Current H_2

“Greening” Ontario’s Peak

Proposed Natural Gas “Hydrogen Ready” Peaking Plant
Municipality of Shuniah, Ontario

August 12, 2025

Opportunity & benefits for Municipality of Shuniah

- Generate **incremental revenue** and **diversify tax base** to support municipal services
- Attract **investment, create jobs** and stimulate Shuniah's local businesses through construction and operations
- Maintain and add to Northern Ontario's **initiative to promote growth**
- Implement one of the **first hydrogen ready peaking generation plants** in Ontario
- **Upgrade local infrastructure** (i.e. transmission lines and substations) to benefit the entire community

Thunder Bay Hydrogen Ready Peaker

About Current H2

Current H2 Inc. – who are we?

- Current H2 is a distributed energy resources (DER) based independent power producer (IPP), founded by an experienced team of successful power-sector developers. The principals of Current H2 Inc. are the founders of Public Energy Inc. an independent power producer that operates 7 power plants in Ontario. Current H2 Inc. will be the proponent under the IESO's LT2 procurement for natural gas that are "hydrogen ready" projects.
- Current H2 finances, designs, permits, installs, operates, and maintains on-site hydrogen and hydrogen ready power plant solutions. These systems use hydrogen, or are ready to use hydrogen, as a fuel to generate carbon free electricity. Current H2 owns the assets and produces baseload or peaking power under long-term contracts
- Current H2's leadership team has significant development, construction and operational experience in renewable energy, HVDC transmission, and distributed energy resources (DER). With a proven track record working on Germany's energy transition and recognizing new business opportunities, the team utilizes innovative business models to enhance Ontario's energy system
- Current H2 is based in Toronto, Canada with an office in Santiago, Chile

Leadership Team

John Douglas

CPA, CA, CBV

- Chairman, Public Energy Inc. (2018 - Present)
- Founder and Director, oneGRID Corp. (2015 - Present)
- Founder and Director, Lake Erie Power Corp (2012 -present)
- Member of Cleantech Advisory Board, MaRS (2018 - 2021)
- Founder, Transmission Developers Inc. (Underwater HVDC from Montreal to New York City. Acquired by Blackstone in 2010) (Board Member, 2008 - 2022)
- Founder, President and CEO, Ventus Energy Inc. (Wind developer. Acquired by GDF-SUEZ in 2007) (2004 - 2007)
- Head of Investment Banking, Director, Sprott Securities Inc. (now Cormark Securities Inc.), (1996 - 2001)

Dr. Denis Steyn

P.Eng, PhD, MSc, BSc

- Vice-Chairman, Public Energy Inc. (2018 - Present)
- CEO & President, Proventus Global (2020 – Present)
- Founder and CEO, Smart Lines Solutions GmbH, Nuremberg, Germany (2017 - 2021)
- Director Business Development Energy Management, Siemens Canada, (2018 - 2021)
- Director Power Transmission Lines, Siemens AG, Germany (2011 - 2018)
- Advisor to German government for energy transition (2012-2013)
- Senior Chief Researcher, University of Technology Graz, Austria (2008 - 2011)
- Founder and CEO, Energy Systems GmbH, Graz, Austria (2002 – 2008)
- Senior Engineer for Energy Management Projects – Medium Voltage in Austria (1998 - 2002)

Proven Track Record of Success

2007	2009	2014	2017	2018	2019
Ventus Energy (36 Months) 25 wind projects; 2,000 MW	**Champlain-Hudson Power Express (14 Months)** $5.8bn underwater HVDC transmission line from Mtl.-NYC in the Hudson River	**Lake Erie Connector (14 Months)** $2bn underwater HVDC transmission line from Ontario – PJM in Lake Erie	**Pacifico HDVC Link (In Progress)** $2bn HVDC transmission line connecting Peru and Chile	**Public Energy Inc. (In Progress)** 30MW portfolio of DER generation in Ontario	**Empire State Connector (In Progress)** $2bn HVDC transmission line connecting Upstate New York to NYC
Acquired By: ENGIE	Blackstone	NEXTera ENERGY	Founder Owned	Founder Owned	Founder Owned

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Ontario's Electricity Needs

Ontario's Growing Electricity Demand & IESO LT2 Procurement

Ontario in need of capacity

- Ontario's need for capacity is growing materially over the next two decades
- The biggest driver of the capacity deficit is the refurbishment of Pickering Nuclear Generating Station which supplies 14% of Ontario's electricity
- Demand for electricity will grow significantly in the next decade with the electrification of transportation, space heating and cooling, and industrial loads; electricity demand is expected to rise 75% by 2050
- The IESO is running multiple procurement processes to meet the province's capacity needs including the Long Term 2 (LT2) RFP
- New projects using natural gas (NG) or a mix of NG and renewable natural gas (RNG) will require interconnection on the grid and gas connection availability
- Maximum size for natural gas projects is limited to 45MW in size for the LT2 RFP

IESO Capacity Procurement Plan

	Procurement Mechanism	Capacity Target (Installed MW)	Eligibility	Term Start	Term Length	Materials Posted	Proposals Due	Contract Award
1	Same Technology Upgrades	300	Cost-effective capacity upgrades from existing contracted facilities	2025	Based on current contract terms	Nov 1, 2022	Dec 20, 2022	Q1 2023
2	Expedited Long- Term RFP	1,500	On-site expansions and new greenfield resources Targeting up to 1,500 MW of gas	2025	Min 15 yrs	Dec 6, 2022	Q2 2023	Q3 2023
3	Long-Term 1	2,200	On-site expansions and new greenfield resources	No later than 2027	Min 15 yrs	Jan 31, 2023	Q2 2023	Q3 2023
4	Long-Term 2	1,600	On-site expansions and new greenfield resources	2030-2033	20 yrs	March 2025	Q3 2025	Q2 2026

Source: IESO

Hydrogen Innovation Fund (HIF)

Hydrogen Future

- The Ontario government is launching a second round of the Hydrogen Innovation Fund in 2025
- The new round will invest $30 million to new hydrogen projects, specifically for projects with direct electricity system benefit such as Current H2's proposed hydrogen peaker plant in Southern Ontario
- IESO will administer the 2025 HIF – a stakeholder call is expected to be held in August 2025 and application submissions are expected to open in October 2025
- IESO's Pathways to Decarbonization Report included a scenario where the Province could have up to 15,000 MW of hydrogen generation capacity by 2050 to meet Ontario's growing electricity needs
- The 2023 HIF invested in 15 hydrogen projects (new and existing) and research/feasibility studies

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Proposed
H2 Ready Peaker Project

Natural Gas "Hydrogen Ready" Peaking Plant (100 MW)

- Prepare for a future when hydrogen from renewables is readily available for power generation
- Recently, the Government announced a Hydrogen Interruptible Rate Pilot program (IRP) for hydrogen generation projects to capitalize on off-peak pricing furthering future hydrogen availability
- PPA with IESO under LT2
- New and innovative turbines capable of burning natural gas, a blend, or 100% hydrogen.
- Provide grid capacity where it's required
- New construction and operational jobs
- Investment into Municipality of Shuniah: $200 million

This opportunity will position Municipality of Shuniah at the forefront of clean energy & innovation

Land Requirements & Permits

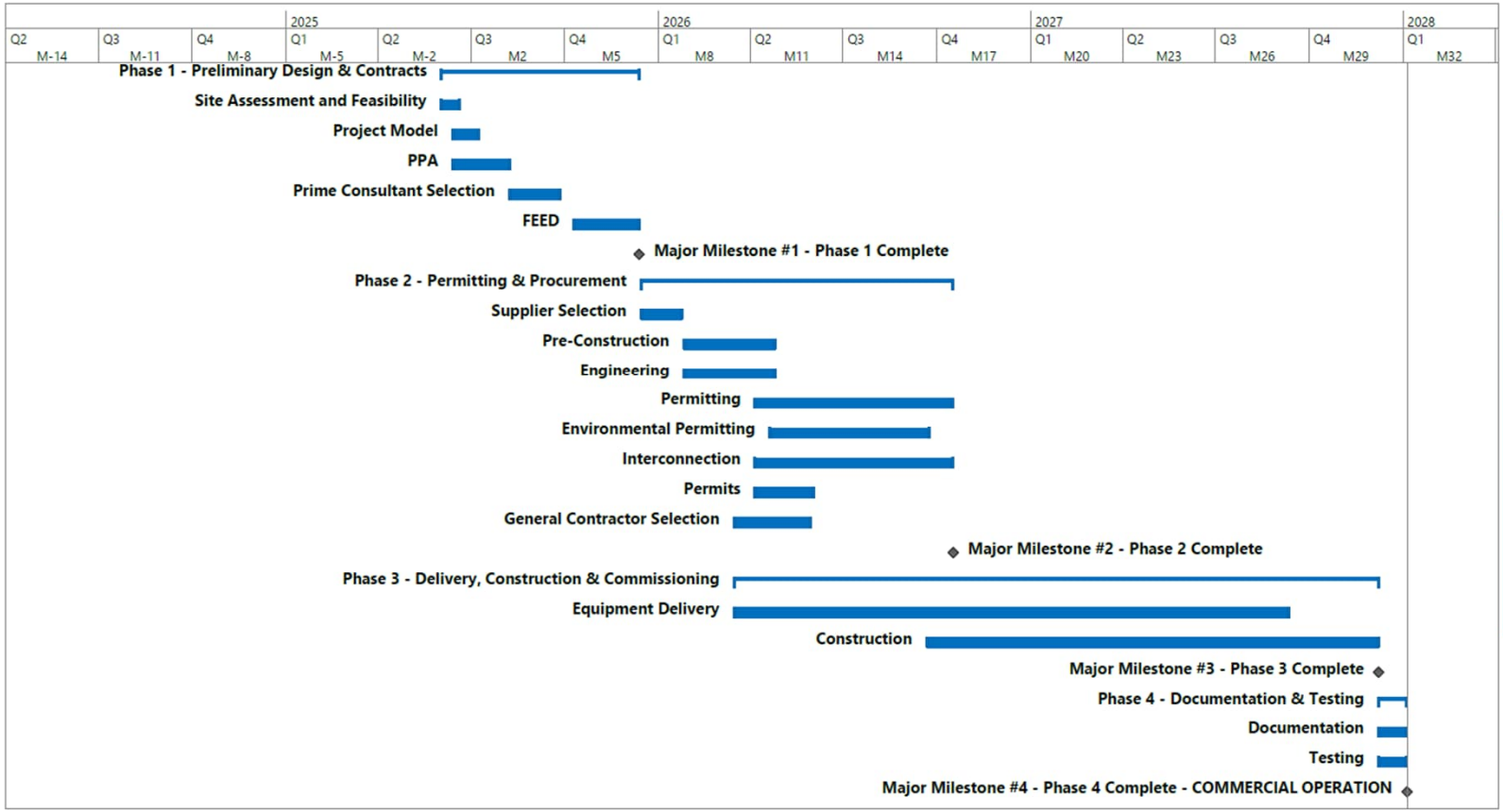
Land Size & Availability

- For a 100 MW, Current H2 requires ~5 acres of land
- Current H2 and Bruno's Construction are finalizing land agreement.

Permitting

- Current H2 will undertake all environmental studies, land use studies, and interconnection studies
- Current H2 will obtain environmental permit, building permit, and water take permit

Project Schedule



Municipality of Shuniah Peaker Plant Concept

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Next Steps

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- **IESO LT2 requires a Municipal Support Resolution.**
- **Public Informational presentation for the Municipality of Shuniah.**

Contact Us

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