



**Written submission from
Moltex Energy**

**Mémoire de
Moltex Energy**

In the Matter of the

À l'égard de la

**New Brunswick Power Corporation,
Point Lepreau Nuclear Generating Station**

**Société d'Énergie du Nouveau-Brunswick,
centrale nucléaire de Point Lepreau**

Application for the renewal of NB Power's
licence for the Point Lepreau Nuclear
Generating Station

Demande de renouvellement du permis
d'Énergie NB pour la centrale nucléaire de
Point Lepreau

**Commission Public Hearing
Part 2**

**Audience publique de la Commission
Partie 2**

May 11 and 12, 2022

11 et 12 mai 2022



March 25, 2022

Commission Registrar
Canadian Nuclear Safety Commission
280 Slater Street, P.O. Box 1046
Ottawa, ON K1P 5S9

RE: Point Lepreau Operating Licence Renewal (Ref. 2022-H-02)

Dear Sir/Madam,

Please accept this letter as a written intervention for the licence hearing for the Point Lepreau Nuclear Generating Station on May 11-12, 2022.

I am writing on behalf of Moltex Energy, a private company developing innovative nuclear technologies to help keep fossil fuels in the ground. These technologies include:

- Stable Salt Reactor – Wasteburner (SSR-W) – a molten salt reactor that uses recycled nuclear waste as fuel
- WASTE To Stable Salt (WATSS) – a process for recycling nuclear waste to produce fuel for the SSR-W
- GridReserve – thermal energy storage tanks, enabling the SSR-W to act as a peaking plant

Moltex was founded in 2014 and moved its head office to Saint John in 2018, when NB Power selected the company to develop its technologies in New Brunswick, with the goal of deploying first-of-a-kind units next to Point Lepreau.

Moltex was delighted at the prospect of working with NB Power because of the utility's commitment to operational excellence. NB Power has an exemplary performance record, which has translated into strong regional support for nuclear energy. In short, Moltex was moving to an environment that would embrace the prospect of new nuclear, along with the jobs and economic benefits that follow.

Over the past few years, Moltex has benefited from a highly collaborative relationship with NB Power, which regularly provides Moltex with advice and expertise. Moltex has seen first-hand the attention to detail and due diligence that goes into every aspect of NB Power's plant operations, and is confident in the utility's ability to ensure the safety and security of current and future nuclear reactors.

For nearly four decades, Point Lepreau has operated to the highest levels of safety and environmental protection. The station is a safe working environment, and has exceeded two million person-hours without a lost-time accident – on several occasions.

Point Lepreau is a leader in environmental responsibility, with Canadian regulatory reviews confirming the station's low to negligible risk to atmospheric, aquatic, terrestrial and human environments. The station also produces clean energy, free of harmful greenhouse gas



emissions. On a lifecycle basis, it emits about the same amount of greenhouse gas as wind power does, and about one third that of solar (photovoltaic) power.

Residents and businesses have come to rely on a steady supply of safe, clean energy from Point Lepreau. The station produces more than one third of the energy used in New Brunswick, and enjoys broad community and stakeholder support.

As a developer of a new reactor with inherent safety features, Moltex supports a longer licence period in general. Moltex believes that this will give customers, end-users, suppliers and potential investors greater confidence in the company's future – and in the regional economy. Businesses can engage in long-term planning, and make decisions with the knowledge that the operator's licence is not at risk.

Longer licence periods are not new in other nuclear operating jurisdictions, such as the USA. This may offer precedents for Canada to consider.

In conclusion, Moltex supports NB Power's request for a 25-year operating licence renewal. Moltex believes that NB Power will maintain its long legacy of safe and reliable station operations, along with its demonstrated commitment to operating openly and transparently, no matter the duration of the licence period.

Moltex appreciates that the station will continue to be a vital part of the low-carbon energy portfolio in New Brunswick for many years to come.

Thank you for the opportunity to provide input on this important matter.

Sincerely,

Rory O'Sullivan
CEO, North America
Moltex Energy