 2
- BC Hydro held commercial rate workshops on January 21, 2015 and February 11, 2015, with another to be held June 25 and 26, 2015



#### **IRRIGATION RATES**

The irrigation rate was originally conceived as a low-priced, promotional rate available during the summer when water might be spilled if not used to generate electricity

One concern with the rate is that it under-recovers the costs associated with serving this rate class – with about 85% cost recovery

Rate Class	Cost of Service (\$ millions)	Forecast Revenue (\$ millions)	Revenue to Cost Ratio
Residential	2,041.9	1,917.6	93.9%
SGS	367.7	411.8	112.0%
MGS	299.3	360.5	120.5%
LGS	838.8	836.1	99.7%
Irrigation	7.09	6.04	85.2%
Streetlighting	28.6	38.4	134.1%
Transmission	876.4	889.3	101.5%
Total	4,459.7	4,459.8	100.0%

#### **IRRIGATION RATES**

The rate includes a Minimum Charge equal to about \$5 per kW of connected load for a period of 8 months whether the service is used or not.

During the non-irrigation season the energy rate of 5c/kWh increases to about 40c/kWh

Possible topics for the RDA include:

- Appropriateness of Minimum Charge
- Treatment of irrigation loads in the non-irrigation season
- Alternatives to using Connected Load, when calculating the Minimum Charge, as opposed to actual metered peak demand



#### **2015 RDA TIMELINE**

- 2015 RDA Module 1 to be filed September 2015
- Farm and irrigation related issues will be addressed in Module 2, planned to be filed in 2016
- Farm customer issues may arise in Module 1:
  - Module 1 will include a review of the RIB rate which will consider the interaction of the RIB rate with the Residential flat rate (RS 1151), largely serving farm customers
  - Module 1 will include SGS, MGS, and LGS rate proposals
- Farm / irrigation stakeholder engagement beginning in 2015



# **REVIEW TODAY'S OBJECTIVES**

- To inform, educate, and identify issues that could be explored further
- To answer any questions you have
- To hear your concerns

Was this discussion helpful?

Are there other issues you think BC Hydro should investigate?



## **RDA WEBSITE**

More information on the RDA, including previous workshop presentations and stakeholder comments, can be found at: <a href="https://www.bchydro.com/about/planning\_regulatory/2015-rate-design.html">https://www.bchydro.com/about/planning\_regulatory/2015-rate-design.html</a>

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