

1 Q. Under the existing federal Clean Electricity Regulations,

2 a) Would the proposed Avalon CT be permitted to operate after 2049?

3 b) Please confirm that the permissible maximum annual output of the proposed Avalon CT
4 is limited to approximately 130 GWh (2025 Build Application, Schedule 3, Page 36).

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7 A. a) Yes, the proposed Avalon Combustion Turbine ("CT") would be permitted to operate after
8 2049. Although the permissible emissions intensity drops to zero tonnes of carbon dioxide
9 ("CO₂") per gigawatt-hour ("GWh") starting in 2050, the unit could still operate if:

- 10 • It is fueled by renewable fuel sources, or
- 11 • Canadian offset credits are remitted (up to a maximum number, which corresponds
12 to approximately 80 GWh,¹ or 24 full days of annual generation at maximum
13 capacity); or
- 14 • There is an emergency circumstance which triggers a disruption, or significant risk of
15 disruption, to the electricity supply of the province.

16 b) While the Annual Emissions Limit ("AEL") for the proposed Avalon CT corresponds to
17 approximately 130 GWh of generation, the *Clean Electricity Regulations*² include compliance
18 flexibility mechanisms such as offsets and compliance credits that would permit additional
19 generation each year.

20 The *Clean Electricity Regulations* prescribe a maximum number of Canadian offset credits
21 that may be remitted each year. For the Avalon CT, this corresponds to an additional
22 ~70 GWh of generation each year up to 2049, and ~80 GWh from 2050 onward, as detailed
23 in Newfoundland and Labrador Hydro's response to part a).

¹ Within the context of the Minimum Investment Required Expansion Plan, forecasted annual production is anticipated to be one quarter of the maximum of the 80 GWh limit.

² *Clean Electricity Regulations*, SOR/2024-263.

1 Regarding compliance credits, if a unit emits less than its AEL in a given year, that unit may
2 be eligible to be issued credits equivalent to the difference between the AEL and the
3 quantity of CO₂ emitted by the unit in that year. These compliance credits can be banked for
4 use in future years up to and including 2049, or until five years after the issuance of the
5 credit, whichever comes first. It may also be possible to transfer compliance credits from
6 one unit to another, in effect creating a pool of emissions within a jurisdiction. This
7 provision permits more efficient units to be run ahead of less efficient ones, even if that
8 generation leads to emissions above the AEL of the singular unit.

9 Carbon capture and storage could also be utilized to enable greater energy production
10 within the AEL of the unit.

11 Emergency provisions also exist within the Regulation that allow emissions from generation
12 in response to an emergency circumstance to be deducted from the annual emissions limit
13 of the unit, given relevant conditions are met.