

OVERVIEW OF THE FRESHET RATE

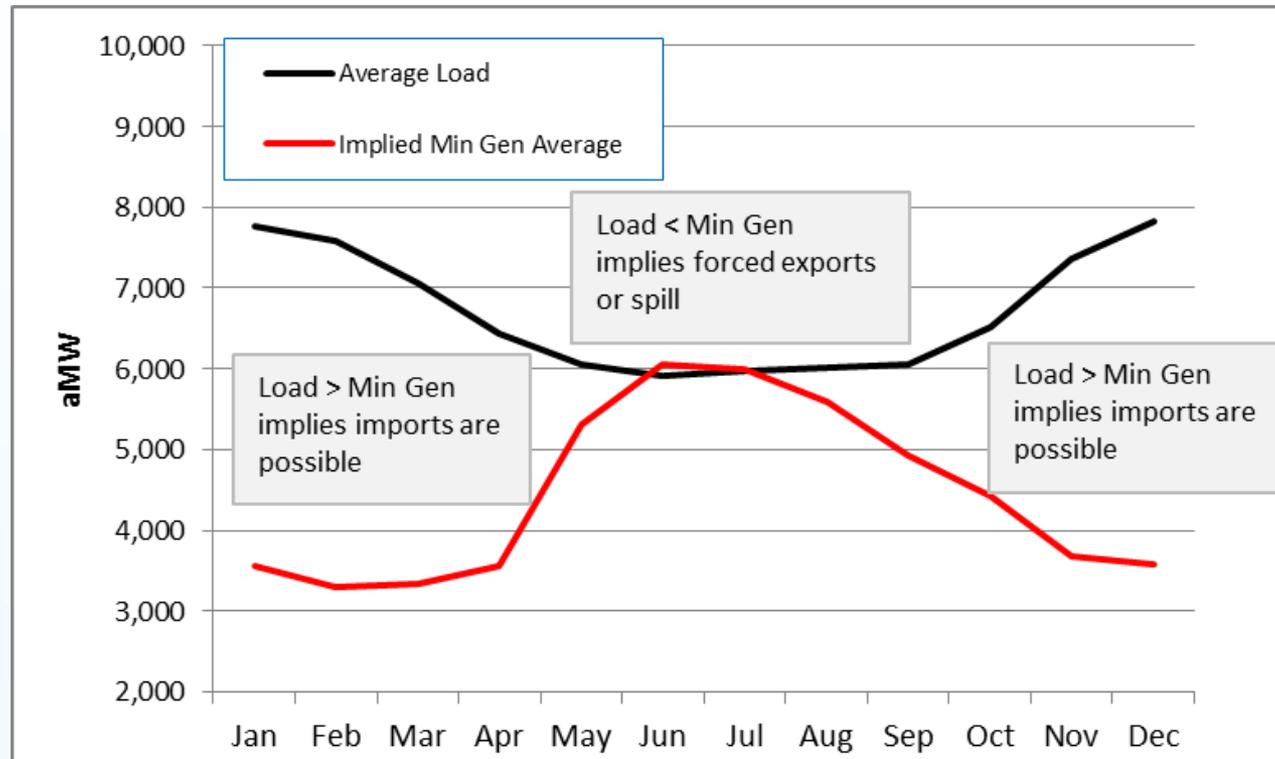
JANUARY 25, 2016 STREAMLINED REVIEW PROCESS



FOR GENERATIONS

SYSTEM CONTEXT

- BC Hydro has a recurring issue of freshet oversupply, which can be mitigated by increased load in the freshet, especially if the load is non-firm.
- As part of its responses to Round 1 Information Requests (**IRs**), BC Hydro provided a series of graphs in the response to BCUC IR 1.104.1 (Exhibit B-5).



SYSTEM CONTEXT

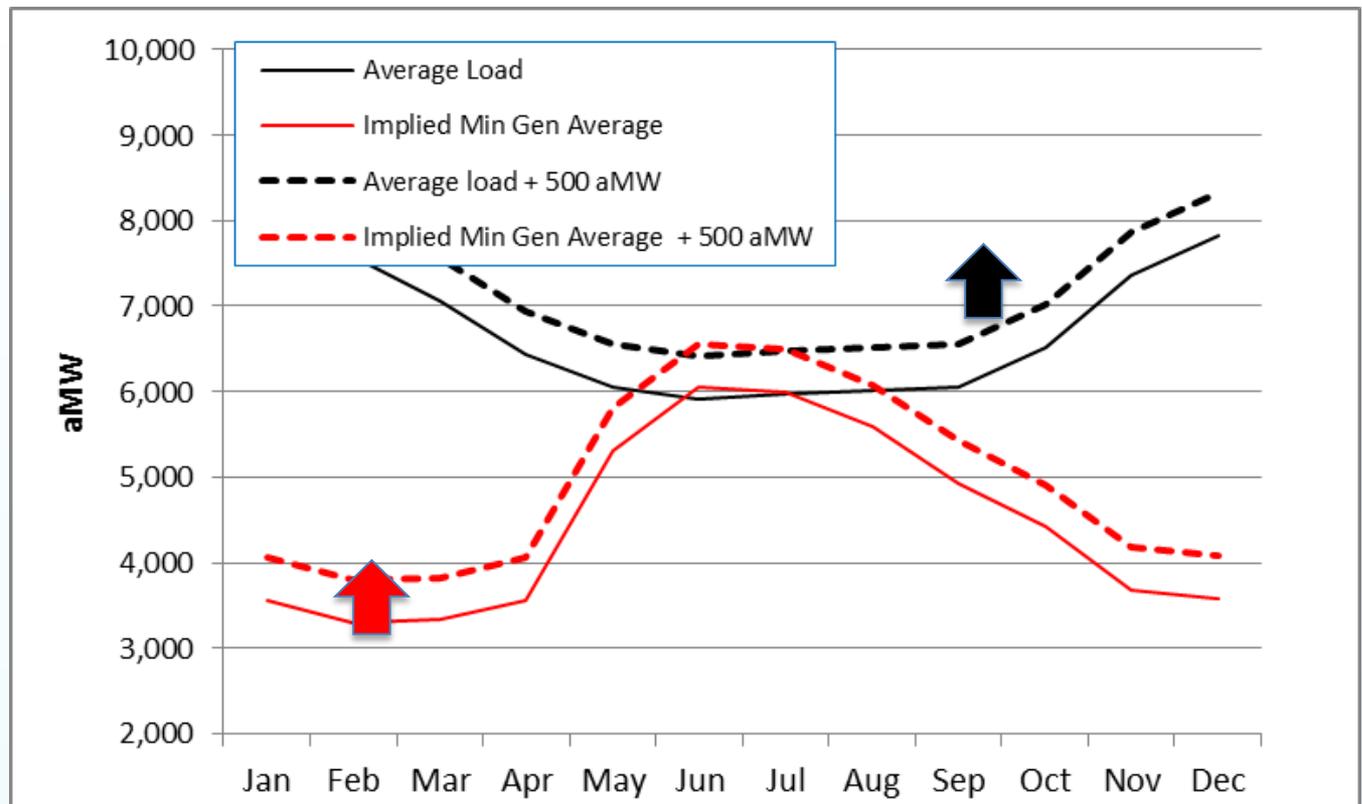
- To see how changes in load and generation affect BC Hydro's system, consider three scenarios assuming 500 aMW in load and/or generation is added:

Scenario 1: Flat increase in load, Flat increase in firm generation supply (ex. LNG load)

Result:

Does not mitigate the problem.

No change in oversupply conditions because graph retains shape and shifts up.



SYSTEM CONTEXT

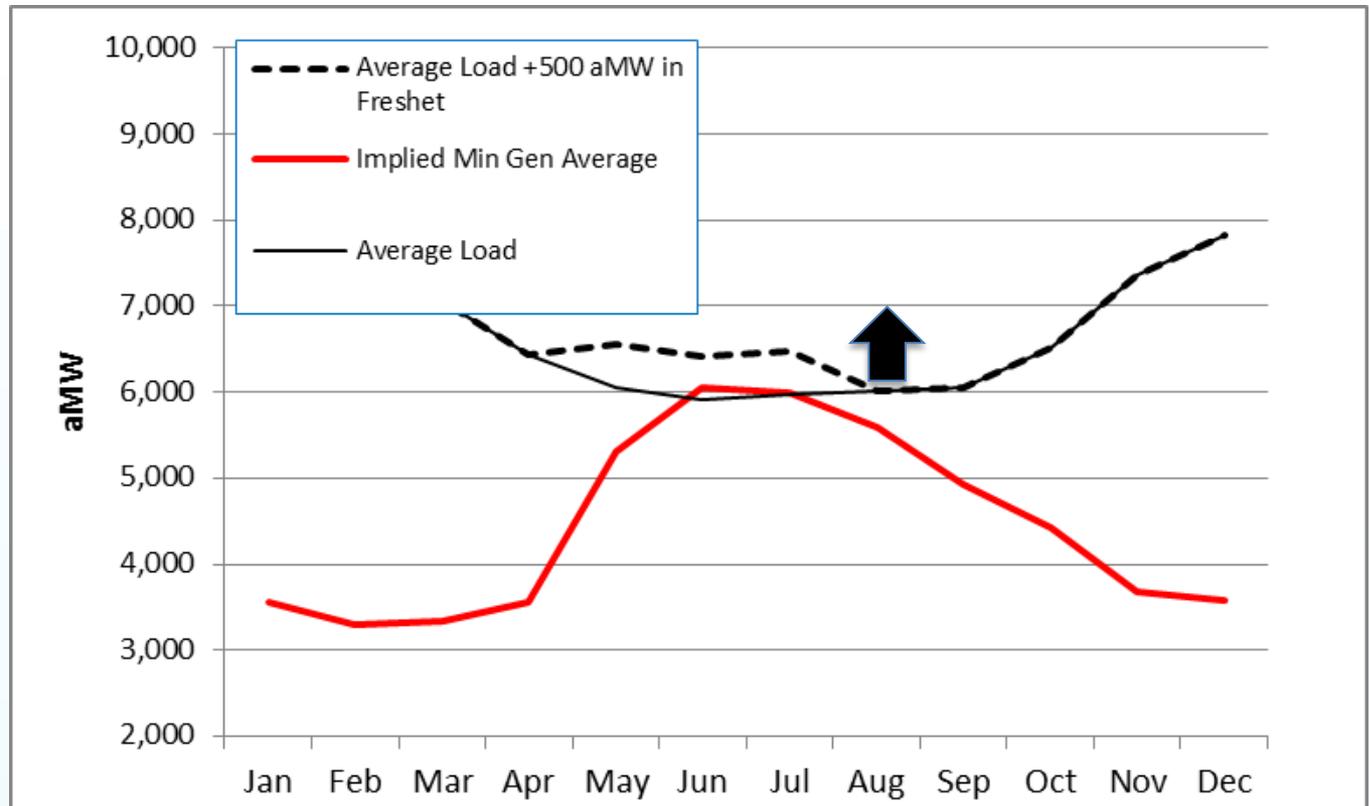
- To see how changes in load and generation affect BC Hydro's system consider three scenarios:

Scenario 3: Incremental non-firm freshet load, no change in generation

Result:
Mitigates
oversupply

*Forced exports or
spill less likely .

*Increased import
flexibility .



BACKGROUND

- Two Year pilot, Rate Schedule (RS) 1892, targeting the May – July 2016 and 2017 freshet periods
- Available to RS 1823 customers
- Customers sign up by March 1st each year. Subject to Commission approval, BC Hydro will engage customers in the next month to promote take-up and review with them again the mechanics of the rate

MECHANICS OF THE RATE

- Non-firm service, and consistent with other non-firm rates, no demand charge for incremental use because BC Hydro will not be advancing any infrastructure to serve customers under RS 1892

MECHANICS OF THE RATE

- Energy priced at High Load Hours (HLH) or Low Load Hours (LLH) daily Mid-Columbia market prices plus a fixed \$3/MWh wheeling fee.
 - Wheeling fee has cost rationale and risk mitigation aspects
 - The cost rationale is based on times where BC Hydro imports more to serve freshet load
 - While the risk to non-participants is expected to be low, the \$3/MWh wheeling fee reflects and provides risk mitigation

MECHANICS OF THE RATE

- While customers can respond to daily HLH and LLH price signals, the freshet rate pilot includes an end of period reconciliation, called a Net-to-Gross ratio, that ensures participating customers only receive market priced energy if there has been a net gain in consumption across the entire freshet period
- If participating customers do not have a net gain in consumption, all their freshet energy is purchased under the existing RS 1823
- BC Hydro will work with customers to set baselines prior to the rate taking effect on May 1st. The Commission will be asked to approve baselines that deviate from 2015 consumption

NON-PARTICIPATING CUSTOMER RISK AND MITIGATION MEASURES

Risk to non-participating customers is expected to be low.

Mitigations:

- Structured the proposal as a 2 year pilot
- Proposing a comprehensive evaluation of the freshet rate consisting of three separate reports, which are described on page 7-44 of Exhibit B-1.
- Structured the baseline component of the proposed rate across the 3 month freshet baseline to ensure customers do not benefit from the rate unless there is an incremental gain in consumption.
- Any baselines deviating from 2015 consumption to be approved by the BCUC.
- Charging a \$3/MWh wheeling fee