

**REQUEST FOR INFORMATION NO. 1 FROM 9380-8566 QUÉBEC INC. AND GOOGLE
CLOUD CANADA CORPORATION (GOOGLE) TO HYDRO-QUÉBEC DISTRIBUTION
REGARDING THE DISTRIBUTOR'S APPLICATION FOR THE ESTABLISHMENT OF RATES
FOR DATA CENTRES AND FOR CRYPTOGRAPHIC USE APPLIED TO BLOCKCHAINS**

1) BILL DETERMINATION

References:

- i. B-0004, HQD-1, Document 1.1, page 9: 21 – 23;
File R-4307-2025, B-0012, HQD-3, Document 3, page 5: 10 – 14, page 5: 17 – 21.
- ii. B-0004, HQD-1, Document 1.1, page 11: 1 – 4.
- iii. B-0004, HQD-1, Document 1.1, page 11: 5 – 9.
- iv. B-0006, HQD-2, Document 1.1, page 4.
- v. B-0006, HQD-2, Document 1.1, page 5.
- vi. B-0006, HQD-2, Document 1.1, page 5.
- vii. B-0004, HQD-1, Document 1.1, page 11: 1 – 4;
B-0006, HQD-2, Document 1.1, page 53.

Preamble:

- i. In order to reflect the cost of new supplies, the Distributor relies on long-term avoided costs. In 2026, these are 12¢/kWh for energy and \$166/kW-year for power.

The long-term avoided [energy] cost signal reflects the supply and transport costs of contracts from tender A/O 2023-01.

The long-term avoided [energy] cost signal is 12¢/kWh (\$ 2026) indexed to inflation, that is 8.3¢/kWh (\$ 2026) for supply, plus transport costs and balancing of 3.7¢/kWh (\$ 2026).

The long-term avoided [power] cost signal is based on the power cost of the third and final bid retained in A/O 2015-01, as approved by the Board.

The long-term avoided [power] cost signal is \$166/kW-year (\$ 2026).

- ii. If, in a calendar year, the customer's largest actual power demand is less than 60% of the predicted power based on the committed ramp-up, the difference between these two values will be subject to an unused power premium of \$92.280/kW.
- iii. In addition, in order to encourage customers to commit to a ramp-up that adequately reflects their needs and to avoid undervaluation in order to circumvent the premium, the maximum power called may not exceed 110% of their committed ramp-up. Any consumption above this

threshold will be charged at a price of 17.420¢/kWh, which is double the price of the energy component of the proposed tariff.

- iv. If, during a period of consumption, the maximum power demand exceeds the largest real power demand that is less than 5,000 kilowatts, Hydro-Quebec applies the power premium to the difference between the maximum power demand, up to a maximum of 5,000 kW, and the greatest real power call.
- v. The minimum power to be charged for each consumption period shall be 75 % of the maximum power drawn during a consumption period which is wholly within the winter period of the 12 consecutive monthly periods ending at the end of the consumption period concerned.
- vi. If a customer's previous 12 consecutive consumption periods do not reflect their usual consumption profile, Hydro-Quebec reserves the right to use any other method it deems more appropriate to calculate the maximum power demand.
- vii. If, in a calendar year, the customer's largest actual power demand is less than 60% of the predicted power based on the committed ramp-up, the difference between these two values will be subject to an unused power premium of \$92.280/kW.

The minimum power to be charged for each consumption period shall be 75% of the maximum power drawn during a consumption period which is wholly within the winter period of the 12 month consecutive monthly periods ending at the end of the consumption period concerned.

Questions:

- 1.1. Please provide the methodology, assumptions, source data, calculations, and all supporting work papers used to determine each of the following avoided cost signals (\$ 2026):
 - 1.1.1. 8.3¢/kWh avoided cost of supply
 - 1.1.2. 3.7¢/kWh avoided cost of transportation and balancing
 - 1.1.3. \$166/kW-year avoided cost of power
- 1.2. Please provide the basis and rationale the Distributor applied in selecting the unused power premium mechanism.
 - 1.2.1. Please provide the basis for the 60% threshold for application of the unused power premium.
 - 1.2.2. Please provide the cost-based derivation of the \$92.280/kW unused power premium, including all methodologies, assumptions, inputs, and supporting workpapers used to determine the premium.
 - 1.2.3. Additionally, please explain whether the premium exceeds the costs incurred by the Distributor due to unused capacity.

- 1.3. Regarding the 17.420¢/kWh charge for maximum power calls exceeding 110% of a customer's committed ramp-up:
 - 1.3.1. Please provide the basis for the 110% threshold for application of the 17.420¢/kWh charge.
 - 1.3.2. Please provide the cost-based derivation of the 17.420¢/kWh charge, including all methodologies, assumptions, inputs, and supporting workpapers used to determine the charge.
 - 1.3.3. Additionally, please explain whether the charge exceeds the costs incurred by the Distributor due to a customer's excess capacity use.
- 1.4. Regarding the statement referenced in the preamble, please:
 - 1.4.1. Confirm the power premium rate that will be applied in the circumstance described in the preamble.
 - 1.4.2. Confirm that the rate will be applied to the difference between the customer's largest real power call during the period and the customer's largest real power call during the period from among all the customer's real power calls during that period that are less than 5,000 kW.
- 1.5. Please provide the basis and rationale for the minimum billing power provision of the proposed CD tariff. Additionally, please provide the basis for selecting the 75% value.
- 1.6. Please explain:
 - 1.6.1. How the Distributor will determine what constitutes a customer's "usual" consumption profile.
 - 1.6.2. How the Distributor will determine that a customer's previous 12 consecutive consumption periods do not reflect the customer's usual consumption profile.
 - 1.6.3. Whether the Distributor may develop customer-specific or ad hoc calculation methodologies, or whether it may choose only a prescribed set of existing calculation methodologies.
 - 1.6.4. Whether the customer will be notified of, and permitted to participate in, the new methodology selection process.
 - 1.6.5. If the Distributor may develop customer-specific or ad hoc methodologies, whether the customer will be permitted to participate in the development of that methodology.
 - 1.6.6. If the Distributor may choose from a prescribed set of existing methodologies, please provide a description of each available methodology and the circumstances in which each methodology may be used.
- 1.7. Please:

1.7.1. Considering that the unused power premium applies to peak demand within a calendar year, while the minimum billing demand is based on peak demand over a rolling 12-month retrospective period, confirm whether demand in a given month could trigger application of both an unused power premium and the minimum billing power provision.

1.7.2. Confirm whether the unused power premium would be charged following the conclusion of a given calendar year. If not, specify the timing of charges associated with the unused power premium.

2) FINANCIAL SECURITY REQUIREMENTS

References:

- i. Hydro-Quebec Conditions of Service, April 1, 2021 Edition, Chapter 6, page 24 – 26.

Preamble:

- i. Situations in which Hydro-Quebec may require a deposit.

Questions:

2.1. Please:

2.1.1. Confirm whether there are financial security requirements specific to data centers, beyond those detailed in Chapter 6 of the Distributor's Conditions of Service, that would apply under the CD tariff.

2.1.2. Identify such financial security requirements.

2.1.3. Identify the process by which the Distributor determines the amount, form, and timing of such financial security requirements.

3) MARKUP CLAUSE

References:

- i. B-0006, HQD-2, Document 1.1, page 6.
- ii. B-0004, HQD-1, Document 1.1, page 6: 4 – 6.

Preamble:

- i. If a customer wishes to pay more for the supply of renewable electricity, they may include an offer to do so in their power demand.
- ii. The rate will be set at a cost that reflects the costs of new supplies, while remaining competitive on a North American scale, particularly given that the electricity provided is fully renewable.

Questions:

- 3.1. Please explain what information must be included in a customer's offer under the markup clause and how the Distributor will determine whether to accept such an offer.
- 3.2. Please confirm:
 - 3.2.1. Whether the assertion that the "electricity provided [by the Distributor] is fully renewable" applies to customers that do not submit an offer, or whose offers are not accepted, under the markup clause.
 - 3.2.2. If the answer to subpart a) is yes, please explain what incremental benefit the markup clause provides to a customer whose offer is accepted by the distributor.

4) RAMP-UP AND CONTRACT TERM

References:

- i. B-0006, HQD-2, Document 1.1, page 3,
B-0004, HQD-1, Document 1.1, page 10: 19 – 20, page 11: 1;
Hydro-Quebec Conditions of Service, April 1, 2021 Edition, Chapter 5, page 21 — 24.

Preamble:

- i. The CD tariff applies to an annual subscription under which all or part of the electricity is delivered for the operation of a data center, if the authorized power is at least 5,000 kilowatts.

Thus, all data centers with a maximum authorized power of at least 5 MW will have to commit to the Distributor the meet a load increase over a 10-year horizon.

Questions:

- 4.1. Please explain:
 - 4.1.1. Whether a customer taking service under the CD tariff may terminate service on an annual basis, or whether the CD tariff requires the customer to commit to a minimum service term exceeding one year.
 - 4.1.2. If the CD tariff requires a minimum service term exceeding one year, please identify the minimum service term and state whether that term includes the 10-year ramp-up period.
 - 4.1.3. Whether there are restrictions or financial obligations specific to data centers, beyond those detailed in Chapter 5 Termination of Contract of the Distributor's Conditions of Service, that would apply under the CD tariff if a customer terminated service prematurely or reduced operations.
 - 4.1.4. The timing and cadence by which a customer's committed ramp-up is determined. For example, must a customer commit to a full 10-year ramp schedule at the onset of service?

- 4.1.5. Whether the Distributor proposes any mechanisms by which a customer may modify its annual predicted power after the initial predicted power has been established.

5) CAPACITY ALLOCATION

References:

- i. B-0021, HQD-5, Document 1, page 7: 27 – 31.

Preamble:

- i. Although the demand for data centers was not as sudden as the demand for blockchain at the time, its importance was undeniable. It is contained in particular thanks to the energy block allocation process put in place by the Government of Quebec, which prevents the emergence of a demand to which the Distributor would not be able to respond.

Questions:

5.1. Please explain:

- 5.1.1. The referenced energy block allocation process, including its relevance to the proposed CD tariff.
- 5.1.2. Whether the Distributor proposes any provisions that would allow a customer to receive partial or interruptible service under the CD tariff if insufficient energy blocks are available to accommodate the customer's requested power demand.
- 5.1.3. Whether the Distributor proposes any provisions that would allow a customer to take service under the CD tariff, despite insufficient energy blocks, if the customer provides or funds additional power or supply resources to serve its requested demand?

6) APPLICATION SCOPE

References:

- i. B-0006, HQD-2, Document 1.1, page 3.
- ii. B-0004, HQD-1, Document 1.1, page 12: 6 – 8.

Preamble:

- i. The DC tariff applies to an annual subscription under which all or part of the electricity is delivered for the operation of a data center, if the authorized power is at least 5,000 kilowatts.
- ii. The Distributor proposes to revise the CB tariff and its terms and conditions to reflect the strategic nature and lower economic benefits of this activity compared to data centers.

Questions:

- 6.1. Please provide the cost-based justification for distinguishing data centers from other customers with authorized power of at least 5,000 kW for purposes of rate determination under the CD tariff.
- 6.2. Please confirm whether the distributor considered the economic benefits associated with non-cryptographic data center activities in designing the proposed CD tariff rates and provisions. If so, please identify how those benefits were reflected.

7) DATA CENTER RATE MARKUP**References:**

- i. B-0005, HQD-1, Document 1.2, Sommaire (i).
- ii. B-0005, HQD-1, Document 1.2, page 15 – 16.
- iii. B-0005, HQD-1, Document 1.2, page 18.

Preamble:

- i. In order to...contextualize a possible request to the Regie de l'Energie, Hydro-Quebec commissioned Dunsy Energie + Climat (Dunksy) to answer two questions:
 - a) are there rates for data centers elsewhere in North America, and what are their high-level terms of application and commitment;
 - b) how would a price of 13¢/kWh compare to what data centers in other jurisdictions, which could compete with Quebec in this market, pay?
- ii. Contractual Terms

Three trends are intensifying in terms of contractual conditions to reduce risks for energy suppliers and their regular customers: financial guarantees, long-term contracts with strict exit conditions, and " take-or-pay ".

We observe the strengthening of 3 practices in the contractual modalities. These approaches aim in particular to reduce the financial exposure of public services and to reduce the risks associated with the required investments (network infrastructure, connections, capacity building), by ensuring that the additional costs are borne by new large consumers rather than socialized with regular customers.

These business practices include:

- a) Requirement for upstream financial guarantees (e.g., deposits, proof of ability to pay, letters of credit) to ensure funding for necessary network enhancements.
- b) Implementation of long-term contracts (often 10-15 years or more) with exit fees or warranty requirements, so that a data centre that reduces operations or

withdraws prematurely continues to cover the costs of the infrastructure built to serve it.

- c) "Take-or-pay" type mechanisms with a minimum demand charged, ensuring that a data centre pays for a high share of its contracted capacity, whether used or not.

- iii. 13¢/kWh is an average of those observed in neighboring jurisdictions and major development hubs.

Questions:

7.1. Please:

7.1.1. Explain how the findings, conclusions, recommendations, or comparative-jurisdiction evidence in Dunsky's report affected the development of the Distributor's proposed CD tariff.

7.1.2. Where possible, identify the specific elements of the CD tariff that were influenced by Dunsky's report, including the relevant report page or section on which the Distributor relied.

7.1.3. If Dunsky's report did not affect the development of any specific element of the proposed CD tariff, explain the purpose of incorporating the report into the record in this proceeding.

7.2. For each of the following contractual or tariff mechanisms discussed in Dunsky's report, please explain whether the Distributor considered incorporating the mechanism into the proposed CD tariff. Please state whether the mechanism was adopted, modified, or rejected in the proposed CD tariff with an explanation as to why.

7.2.1. Financial guarantees, including deposits, proof of ability to pay, or letters of credit

7.2.2. A minimum contract term or long-term service commitment

7.2.3. Exit fees or other financial obligations for CD tariff customers that reduce operations or withdraw prematurely

7.2.4. A minimum demand charge or "take-or-pay" obligation based on a CD tariff customer's contracted capacity

7.3. Please explain the role that rates observed in neighboring jurisdictions and major development hubs played in establishing the proposed CD rate. In particular, please clarify whether the jurisdictional comparison was used only as a reasonableness check for a cost-based rate, or whether the Distributor would have considered adjusting the proposed rate if the cost-based result had materially differed from rates in competing jurisdictions.

8) COST OF ENERGY FOR DATA CENTERS

References:

- i. B-0005, HQD-1, Document 1.2, page 19, Figure 5;
B-0005, HQD-1, Document 1.2, page 19.

Preamble:

- i. To determine the price values for each jurisdiction, our team relied on different sources with the following prioritization, depending on the availability of the data:
 - a) P1. Data Centre/Large Load pricing details are publicly available (see Table 1).
 - b) P2. Hydro-Québec's markup for electricity price comparison in major North American cities. This source has the merit of distinguishing the different classes of high-power client.
 - c) P3. For the remaining states, a search for the tariff structure of a large industrial customer for the most populous city of the state. Portland, ME (Central Maine Power Company); Burlington, VT (Burlington Electric Department) and Las Vegas, NV (NVEnergy). Note: there may be differences between the cost within a large city and the cost over the entire state. Nevertheless, the majority of data center projects are located on the outskirts of major cities, hence the logic of looking at the tariffs of distributors operating in these areas.
 - d) P4. As a last resort, we used EIA data, which provides an average cost for the industry segment by state.

Questions:

- 8.1. Please provide the workpapers containing all inputs, assumptions, calculations, and sources used to derive the rates illustrated in Figure 1, whether those rates were calculated by Dunskey or taken, adapted, or relied upon from Hydro-Quebec's markup for electricity price comparison in Major North American cities, as is referenced in footnote 22.