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To: Executive Council From: Theo Date: 30th January 2025 Subject: Urgent Request for Municipal Support Resolution in February– Boston Bar First Nation Geothermal and Green Hydrogen Project

EXECUTIVE SUMMARY

The Boston Bar First Nation urgently seeks the Fraser Valley Regional District's (FVRD) support in passing a municipal resolution to endorse our proposed Integrated Geothermal and Green Hydrogen Power Facility. This resolution is a prerequisite for applying to the Federation of Canadian Municipalities (FCM) Green Municipal Fund Feasibility Study Grant. Given the long lead times for feasibility study and capital funding applications 6 months and 8 months, respectively including the time to apply for the application. Any delay in obtaining this resolution risks delaying project implementation, exacerbating existing power reliability issues in the Fraser Canyon.

Why Immediate Support is Essential:

- Frequent Power Outages: Rockslides, snow slides, and accidents frequently damage BC Hydro's power lines, leaving residents and businesses without electricity for over 25 hours at a time in Boston Bar First Nation.
- Public Safety Risk: Critical services, including hospitals, gas stations, restaurants, and emergency services, are at risk during outages, affecting public safety and economic stability.
- Climate Resilience & Energy Independence: The destruction of the region's 6 MW hydro project in December 2023 underscores the vulnerability of existing energy infrastructure.
- Indigenous-Led Clean Energy Innovation: This project will establish Boston Bar as a leader in green energy while creating employment, skill-building opportunities, and long-term economic benefits for the entire region.
- Zero Financial Burden on FVRD: The feasibility study grant provides up to \$200,000 (50% of eligible costs) as a non-repayable grant to Boston Bar First Nation, with the First Nation assuming full execution responsibility.

• We respectfully urge the Council to approve this resolution at the earliest possible date in February to keep the project on track.

PROJECT OVERVIEW & REGIONAL BENEFITS

The Boston Bar First Nation Integrated Geothermal and Green Hydrogen Power Facility will address power instability in the Fraser Canyon by developing a 7 MW geothermal plant, scalable to 100 MW, with an integrated green hydrogen production facility. The project will provide a reliable, locally controlled, renewable energy source that ensures energy security for residents and businesses between Spences Bridge and Spuzzum.

Key Benefits:

- Improved Energy Security: Ensures continuous power supply to the 103-km Fraser Canyon corridor during BC Hydro outages.
- GHG Emission Reductions:
 - 7 MW Plant: Offsets 5.6M liters of diesel per year, reducing GHG emissions by 15,236 tonnes annually.
 - 100 MW Plant: Reduces 224,000 tonnes of CO₂ annually, aligning with Canada's net-zero goals.
- Economic Growth & Job Creation:
 - 40 full-time jobs and 1,200 indirect/contractual jobs in construction, operation, and maintenance.
 - Training programs in geothermal and hydrogen energy for Indigenous youth and local residents.
- Green Hydrogen Exports:
 - 7 MW Plant: Produces 1,689 tonnes of green hydrogen annually.
 - 100 MW Plant: Produces 24,128 tonnes of green hydrogen annually, with export opportunities to the USA, Asia-Pacific, and Europe.
 - Revenue to be around: 150-250 million CAD per year
- Climate Resilience & Indigenous Sovereignty:
 - Reduces reliance on external power sources.
 - Ensures 100% community ownership and control over energy revenues and future development.

FCM FEASIBILITY STUDY GRANT & MUNICIPAL RESOLUTION REQUIREMENT

Boston Bar First Nation is seeking <u>FCM Feasibility Study</u> funding to advance early-stage technical assessments. As an Indigenous community, we can only access this grant by partnering with a municipality, making FVRD's participation essential.

• Funding Structure: Covers up to 50% of feasibility study costs, up to a \$200,000 grant. (100% grant funding)

- No Financial Obligation for FVRD: The funding is awarded to Boston Bar First Nation, which assumes all responsibilities for execution.
- Process:
 - 1. FVRD passes a resolution to endorse and support the project (this does not imply financial commitment).
 - 2. Boston Bar First Nation submits the feasibility study application.
 - 3. Grant review (4-5 months); funds awarded for feasibility assessment.
 - 4. Upon successful study completion, Boston Bar proceeds to capital funding applications.

Failure to secure this resolution in a timely manner could result in a one-year delay in funding access, preventing the community from addressing its energy security needs.

REQUESTED ACTION

We urge the Executive Council to:

- 1. Pass the resolution to endorse and support Boston Bar First Nation's application to the FCM Green Municipal Fund Feasibility Study.
- 2. Ensure this resolution is passed at the earliest possible date in the month of February 2025 to prevent unnecessary delays.

The approval of this resolution represents a pivotal step toward securing a sustainable, resilient, and Indigenous-led energy future for the Fraser Valley region. Your leadership and timely action on this matter are crucial to ensuring the success of this transformative project.

We appreciate your support and look forward to collaborating with FVRD to make this vision a reality.

Sincerely,

Theo Warkentin, CEO, Boston Bar First Nation Economic Development Corporation Boston Bar First Nation

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