

1 **Q. (Reference Bates White Phase 2 Expert Report of Vincent Musco and Collin Cain dated**
2 **February 3, 2026)**

- 3 a) Did Bates White consider an incremental approach to meeting the reliability needs
4 of the Island? For example, did Bates White consider the merits of rate design and
5 behind-the meter alternatives combined with incremental additions of wind
6 generation as an alternative to the Avalon CT or Bay d'Espoir Unit 8, or both?
7 b) Did Bates White consider the merits of an alternative to the Avalon CT and Bay
8 d'Espoir Unit 8 that replaces Holyrood TGS with a new gas-fired combined cycle
9 plant at the Holyrood site for service in 2035 or beyond?
10 c) In the future, could the Avalon CT be converted to a combined cycle plant boosting
11 the plant's thermal efficiency from 30 to 40% to 50 to 60% and perhaps reducing
12 or eliminating the need for wind turbines?
13

14 **A.** (a) Dating back to our August 30, 2024 Assessment of Hydro's 2024 Resource Adequacy
15 Plan, we reviewed and assessed all supply options considered by Hydro. We noted
16 that electricity rate structures like time-of-use pricing and critical peak pricing have
17 historically not been cost effective according to Hydro, but that cost-effective
18 electrification, conservation, and demand management ("ECDM") programs can
19 provide system benefits, including capacity, energy, and overall cost savings, and as
20 such, Hydro's continued review of ECDM programs is worthwhile.¹ We understand
21 that current distributed energy resources in the province are quite small (less than
22 1 MW)² and would expect that distributed energy resources would be less cost
23 effective than utility-scale alternatives.³
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- 25 (b) As we pointed out in our August 30, 2024 Assessment of Hydro's 2024 Resource
26 Adequacy Plan, Hydro screened out combined-cycle combustion turbines as
27 potential resource supply options in the province. We quoted Hydro, which stated:
28 "with the advancement of the draft CER, it has become clear that base-loaded,
29 fossil-fuel fired facilities that provide a significant source of energy no longer have a
30 long-term place in Canada's electricity network and therefore no longer have a place
31 within the Island or Labrador Interconnected Systems."⁴ We stated that this may be
32 a valid reason for excluding combined-cycle resources, but that Hydro should
33 reconcile this exclusion with its pursuit of diesel-fired combustion turbines.⁵ Hydro

¹ Vincent Musco, Collin Cain, and Nick Puga, "Assessment of Newfoundland and Labrador Hydro's 2024 Resource Adequacy Plan," August 30, 2024, page 24.

² CA-NLH-062 (d), "Reliability and Resource Adequacy Study Review."

³ See, for example, Lazard's 2025 Levelized Cost of Energy, Version 18.0, slide 8:
https://www.lazard.com/media/5tlbhyla/lazards-lcoeplus-june-2025-_vf.pdf.

⁴ Vincent Musco, Collin Cain, and Nick Puga, "Assessment of Newfoundland and Labrador Hydro's 2024 Resource Adequacy Plan," August 30, 2024, page 30.

⁵ Bates White's August 30, 2024 Assessment of Newfoundland and Labrador Hydro's 2024 Resource Adequacy Plan, page 24.

**NLH - Application for the Purchase and Installation of Bay d'Espoir Unit 8 and Avalon
Combustion Turbine (Avalon Combustion Turbine)**

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1 explained that base load implies “continuous generation, low energy cost, less
2 flexibility, higher capital cost” resources, as opposed to peakers, which offer
3 “flexible generation, fast response times, high energy cost, low capital costs, [and]
4 possibly limited generation.”⁶ Hydro concluded that it intended to use its
5 combustion turbines to meet peak loads and to provide reserves, which makes
6 smaller, more flexible peaking units preferable to larger, more efficient units.
7 Moreover, Hydro noted that “[l]ack of access to natural gas and compliance with
8 CER prevent Hydro from using CTs for base load generation.”⁷
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10 (c) See response to (b) above.

⁶ Hydro, “2024 Resource Adequacy Plan: Technical Conference #2, Issue #4: Resource Supply Options,” October 2, 2024, slide 47.

⁷ Hydro, “2024 Resource Adequacy Plan: Technical Conference #2, Issue #4: Resource Supply Options,” October 2, 2024, slide 48.