The Leapfrog Opportunity

Nova Scotia can skip legacy gas peakers and go straight to grid-forming batteries if the IESO pauses to look at what has changed.

In **2023**, NS planners recommended a 300 MW gas turbine as the first step in meeting peak demand, with another 300 MW to follow later. At the time, it was a reasonable call. The clean alternative, **grid-forming battery storage (GFM BESS)**, didn't exist at this scale.

In **2026**, two **GFM BESS** are operating in Scotland, providing the same grid services a gas peaker would. The government's **2024** decision to move procurement to the IESO pushed the timeline back by nearly two years and created the **Leapfrog Opportunity.**

Nova Scotia still has a chance to look again before signing 25-year fossil fuel contracts.

HOW THE 2024-2025 DELAY JUST HAPPENED TO CREATE THE OPPORTUNITY

Aug 2023	GAS	**NS Power Evergreen IRP completed.** Recommends gas combustion turbines. At this moment, grid-forming BESS had not yet been demonstrated at transmission scale delivering full stability services.
April 2024		**Bill 404 passes.** Procurement moves from NS Power to a brand-new Independent System Operator (IESO Nova Scotia).
2024–2025		IESO-NS transition period. New staff, governance, and market rules. **This ~2 year delay creates the Leapfrog Opportunity**
March 2025	BESS	**Blackhillock, Scotland goes live.** 200 MW grid-forming battery — the world's first transmission-connected BESS providing full grid stability services. Replaces fossil-fuel plants.
March 2025	BESS	**ESIG/GridLab study published.** Tests grid-forming BESS from all five major manufacturers — all pass NERC grid-stability specifications.
April 2025	GAS	**One month after Blackhillock goes live,** NS Power publishes its IRP Action Plan Update — continues to recommend gas combustion turbines, citing the 2023 modelling unchanged. Neither Blackhillock nor the ESIG study is mentioned.
Oct 2025	GAS	**IESO-NS issues a call for interest** for 600 MW of gas capacity, citing the 2023 IRP and the April 2025 Update.
Jan 2026	BESS	**Kilmarnock South, Scotland goes live.** 300 MW grid-forming BESS — exactly the scale of each proposed Nova Scotia gas plant. "More than doubles synthetic inertia capability."
March 2026	GAS	**Draft RFP for the gas plants released.** 25-year contracts with guaranteed capacity payments. $3–5 billion in ratepayer obligations. Serious Environmental Concerns.
Late 2026		IESO battery procurement ***planned to begin***.

What was true in 2023

WHEN THE IRP MODEL WAS RUN

- — No grid-forming battery operating at transmission scale delivering full stability services.
- — No published study confirming GFM BESS could meet grid stability specifications
- — The PLEXOS model used by NS Power did not include GFM BESS as a resource option at all
- — The optimizer was structurally forced to pick gas turbines or synchronous condensers for grid stability
- — Recommending gas was defensible given the information available

What is true today

APRIL 2026

- ✓ Two grid-forming BESS projects operating in Scotland (200 MW + 300 MW), replacing fossil plant services
- ✓ Independent NERC-spec testing confirms GFM BESS provides inertia, frequency response, and voltage regulation
- ✓ NRStor proposes a 150 MW / 600 MWh BESS at Trenton, NS — 50% Mi'kmaw owned, shovel-ready
- ✓ Battery costs have fallen sharply since the 2023 modelling
- ✓ The 2023 recommendation no longer rests on a fair comparison

Technological leapfrogs are a well-known pattern

In a leapfrog, one technology gets skipped over because a better one arrives before people commit to the old one.

- → **Mobile phones skipped landlines.** Much of Africa and Asia never built copper-wire phone networks. By the time they were ready to, cell towers had arrived and the older technology was skipped entirely.
- → **LED bulbs skipped CFLs.** Governments around the world had just finished phasing in curly fluorescents when LEDs arrived and made them obsolete. Anyone who waited got a better bulb without ever owning a CFL.

Nova Scotia is in exactly that kind of moment right now. The delay wasn't planned, but it landed us in the narrow window where a better option has arrived before the older one gets locked in. We can skip the gas peaker era and go directly to what comes next

A QUESTION FOR THE DECISION MAKERS

"Why not re-run the planning model with today's technology before locking Nova Scotians into 25 years of fossil fuels?"

ASK THEM. THESE PLANTS HAVE NOT BEEN BUILT YET.

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Sources: NS Power Evergreen IRP 2022/2023 • NS Power IRP Action Plan Update (April 2025) • Wärtsilä/Zenobe Blackhillock press release (March 2025) • Zenobe Kilmarnock South announcement (January 2026) • ESIG/GridLab GFM BESS Brief (March 2025) • NRStor Trenton project materials • IESO-NS Draft RFP v1.0 (March 2026). Full sourcing at twinpeakers.com.