NEWFOUNDLAND AND LABRADOR
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

AN ORDER OF THE BOARD

NO. P.U. 34(2023)

IN THE MATTER OF the **Electrical Power Control Act, 1994**, SNL 1994, Chapter E-5.1 (the "**EPCA**") and the **Public Utilities Act**, RSNL 1990, Chapter P-47 (the "**Act**"), as amended, and regulations thereunder; and

IN THE MATTER OF an application by Newfoundland and Labrador Hydro for approval of a rate for non-firm service in Labrador, revisions to the Island Industrial customer non-firm rate, the discontinuance of the Labrador secondary energy rate and a revision to the Supply Cost Variance Deferral Account definition.

DECISION SUMMARY

The Board approves Hydro's application to implement a non-firm rate for the Labrador Interconnected System to be calculated based on export market prices on the basis that non-firm energy sales will reduce the energy available for export. The Board also approves a proposed revision to the Island Industrial customer non-firm rate to be consistent with the Labrador Interconnected System non-firm rate and to better reflect marginal costs.

The proposed revision to the Supply Cost Variance Deferral Account to credit revenues from non-firm sales on the Labrador Interconnected System to the account are also approved. The discontinuance of the Secondary Energy rate on the Labrador Interconnected System is approved on the basis that it is no longer needed.

The non-firm rates will come into effect on March 1, 2024 and will remain in place until September 1, 2026 or until a further order of the Board. Hydro will be required to file, on or before June 1, 2026, an application requesting new non-firm rates.

APPLICATION

On September 15, 2022 Hydro applied for approval of a Labrador Interconnected System Non-Firm rate, revisions to the non-firm rate for Island Industrial customers and the discontinuance of the Secondary Energy Rate on the Labrador Interconnected System.

Notice of the Application was published in The Telegram and on the Board's website starting October 8, 2022. The intervenors in the Application were Newfoundland Power Inc. ("Newfoundland Power"), the Consumer Advocate, Mr. Dennis Browne, KC, the Island Industrial Customer Group[1], the Labrador Interconnected Group[2], Blockchain Labrador Corp ("BlockLAB"), Iron Ore Company of Canada and Enovum Data Centers.

On November 30, 2022 the intervenors and Board staff participated in a presentation by Hydro in relation to the application. On January 23, 2023 Hydro responded to Requests for Information ("RFIs").[3]

On March 1, 2023 the Board requested clarification from Hydro on certain issues, including whether additional proposals for approval were required. On March 15, 2023 Hydro responded to the Board's request for clarification.

On March 29, 2023 Hydro filed a revised application which included new proposals for a revision to its Supply Cost Variance Deferral Account and a minimum floor price for the non-firm rates (the "Application"). The Application requested approval of:

i) Discontinuance of Rate No. 5.1L, Secondary Energy;
ii) Rate No. 5.1L, Non-firm Energy;
iii) Modification of the IIC Rate Sheets; and
iv) A revision to the Supply Cost Variance Deferral Account.

The Application proposed an implementation date on the first day of the month that is at least of two months after the Board's order.

On May 1, 2023, the Board advised that there would be a second round of RFIs. On June 6, 2023 Hydro responded to additional RFIs.[4]

In mid-August 2023 Newfoundland Power, the Consumer Advocate, the Industrial Customer Group, the Labrador Interconnected Group and BlockLAB filed submissions and on August 25, 2023 Hydro filed its reply.

[1] Corner Brook Pulp and Paper Limited, Braya Renewable Fuels (Newfoundland) LP and Vale Newfoundland and Labrador Limited are the members of the Island Industrial Customer Group.
[2] The communities of Sheshatshiu, Happy Valley-Goose Bay, Wabush, and Labrador City are the members of the Labrador Interconnected Group.
[3] There were 105 Requests for Information, several of which contained multiple part requests.
[4] There were an additional 71 Requests for Information, several of which contained multiple part requests.

SUBMISSIONS

Newfoundland Power did not object to the Application but raised issues in relation to the proposed basic customer charge, the absence of a cost "adder," and excluding the direct connection to the Muskrat Falls Terminal Station.

The Consumer Advocate supported the Application and stated that offering surplus energy to customers within the province keeps the economic benefits from the sales in the province.

The Industrial Customer Group supported approval of the non-firm energy rate but submitted it should be on an interim basis and that non-firm energy rate offerings should be addressed in Hydro's next general rate application.

The Labrador Interconnected Group did not oppose the Application but raised issues in relation to non-firm revenues, recapture energy, a demand charge and the priority for allocating load.

BlockLAB opposed the Application and raised issues relating to the pricing methodology, and whether the power that would be available under the non-firm rate was surplus power. BlockLAB submitted that it is entitled to continue to receive service.

Hydro submitted in its reply that the proposals for a non-firm rate for the Labrador Interconnected System, revisions to the Island Industrial Customer Non-Firm Rate and the discontinuance of the Secondary Energy Rate on the Labrador Interconnected System reflect accepted utility practice and requested approval of the Application as submitted.

BACKGROUND

On March 23, 2018 the Board directed Hydro to provide an expansion study for the Labrador Interconnected System as well as a network additions policy setting out how new customers will be treated in regards to their impact on the system and how costs will be allocated among customers for reliability, economic, transmission, and load upgrades, either in the cost of service or through contributions in aid of construction.[5] The Board noted that the load in Labrador East was increasing and that there were reliability issues with the existing radial transmission line and directed Hydro to file a plan to ensure the continued provision of reliable service in Labrador East in the short-term.

On March 29, 2018 Hydro advised BlockLAB that its June 13, 2017 application for 20 MW of capacity to serve a blockchain data centre in Labrador West could not be approved until more firm capacity became available. On April 1, 2018 BlockLAB sent a revised request for service to Hydro seeking up to 8 MW of temporary power.[6]

[5] Order No. P.U. 9(2018).

[6] BlockLAB Submission, pages 1-2 and Information Session November 30, 2022, Slideshow, page 22.

On May 31, 2018 Hydro filed an application for approval of a new regulation to permit the restriction of load additions in Labrador East which was approved by the Board on the basis of the potential impact of large load additions in the context of the transmission constraints and reliability concerns in Labrador East for the 2018-2019 winter season.[7] This regulation was later amended to remain in place beyond the winter of 2018-2019 and was extended to Labrador West to assist in the provision of reliable service to customers.[8]

On August 10, 2018 the Board approved Hydro's application for a temporary service agreement with BlockLAB with a maximum demand of 7.75 MW.[9]

On March 17, 2021 the Board approved a network additions policy for the Labrador Interconnected System and directed Hydro to file a report with respect to the feasibility of the addition of a non-firm rate option in the network additions policy. [10] On June 30, 2021 Hydro filed a report in relation to non-firm rates which concluded that a non-firm rate is technically feasible for a limited number of customers on the Labrador Interconnected system.[11]

On November 10, 2022, the Government of Newfoundland and Labrador issued Order in Council OC2022-266 setting out an exemption with respect to Hydro's legislative obligation to supply firm power to cryptocurrency customers.

On December 16, 2022 the Board approved an amended temporary service agreement with BlockLAB to extend the agreement due to expire on December 31, 2022 until the conclusion of Hydro's non-firm rates application (the "Temporary Service Agreement").[12] The new termination date was the earlier of:

(i) the effective date of an Order from the Board with respect to Hydro's non-firm rate application;
(ii) the Customer's written declaration to Hydro that the temporary service has ended; or
(iii) when the Customer's load requirements would impede Hydro's ability to supply the contracted Power on Order with its Labrador Industrial customers with which Hydro already has contracts.

[7] Order No. P.U. 32(2018) and Order No. P.U. 36(2018).
[8] Order No. P.U. 18(2019) and Order No. P.U. 34(2019).
[9] Order No. P.U. 27(2018).
[10] Order No. P.U. 7(2021). The parties agreed as part of the settlement agreement that Hydro would conduct a review of the feasibility of adding a non-firm rate option.
[11] Application, Schedule 1, Attachment 1.
[12] Order No. P.U. 36(2022).

BOARD FINDINGS

The Application requested the approval of the Board to:

- implement a non-firm rate for the Labrador Interconnected System
- revise the non-firm rate for Island Industrial customers
- discontinue the Labrador Interconnected System Secondary Energy Rate
- revise the Supply Cost Variance Deferral Account to include revenues from the Labrador non-firm rate

These proposals as well as the issues raised by the parties in relation to these proposals are addressed below.

Labrador Interconnected System Non-Firm Rate

The Application proposed the implementation of a non-firm rate for the Labrador Interconnected System. The proposed rate includes an energy rate and a basic customer charge but does not include a demand or capacity charge.

The proposed energy rate is based on a forecast export market price to be updated monthly. The forecast export market price is computed using both the New York wholesale energy market price and the New England Massachusetts Hub energy price as export revenues are expected to be based on both of these markets. The export market price is based on the forecast prices published on the 21st day of the prior month and the weighting applied to each market is based on volume data from two months prior. The minimum price is based on the energy component of the rates for large General Service customers on the Labrador Interconnected System, Rate 2.4L, which is currently 1.675 cents per kWh.

The proposed monthly basic customer charge is based on Newfoundland Power's Rate 2.4 for General Service customers on the Island Interconnected System with demands of 1,000 KVA or greater, which is currently $85.25 per month. The monthly charge is intended to reflect the administration costs incurred in the provision of non-firm service, including billing costs, meter reading, posting the monthly price and administering curtailments. [13]

The proposed non-firm rates do not include a demand charge on the basis that the sale of non-firm energy will not contribute to additional capacity costs to be recovered through customer rates.

The Board is satisfied that the evidence demonstrates that the proposed Labrador Interconnected System non-firm rate should be approved at this time but that more information is required before the appropriate long-term approach is determined. The Board accepts that it is reasonable to base non-firm rates on the market value of exports as the revenue derived from

[13] Application, Schedule 1, page 10.

export sales represents the opportunity cost of offering the non-firm power to consumers in Labrador. This approach is consistent with Hydro's existing non-firm rates for the Labrador Industrial customers and with regulatory practice in other Canadian jurisdictions.[14] The Board accepts that the proposal is intended to be revenue neutral as the revenue recovered through the sale of non-firm energy based on export market prices would replace the revenue that would be recovered through the sale of the energy as exports.[15]

During this proceeding there were a number of issues raised in relation to specific aspects of the proposed non-firm rates which are addressed below, including:

i) the basis for the export market price,
ii) the monthly pricing updates,
iii) the proposed minimum price,
iv) the proposed basic customer charge for Labrador Interconnected customers, and
v) the absence of a demand or capacity charge.

The proposed export market price is based on a weighted average of the projected price (net of delivery costs) from the New York wholesale energy market and the New England Massachusetts Hub energy market.[16] According to BlockLAB there is no rationale to include the New England market in pricing or to ignore the transmission costs through Quebec. The Board notes that the New York market has historically been the export market for excess sales, however, it is expected that with the commissioning of the Muskrat Falls Project and the Maritime Link, export sales will include sales to the New England market and not just the New York market.[17] Since the calculation of the export market price is based on recent export sales, it can be expected to reasonably reflect actual sales to each of the markets. The Board also accepts that the transmission costs through Quebec are not deducted on the basis that they are a fixed cost and are not impacted by non-firm sales.[18] While the Board accepts the use of both New York and New England market prices without deduction for Quebec transmission costs at this time, the Board believes that as more experience is gained in the export market with the commissioning of the Muskrat Falls Project and the Maritime Link, more information will become available as to whether there should be changes as to the calculation of the export market price.

The proposed non-firm rate is updated monthly on the basis that this represents a reasonable balance between efficient pricing and price stability.[19] The Consumer Advocate supported a shorter pricing update period, such as weekly or daily, to better track the value of energy in the New York and New England markets. The Industrial Customer Group did not object to month-ahead pricing but noted that there would be more risk for Hydro and that more frequent pricing may offer benefits for customers. BlockLAB submitted that the monthly price is unusual and unnecessary and that daily price updates allow customers to determine if the pricing is

[14] Application, page 3.
[15] Hydro Submission and NP-NLH-015.
[16] Application, page 4.
[17] Application, Schedule 1, page 7.
[18] Hydro Submission, page 5.
[19] Application, Schedule 1, page 9.

economically feasible which is especially important for cryptocurrency customers which have the ability to engage and disengage within minutes. The Board notes that in British Columbia, Manitoba and New Brunswick surplus energy prices are updated more frequently.[20] The Board believes that more frequent pricing may result in non-firm rates which better reflect incremental costs as the non-firm rate would be based on more current export market prices. Nevertheless based on the evidence the development of a non-firm rate which is updated more frequently would require more time and may be associated with increased administrative costs and necessary billing system investments.[21] In addition it is not clear at this time whether daily and weekly prices are publicly available without a subscription.[22] Hydro indicated it will complete research to confirm its ability to source and provide daily or weekly forward market prices.[23] While the Board accepts monthly pricing at this time, the Board believes that more study and analysis is required to determine whether the non-firm rates should be updated more frequently.

The proposed non-firm rate includes a minimum price based on the energy price component of Rate 2.4L, General Service Rates for customers on the Labrador Interconnected System. BlockLAB opposed the minimum price and submitted that it was unfair and contrary to the current pricing of interruptible power. Hydro explained that its proposal is revenue neutral and the floor price is intended to protect Hydro against negative pricing. The Board accepts that it is reasonable at this time to set a minimum price which is higher than zero, given the value provided to non-firm customers and the fact that Hydro could decide not to export energy and store water until the export market price improves.[24] The Board notes that the proposed minimum price for non-firm energy is not higher than firm energy prices on the Labrador Interconnected System. While the Board accepts the proposed minimum price at this time it believes that more study is required in relation to minimum prices.

The proposed monthly basic customer charge is based on the rate applicable to Newfoundland Power's General Service customers on the Island Interconnected System with demands of 1,000 KVA or greater, as Hydro does not have a charge for large general service customers on the Labrador Interconnected System.[25] This charge is currently $85.25, and is intended to recover Hydro's costs associated with administering the non-firm rate. Newfoundland Power submitted that the basic customer charge should not be based on its customer costs and suggested that Hydro should complete its own detailed analysis of its costs. While the Board accepts that Hydro will incur administrative costs to provide the non-firm service, there is insufficient information available at the present time to determine the amount of the costs which will be incurred. In the circumstances the Board accepts the evidence that the proposed use of the Newfoundland Power general service customer rate will serve as a reasonable proxy for administrative costs until further information is available as to the actual costs.[26] The Board accepts the proposed basic

[20] Application, Schedule 1, page 8 and Schedule 1, Attachment 2, pages 7-8.
[21] Hydro Submission, page 3.
[22] PUB-NLH-015, page 2.
[23] Hydro Submission, page 3.
[24] PUB-NLH-017, Hydro Submission, page 5.
[25] Application Schedule 1, page 10.
[26] PUB-NLH-022.

customer charge at this time, but believes that more study is necessary to determine whether there should be a monthly charge to recover administrative costs and, if so, the amount of the charge.

The proposed non-firm rates do not include a demand or capacity charge. The Labrador Interconnected Group submitted that a demand charge should be included, otherwise non-firm customers would be permitted a free-ride on the transmission system. Newfoundland Power submitted that the energy rate should include a per kWh "adder" so that non-firm customers contribute toward the recovery of costs associated with common assets being used to deliver the energy. While typical rate design for general service customers would include a demand or capacity charge to recover a portion of the transmission costs, based on the evidence demand charges are not normally applied in pricing for surplus energy in other Canadian jurisdictions.[27] In addition the existing Island Industrial Customer Non-Firm rate does not include a demand charge for non-firm capacity. It is noted, however, that these examples involve the sale of surplus energy to existing customers who would pay a demand charge as part of their existing contracts. The Board also notes that there are examples of "adders" in non-firm rate offerings in other jurisdictions in Canada which involve per kWh charges that may provide for partial recovery of capacity costs.[28] The Board accepts based on the evidence that the sale of non-firm energy will not require an increased investment in generation or common transmission capacity and therefore will not contribute to additional capacity costs to be recovered through firm customer rates.[29] Investment in transmission, if required to provide non-firm service to a customer, will be recovered through upfront contributions from the customer.[30] While the Board accepts the exclusion of a demand charge or an "adder" at this time it believes that this issue should be studied further to determine the best long-term approach.

Island Industrial Customer Non-Firm Rate

The Application proposed to revise non-firm rates for the Island Industrial customers to reflect Hydro's incremental energy costs at time of delivery. Currently Hydro's Island Industrial customers have a non-firm energy rate for a customer-specific MW block in excess of their firm load. The existing rate for this service is calculated based on the monthly Holyrood Thermal Generating Station fuel cost which represents the marginal costs associated with the operation of the Holyrood Thermal Generating Station to provide energy to the Island Interconnected System.[31]

With the commissioning of the Muskrat Falls Project, including the commissioning of the Labrador-Island Link ("LIL"), Hydro expects the marginal energy cost on the Island Interconnected System to transition to the market value of exports. To reflect this change the Application proposed to revise the Island Industrial Customer Non-Firm Rate to reflect two alternative

[27] Application, Schedule 1, page 9, and Application, Schedule 1, Attachment 2, page 8.
[28] NP-NLH-002, NP-NLH-003 and NP-NLH-020.
[29] Application, Schedule 1, page 9.
[30] LAB-NLH-015.
[31] Application, Schedule 3. The energy sources for the non-firm rate can also include gas turbines and diesels.

calculations, depending on the source of the energy supplied. The existing non-firm rate would continue to be used when the Holyrood Thermal Generating Station is being operated to provide energy to the Island Interconnected system, except that the existing 10% administrative overhead rate would be eliminated.[32] When the Holyrood Thermal Generating Station is not being operated to supply energy, the non-firm rate would be the same as the non-firm rate for the Labrador Interconnected System, except that there would be no Basic Customer Charge.

The Board notes that the Island Industrial Customer Group did not object to the proposed amendments to the non-firm rates and supported the decision not to include a 10% administrative overhead rate.[33] Newfoundland Power supported the revisions to the Island Industrial Customer Non-Firm Rate to better reflect marginal energy cost and submitted that consistent with the Labrador Interconnected System Non-Firm Rate there should be a per kWh cost "adder" so that the customers contribute to fixed costs. The Board accepts that the proposed amendments to the Island Industrial Customer Non-Firm Rate will result in rates which better reflect the incremental cost of supply and which are consistent with the non-firm rates on the Labrador Interconnected system. With the commissioning of the Muskrat Falls Project, the marginal cost of energy on the Island Interconnected System is expected to transition to the market value of exports, except where the Holyrood Thermal Generating Station is being operated to provide energy to the system.[34] The Board accepts based on the evidence that non-firm energy usage is projected to be materially higher and therefore the 10% administrative fee would no longer reasonably represent costs.[35] The Board also accepts the rate should not include a monthly basic customer charge as the Island Industrial customers are existing customers who pay rates for firm service which include a specifically assigned charge and a demand charge. The Board accepts the proposed amendments to the Island Industrial Customer Non-Firm Rate at this time on the basis that the rate will be reviewed when more experience is gained with export sales and the provision of non-firm service.

Supply Cost Variance Deferral Account

The Application proposed a revision to the Supply Cost Variance Deferral Account definition to provide that the revenue from the Labrador Interconnected System Non-Firm Rate would be credited to the balance in this account to help offset the costs of supply from the Muskrat Falls Project.[36] Hydro believes that this change is appropriate on the basis that increases in non-firm sales in Labrador will serve to reduce the value of export revenues that would have been available to support rate mitigation funding.

The Board notes that Newfoundland Power and the Island Industrial Customer Group supported Hydro's request for a revised Supply Cost Variance Deferral Account definition. The Labrador Interconnected Group requested that where there is insufficient recapture energy Hydro be

[32] Hydro Submission, page 4.
[33] Industrial Customer Group Submission, page 2 and 3.
[34] Application, Schedule 1, pages 12-13.
[35] Application, Schedule 1, page 10 and PUB-NLH-022.
[36] Application, page 6.

required to advise the Board and use non-firm revenues generated in Labrador toward offsetting rates paid by Labrador residents.[37] The Board accepts that sales of the non-firm energy on the Labrador Interconnected System should be credited to the Supply Cost Variance Deferral Account since these sales will reduce the export sales which would have been credited to the account. The Board also accepts it is not necessary to address recapture energy at this time as based on the evidence there is sufficient recapture to meet firm load with additional amounts remaining to serve non-firm customers.[38] While the Board accepts the proposed revision to the Supply Cost Variance Deferral Account at this time, the Board believes that the approach should be reviewed when Hydro has more experience with export sales and non-firm rates.

Discontinuance of Rate No. 5.1L, Secondary Energy

The Application proposed to discontinue Rate 5.1L, Secondary Energy charged to customers who are engaged in fuel switching on the Labrador Interconnected System on the basis that this rate is not in use and has not been in use for many years and will not be required once the proposed Labrador Interconnected System Non-Firm Rate is approved.

The Board notes that no party commented on Hydro's proposal to discontinue Rate 5.1L, Secondary Energy. The Board accepts the evidence that Rate 5.1L, Secondary Energy is not in use and will not be required once the proposed Labrador Interconnected System Non-Firm Rate is implemented and therefore should be discontinued.

Service to BlockLAB

In addition to BlockLAB's specific comments on the proposed non-firm rate pricing methodology as previously discussed, it also raised issues with respect to Hydro's provision of service to BlockLAB. These issues relate to contractual undertakings made by Hydro, Hydro's legislated mandate and Order in Council OC2022-266.

BlockLAB submitted that the Application is contrary to contractual undertakings and representations made by Hydro. According to BlockLAB it accepted 7.75 MW of curtailable power in 2018 and made substantial capital investments, including building a substation, on the understanding and with the assurance from Hydro that its request for 20 MW of power would be made available when Hydro had available capacity (subject to a prior 1.25 MW request). BlockLAB argued that 20 MW is now available year-round and therefore is properly considered firm power. It is BlockLAB's position that it should be accorded this power at the existing industrial rate in accordance with the representations and undertakings made to it.

The Board accepts that based on the evidence the forecast 20 MW of power available in Labrador West in the winter is properly considered non-firm power at this time.[39] The total peak capacity

[37] Labrador Interconnected Group Submission, page 5.
[38] Application, Schedule 1, Attachment 1, pages 3-4 and Hydro Submission, page 7.
[39] Application, Schedule 1, page 3 and Application, Schedule 1, Attachment 1, page 16.

in Labrador West is 385 MW in the winter and the load forecast for 2024 is 378.3 MW, not including the 10 MW interruptible power entitlement of IOC and Tacora.[40] The projected maximum non-firm load reflects the potential for up to 50 interruptions which was determined to be an acceptable limit for customers and for reliable system operation.[41] The final calculation of the non-firm capacity is not known at this time as a system impact study will be required to make this determination.[42] The Board accepts that the evidence demonstrates that the 20 MW is properly considered non-firm power at this time and that there is no operationally viable firm capacity available in Labrador West. As the available power in Labrador West is non-firm, the Board does not accept that BlockLAB should be accorded 20 MW of firm power. The Board makes no comment with respect to any contractual remedies that BlockLAB may have in relation to contractual undertakings and representations which may have been made by Hydro.

BlockLAB submitted that Hydro's proposal runs contrary to Hydro's legislated mandate. According to BlockLAB the Application is contrary to subsection 3(a) of the **EPCA** that rates be reasonable and not discriminatory and that they would impede or preclude industrial activity in Labrador because of the substantial price increases. BlockLAB also cited subsection 3(b) of the **EPCA** which requires open, non-discriminatory and non-preferential access to the electric system and that power be assessed and allocated consistent with this policy. BlockLAB submitted that Hydro's proposal would cause it great uncertainty, resulting in losses, employee layoffs and possible closure. BlockLAB noted that of the potential identified non-firm customers, it is the only one that has established operations in Labrador West and that it has made substantial investments and provided benefits to the local community. BlockLAB submitted that Hydro's proposal unfairly favours one industry over others as Hydro has already assigned at least 10 MW to the two mining companies in Labrador West as interruptible power at the existing industrial rate while consigning the existing 7.75 MW power provided to BlockLAB as non-firm power to be divided among all new applicants, none of which have a local presence or made any local investments. According to Hydro its proposal for the allocation of non-firm power meets its obligation to treat all customers seeking access to non-firm power in a fair and equitable manner pursuant to section 73(1) of the **Act**.[43] Hydro noted that it applies a similar approach for the sale of excess energy to Labrador Industrial customers which is based on the forecast average monthly market price. Hydro stated that the rate established for the sale of firm power to Labrador Industrial customers was established pursuant to the Labrador Industrial Rates Policy intended to meet Hydro's statutory obligation to promote the development of industrial activity in Labrador.[44]

The Board is satisfied that the Application requests are not contrary to Hydro's legislated mandate given that OC2022-266 specifically exempts Hydro from section 3 of the **EPCA,** sections 54 and 55 of the **Act,** and its statutory obligation to supply electrical energy on a firm basis to cryptocurrency customers.

[40] Application, Schedule 1, Attachment 1, pages 15 and 20.
[41] Application, Schedule 1, page 3 and BKL-NLH-063.
[42] Hydro Submission, page 2.
[43] Hydro Submission, page 6, BKL-NLH-065.
[44] Application Schedule 1, page 4, BKL-NLH-044 and BKL-NLH-076.

BlockLAB submitted that in accordance with Order in Council OC2022-266, as an existing cryptocurrency mining customer it is entitled to continue to receive its current 7.75 MW of power. Hydro submitted that the Temporary Service Agreement will expire upon the effective date of the Board's non-firm rates order and as a result BlockLAB will then be subject to the exemption in OC2022-266.

The Board does not accept that OC2022-266 entitles BlockLAB to continue to receive its current 7.75 MW of power after the non-firm rates become effective. OC2022-266 exempts Hydro from its statutory obligation to supply electrical energy on a firm basis to cryptocurrency customers subject to two conditions. The first condition relates to circumstances where there is energy and capacity surplus to Hydro's forecast requirements which has become available which Hydro can provide on a temporary firm basis. The Board has accepted that the 20 MW of power projected to be available in the winter in Labrador West is properly considered non-firm power and as a result there is no surplus energy and capacity for Hydro to supply on a temporary firm basis. The second condition relates to existing customers. While BlockLAB was an existing customer when the Order in Council was issued, upon the effective date of the non-firm rates its service agreement with Hydro will expire. This will result in a change in BlockLAB's service and it will no longer be a customer of Hydro. As a result OC2022-266 will exempt Hydro from its obligation to provide firm service to BlockLAB. The Board is satisfied that upon the effective date of the non-firm rates Hydro is exempted from its statutory obligation to supply electrical energy to BlockLAB on a firm basis.

Other Issues

The Board notes that there were other issues raised during this proceeding which do not require an order of the Board at this time, including the allocation of non-firm power, the direct connection of non-firm customers closer to the Muskrat Falls Terminal Station and the potential depletion of recapture energy.

While the sharing and allocation of non-firm power was raised during this proceeding, Hydro did not request the Board's approval and confirmed that the allocation of power has not yet been determined.[45] Hydro stated:

> Hydro agrees with the IIC Group that the issue of power distribution and priority is not the subject of the present application; this will be subject to further review and discussion amongst the parties once this process has concluded and once there is further certainty regarding the number of customers availing of the rate.[46]

The Board notes that several intervenors raised issues related to the allocation of the non-firm power. The Labrador Interconnected Group argued that Industrial customers should have priority on the basis of the significant employment and economic benefits they provide as compared to

[45] BKL-NLH-015, page 3.
[46] Hydro Submission, pages 2-3.

cryptocurrency operators or other non-firm loads. The Island Industrial Customer Group submitted that Hydro's existing high firm demand customers should have priority over new customers seeking primarily the interruptible rate and suggested this matter may be brought forward to be considered at Hydro's next general rate application. BlockLAB noted that it has been a customer since 2018 and has made substantial investments and submitted that Hydro's proposals unfairly favor one industry over others and would result in the division of non-firm power among all new applicants, none of which have a local presence or have made investments. The Board believes that consideration should be given to the concerns expressed in this proceeding when determinations are made with respect to the allocation and sharing of non-firm power.

Issues were raised during this proceeding in relation to the direct connection of non-firm customers closer to the Muskrat Falls Terminal Station.[47] The Board notes that Hydro subsequently indicated that it does not have any plans to connect customers to the Muskrat Falls Terminal Station as the interconnection estimate analysis has been halted and would need to be restudied subsequent to the conclusion of this application process. As a result, it is not necessary at this time to address the direct connection of non-firm customers closer to the Muskrat Falls Terminal Station.

The Labrador Interconnected Group requested that the Board direct that non-firm service can only be served using recapture energy and that non-firm customers be curtailed whenever it would require that the Labrador Interconnected System be supplied with another source. The Board accepts based on the evidence that non-firm service will not impact the availability of recapture energy for firm service or power transfers to the island as non-firm service would be curtailed in circumstances that would impact firm customer service.[48] As a result the Board is satisfied that there is no reason to provide any direction to Hydro with respect to recapture energy and the provision of non-firm service at this time.

Implementation

The Board is satisfied that the proposed non-firm rates for the Labrador Interconnected System and the Island Industrial customers are a reasonable first step on the basis that Hydro will continue to gather information as it gains more experience in export activity and the provision of non-firm service.

The Island Industrial Customer Group requested that the rates be set as interim until Hydro's next general rate application and that Hydro be ordered to track and report quarterly on how the month-ahead price estimates are tracking with actual export prices.[49] Hydro did not agree that the non-firm rates should be limited or provided on a pilot basis as applicants would not want to proceed with further studies or infrastructure investments until they have certainty.[50] The Board

[47] Application, Schedule 1 pages 5-6 and Newfoundland Power Submission, page 3.
[48] Hydro Submission, pages 4-5.
[49] Island Industrial Customer Group Submission, page 2.
[50] NP-NLH-018.

accepts that the proposed non-firm rates should be approved at this time for use until Hydro has the necessary information and experience to address the outstanding issues. Hydro has indicated that it will need a couple of winter seasons to collect adequate information.[51] Hydro has also indicated that it will require a two-month period from the date of approval of the non-firm rates to allow for the implementation of the necessary processes.[52] As a result the proposed Labrador Interconnected System non-firm rates will be approved effective March 1, 2024 and will remain in place until a further order of the Board or no later than September 1, 2026. Hydro will be required to file an application for new non-firm rates which will include a comprehensive report supporting the application proposals by June 1, 2026.

BOARD DECISION

IT IS THEREFORE ORDERED THAT:

1. The proposed Rate No. 5.1L, Non-Firm Energy, as set out Schedule A, is approved, effective March 1, 2024 until further order of the Board or no later than September 1, 2026.

2. The revised Island Industrial Customer Rates, as set out in Schedule B, are approved, effective March 1, 2024 until further order of the Board.

3. The revised Supply Cost Variance Deferral Account, as set out in Schedule C, is approved.

4. The discontinuance of Rate No. 5.1L, Secondary Energy is approved.

5. Newfoundland and Labrador Hydro shall file an application and a report addressing the Labrador Interconnected System Non-Firm Rate and the Island Industrial Customer Non-Firm Rate by June 1, 2026.

6. Newfoundland and Labrador Hydro shall pay all expenses of the Board relating to this Application.

[51] Hydro's Submission, page 4.
[52] Application, page 6.

DATED at St. John's, Newfoundland and Labrador, this 19th day of December 2023.

Dwanda Newman, LL.B.
Vice-Chair

John O'Brien, FCPA, FCA, CISA
Commissioner

Christopher Pike, LL.B., FCIP
Commissioner

Jo-Anne Galarneau
Executive Director and Board Secretary

NEWFOUNDLAND AND LABRADOR HYDRO
SCHEDULE OF RATES, RULES AND REGULATIONS
RATE NO. 5.1L
NON-FIRM ENERGY

Availability

For service to Customers on the Labrador Interconnected System who purchase a minimum of 1.5 MW load, who provide their own transformer and who are delivered power at transmission voltage and subject to interruption/curtailment. Hydro shall supply non-firm energy to the Customer at such times and to the extent that Hydro has electricity available in excess of the amount it requires to meet the firm service requirements of its customers. Hydro will not utilize standby generation to supply non-firm energy. Hydro may also interrupt or curtail the supply of non-firm energy at its sole discretion to deal with system constraints.

Rate

Basic Customer Charge ..... $85.25 per month

Energy Charges

Energy charges shall be the greater of:

(i) The energy charge applicable to Rate No. 2.4L – General Service 1,000 KVA and Over provided in Hydro's Schedule of Rates. Rules and Regulations; and

(ii) The applicable On-Peak Energy Rate or Off-Peak Energy Rate

The following formula shall apply to calculate the On-Peak Energy Rate and Off-Peak Energy Rate:

On-Peak Energy Rate:

The non-firm energy charge for the on-peak period for the calendar month shall be calculated monthly based on the weighted average of:

(i) the settlement price for NYISO Zone A Day-Ahead Peak Calendar-Month 5 MW Futures after the end of trading on the nineteenth day of the previous month, converted to Canadian dollars using the exchange rate of the same day, and adjusted for losses and other market fees; and

(ii) the settlement price for ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures after the end of trading on the nineteenth day of the previous month, converted to Canadian dollars using the exchange rate of the same day, and adjusted for losses and other market fees.

NEWFOUNDLAND AND LABRADOR HYDRO
SCHEDULE OF RATES, RULES AND REGULATIONS
RATE NO. 5.1L
NON-FIRM ENERGY

Off-Peak Energy Rate

The non-firm energy charge for the off-peak period for the calendar month shall be calculated monthly based on the weighted average of:

(i) the settlement price for NYISO Zone A Day-Ahead Off-Peak Calendar-Month 5 MW Futures after the end of trading on the nineteenth day of the previous month, converted to Canadian dollars using the exchange rate of the same day, and adjusted for losses and other market fees; and

(ii) the settlement price for ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures after the end of trading on the nineteenth day of the previous month, converted to Canadian dollars using the exchange rate of the same day, and adjusted for losses and other market fees.

The weightings applied to each market price to calculate the on-peak and off peak energy charges will reflect the percentage of kWh exports sold (i.e., including exports from regulated and non-regulated Hydro) based on each market for the previous calendar month.

Peak and Off-Peak Periods

The winter on-peak period is proposed to be 7 am to 10 pm Monday to Friday for the months of December to March and the non-winter peak period is 8 am to 10 pm for the period April to November. The off-peak period will include all other hours.

Terms and Conditions

1. The product is non-firm energy, meaning delivery or receipt of the energy may be interrupted at any time to deal with system constraints. Standby generation will not be used to ensure continuity of service to non-firm customers.
2. The Customer will be required to interconnect at transmission system voltages of 46 kV or higher.
3. Applicants interested in proceeding with non-firm service will fund a system impact study for use in finalizing the amount of non-firm capacity that can be made available.
4. The Customer is required to fund the cost of interconnection in advance of Hydro providing service.
5. The Customer curtailment process must be automated and controllable by operators in Hydro's Energy Control Centre ("ECC"). Operational procedures and protocols must be established to ensure that interruption of non-firm customers can be safely and effectively performed by ECC operators.

NEWFOUNDLAND AND LABRADOR HYDRO
SCHEDULE OF RATES, RULES AND REGULATIONS
RATE NO. 5.1L
NON-FIRM ENERGY

6. The Customer must be capable of curtailing load within ten minutes of being advised by Hydro. In the case where the Customer does not comply with a curtailment request, Hydro can automatically interrupt supply to the Customer.
7. Any equipment, software, and resources required to remotely monitor and enable automatic curtailment at both Hydro's facilities and the Customer's facilities will be funded by the Customer.
8. The Customer will be required to provide reasonable security prior to Hydro connecting service, usually in the form of two months equivalent bills. The security deposit will be returned when the Customer has established two consecutive years of good credit history with Hydro.
9. Hydro will inform the Customer of the Non-firm energy charge on the first business day following the 21st day of the month preceding the month for which the rate is being set.
10. The Customer must supply and own the transformer supplying the customer.
11. Customer-owned equipment required for interconnection must meet Hydro's service standards.
12. The rate is designed for customers supplied and metered at the high side of the transformer at transmission voltage of 46 kV or higher. For customers metered at the low side of the transformer, meter readings shall be increased by 1.5% for each transformation between the meter and the transmission voltage.
13. Hydro reserves the right to have a separate service agreement with the Customer to provide clarity on issues that may not be specifically set out in the Terms and Conditions.
14. If the Customer's power factor is below 90%, the Customer shall upon written notice by Hydro provide, at the Customer's expense, power factor corrective equipment to ensure that a power factor of not less than 90% is maintained.
15. For the purpose of allocation and monitoring the use of non-firm capacity, Hydro will maintain separate regions for Labrador East and Labrador West.
16. If a non-firm customer discontinues service, the remaining existing non-firm customers in the same region will be provided the option to share equally in the newly available non-firm capacity. If at the conclusion of this process, non-firm capacity remains available in the region, Hydro can offer the available non-firm capacity available to new applicants.
17. When Hydro determines that the full non-firm capacity is utilized in a region, Hydro will not add additional non-firm customers unless additional transmission investments result in additional non-firm capacity becoming available in that region. In this circumstance,

NEWFOUNDLAND AND LABRADOR HYDRO
SCHEDULE OF RATES, RULES AND REGULATIONS
RATE NO. 5.1L
NON-FIRM ENERGY

Hydro will conduct an open process prior to allocation of additional non-firm capacity among applicants. Existing non-firm customers would have the opportunity to apply to increase their non-firm capacity allocation as part of this process.

This rate schedule does not include the Harmonized Sales Tax (HST) which applies to electricity bills.

NEWFOUNDLAND AND LABRADOR HYDRO
SCHEDULE OF RATES, RULES AND REGULATIONS
INDUSTRIAL – FIRM

Availability

Any person purchasing power, other than a retailer, supplied from the Interconnected Island bulk transmission grid at voltages of 66 kV or greater on the primary side of any transformation equipment directly supplying the person and who has entered into a contract with Hydro for the purchase of firm power and energy.

Base Rate*

Demand Charge

The rate for Firm Power, as defined and set out in the Industrial Service Agreements, shall be $10.73 per kilowatt (kW) per month of billing demand.

Firm Energy Charge

Base Rate ..... @ 4.428¢ per kWh

RSP Adjustment

Current Plan .....@ 1.060¢ per kWh
Current Plan Mitigation Adjustment .@ (0.675)¢ per kWh
Current Plan Total.....@ 0.385¢ per kWh

Total RSP Adjustment – All kilowatt-hours..... @ 0.385¢ per kWh

CDM Cost Recovery Adjustment……..@ 0.014¢ per kWh

NEWFOUNDLAND AND LABRADOR HYDRO
SCHEDULE OF RATES, RULES AND REGULATIONS
INDUSTRIAL – FIRM

Specifically Assigned Charges

The table below contains the additional annual specifically assigned charges for customer plant in service that is specifically assigned to the Customer.

	Annual Amount
Corner Brook Pulp and Paper Limited	$13,311
Braya Renewable Fuels (Newfoundland) GP Inc.	$107,678
Teck Resources Limited	$51,789
Vale	$145,352

***Subject to RSP Adjustments and CDM Cost Recovery Adjustment**

RSP Adjustments refers to all applicable adjustments arising from the operation of Hydro's Rate Stabilization Plan, which levelizes variations in hydraulic production, fuel cost, load and rural rates.

The CDM Cost Recovery Adjustment is updated annually to provide recovery over a seven-year period of costs charged annually to the Conservation and Demand Management (CDM) Cost Deferral Account.

Adjustment for Losses

If the metering point is on the load side of the transformer, either owned by the customer or specifically assigned to the customer, an adjustment for losses as determined in consultation with the customer prior to January 31 of each year shall be applied.

General

Details regarding the conditions of Service are outlined in the Industrial Service Agreements.

This rate schedule does not include the Harmonized Sales Tax (HST) that applies to electricity bills.

NEWFOUNDLAND AND LABRADOR HYDRO
SCHEDULE OF RATES, RULES AND REGULATIONS
INDUSTRIAL – NON-FIRM

Availability

Any person purchasing power, other than a retailer, supplied from the Interconnected Island bulk transmission grid at voltages of 66 kV or greater on the primary side of any transformation equipment directly supplying the person and who has entered into a contract with Hydro for the purchase of firm power and energy.

Rate

Non-Firm Energy Charge: Non-Thermal Generation Source (¢ per kWh)

Hydro will inform the Customer of the Non-firm energy charge on the first business day following the 21st day of the month preceding the month for which the rate is being set.

Energy charges shall be the greater of:

(iii) The energy charge applicable to Rate No. 2.4L – General Service 1,000 KVA and Over provided in Hydro's Schedule of Rates. Rules and Regulations; and

(iv) The applicable On-Peak Energy Rate or Off-Peak Energy Rate

The following formula shall apply to calculate the On-Peak Energy Rate and Off-Peak Energy Rate:

On-Peak Energy Rate:

The non-firm energy charge for the on-peak period for the calendar month shall be calculated monthly based on the weighted average of:

(i) the settlement price for NYISO Zone A Day-Ahead Peak Calendar-Month 5 MW Futures after the end of trading on the nineteenth day of the previous month, converted to Canadian dollars using the exchange rate of the same day, and adjusted for losses and other market fees; and

(ii) the settlement price for ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures after the end of trading on the nineteenth day of the previous month, converted to Canadian dollars using the exchange rate of the same day, and adjusted for losses and other market fees.

Off-Peak Energy Rate

The non-firm energy charge for the off-peak period for the calendar month shall be calculated monthly based on the weighted average of:

(i) the settlement price for NYISO Zone A Day-Ahead Off-Peak Calendar-Month 5 MW Futures after the end of trading on the nineteenth day of the previous month, converted to Canadian dollars using the exchange rate of the same day, and adjusted for losses and other market fees; and

NEWFOUNDLAND AND LABRADOR HYDRO
SCHEDULE OF RATES, RULES AND REGULATIONS
INDUSTRIAL – NON-FIRM

(ii) the settlement price for ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures after the end of trading on the nineteenth day of the previous month, converted to Canadian dollars using the exchange rate of the same day, and adjusted for losses and other market fees.

The weightings applied to each market price to calculate the on-peak and off-peak energy charges will reflect the percentage of kWh exports sold (i.e., including exports from regulated and non-regulated Hydro) based on each market for the previous calendar month.

Peak and Off-Peak Periods

The winter on-peak period is proposed to be 7 am to 10 pm Monday to Friday for the months of December to March and the non-winter peak period is 8 am to 10 pm for the period April to November. The off-peak period will include all other hours.

Non-Firm Energy Charge: Thermal Generation Source (¢ per kWh)

The following formula shall apply to calculate the Non-Firm Energy rate:

$$\{(A \div B) \times (1 \div (1 - C))\} \times 100$$

A = the monthly average cost of fuel per barrel for the energy source in the current month or, in the month the source was last used

B = the conversion factor for the source used (kWh/bbl)

C = the average system losses on the Island Interconnected grid for the last five years ending in 2016 (3.34%).

The energy sources and associated conversion factors are:

1) Holyrood, using No. 6 fuel with a conversion factor of 583 kWh/bbl

2) Gas turbines using No. 2 fuel with a conversion factor of 475 kWh/bbl

3) Diesels using No. 2 fuel with a conversion factor of 556 kWh/bbl

Adjustment for Losses for Thermal Generation Source

If the metering point is on the load side of the transformer, either owned by the customer or specifically assigned to the customer, an adjustment for losses as determined in consultation with the customer prior to January 31 of each year shall be applied.

General

Details regarding the conditions of Service are outlined in the Industrial Service Agreements.

This rate schedule does not include the Harmonized Sales Tax (HST) that applies to electricity bills.

NEWFOUNDLAND AND LABRADOR HYDRO
SCHEDULE OF RATES, RULES AND REGULATIONS
INDUSTRIAL – WHEELING

Availability

Any person purchasing power, other than a retailer, supplied from the Interconnected Island bulk transmission grid at voltages of 66 kV or greater on the primary side of any transformation equipment directly supplying the person and who has entered into a contract with Hydro for the purchase of firm power and energy and whose Industrial Service Agreement so provides.

Rate

Energy Charge

All kWh (net of losses)*..... @ 0.831¢ per kWh

*For the purpose of this Rate, losses shall be 3.34%, the average system losses on the Island Interconnected Grid for the last five years ending in 2016.

General

Details regarding the conditions of Service are outlined in the Industrial Service Agreements.

This rate schedule does not include the Harmonized Sales Tax (HST) that applies to electricity bills.

NEWFOUNDLAND AND LABRADOR HYDRO
SUPPLY COST VARIANCE DEFERRAL ACCOUNT DEFINITION

Newfoundland and Labrador Hydro's ("Hydro") Supply Cost Variance Deferral Account is established to smooth rate impacts for Hydro's Utility customer, Newfoundland Power Inc. ("Newfoundland Power"), and Island Industrial customers and to provide Hydro the opportunity to recover supply cost variances between the forecasts reflected in customer rates and the actual costs incurred.

The formulae used to calculate the account's activity are outlined below. Positive values denote amounts owing from customers to Hydro whereas negative values denote amounts owing from Hydro to customers.

Section A

1.0 Muskrat Falls Project ("Project") Cost Variances

The **Project Cost Variances** will reflect the variance from test year costs for the Muskrat Falls Purchase Power Agreement ("Muskrat Falls PPA") and the Transmission Funding Agreement ("TFA").

Project Cost Variances will be calculated monthly based on the following formula:

$$(A - A_T) + (B - B_T)$$

Where:

A = Actual Purchased Power Expense from Muskrat Falls PPA Charges;

A_T = Test Year Purchased Power Expense from Muskrat Falls PPA Charges;

B = Actual Purchased Power Expense from TFA Charges; and

B_T = Test Year Purchased Power Expense from TFA Charges.

2.0 Rate Mitigation Fund

Any funding to provide rate mitigation to offset the costs of the Project will be credited to the **Rate Mitigation Fund** component of the deferral account.

3.0 Project Cost Recovery

Charges applied to customers to recover Project costs will be credited to the **Project Cost Recovery** component of the deferral account and tracked by customer class.

NEWFOUNDLAND AND LABRADOR HYDRO
SUPPLY COST VARIANCE DEFERRAL ACCOUNT DEFINITION

4.0 Holyrood Thermal Generating Station ("Holyrood TGS") Fuel Cost Variance

Holyrood TGS Fuel Cost Variances will be calculated monthly based on the following formula:

$$(C - C_T)$$

Where:

C = Actual Holyrood TGS Fuel Cost incurred in the month to supply firm energy to customers on the Island Interconnected System; and

C_T = Test Year Holyrood TGS Fuel Cost in the month to supply firm energy to the customers on the Island Interconnected System.

5.0 Other Island Interconnected System Supply Cost Variance

The account shall be charged or credited monthly with the **Other Island Interconnected System Supply Cost Variance** incurred by Hydro on the Island Interconnected System that is in excess of the Cost Variance Threshold in the calendar year.

Variations resulting from both the price and volume of the following thermal generation sources shall be charged or credited to this account:

- Holyrood Combustion Turbine;
- Hardwoods Gas Turbine;
- Stephenville Gas Turbine;
- St. Anthony Diesel Plant; and
- Hawkes Bay Diesel Plant.

Variations resulting from the volume of the following on-island power purchases shall be charged or credited to this account:

- Nalcor Exploits;
- Star Lake;
- Rattle Brook;
- Corner Brook Pulp and Paper Limited ("CBPP") Cogeneration;
- St. Lawrence wind; and
- Fermeuse wind.

Variations from the price and volume of firm energy power purchases from CBPP shall be charged or credited to this account.

NEWFOUNDLAND AND LABRADOR HYDRO
SUPPLY COST VARIANCE DEFERRAL ACCOUNT DEFINITION

Variations resulting from the cost of off-island power purchases shall also be charged or credited to this account. Off-island power purchase costs shall not include any expenditure related to Muskrat Falls PPA, TFA or the Interim TFAs.

The **Other Island Interconnected System Supply Cost Variance** will be determined monthly by the following formula:

D + E + F + G

D = Test Year Thermal Generation Variances resulting from both price and volume;

Where:

D = (Actual Thermal Generation Cost in providing firm energy – Test Year Thermal Generation Cost).

E = Test Year Off-Island Power Purchase Variances resulting from both price and volume;

Where:

E = (Actual Off-Island Power Purchase Cost – Test Year Off-Island Power Purchase Cost).

F = Test Year Power Purchase Variances resulting from volume;

Where:

F = (Actual kWh Purchases – Test Year kWh Purchases) x (Test Year Purchase Cost in $/kWh).

G = Variances based on firm energy purchases from CBPP;

Where:

G = (Actual CBPP Power Purchase Cost – Capacity Assistance Adjustment) – (Test Year CBPP Firm Energy Power Purchase Cost).

"Capacity Assistance Adjustment" shall represent any change in fixed capacity assistance payments as a result of firm energy purchases from CBPP.

The **Cost Variance Threshold** equals ±$500,000[1] in a calendar year.

[1] The effective date of the cost variance threshold commences January 1, 2022.

NEWFOUNDLAND AND LABRADOR HYDRO
SUPPLY COST VARIANCE DEFERRAL ACCOUNT DEFINITION

6.0 Net Revenue from Exports Variance

The **Net Revenue from Exports Variance** is computed on monthly basis by the following formula:

$$(H_T - H)$$

Where:

Net Revenue from Exports reflect the revenues from Hydro exports less the costs incurred to export energy.

H_T = Test Year Net Revenues from Exports ($); and

H = Actual Net Revenues from Exports ($).

The account will be credited in December with an estimate of net export sales that occurred during the year but the actual settlement value will not be finalized until the following period. The account will be adjusted in the following period for any difference between the estimated and actual value.

Revenues from non-firm sales on the Island Interconnected System supplied by hydraulic generation and revenues from Rate No. 5.1L – Non-Firm Energy will also be credited to the Net Revenue from Exports Variance component.

7.0 Transmission Tariff Revenue Variance

For the purpose of this deferral account, Transmission Tariff Revenues reflect the transmission revenues paid by third parties to enable exports. The ***Transmission Tariff Revenue Variance*** is computed on monthly basis by the following formula:

$$(I_T - I)$$

Where:

I_T = Test Year Transmission Tariff Revenues paid by third parties ($); and

I = Actual Transmission Tariff Revenues paid by third parties ($).

NEWFOUNDLAND AND LABRADOR HYDRO
SUPPLY COST VARIANCE DEFERRAL ACCOUNT DEFINITION

8.0 Load Variation

Firm: Firm load variation is determined based on the revenue variation for firm energy sales compared with the test year Cost of Service Study firm sales. It is calculated separately for Newfoundland Power firm sales and Island Industrial firm sales on a monthly basis, in accordance with the following formula:

$$(J_T - J_A) \times K_R$$

Where:

J_T = Test Year Cost of Service Firm Sales, by customer class (kWh);

J_A = Actual Firm Sales, by customer class (kWh); and

K_R = Firm Energy Rate, by customer class.

Where the rate designs include more than one energy block, the excess energy rate will apply in computing **Load Variation** transfers.

9.0 Rural Rate Alteration

The **Rural Revenue Adjustment** transfers to Newfoundland Power: (i) changes in Hydro Rural revenues resulting from changes in Rural Rates between test years, and (ii) changes in Rural revenues on the Island Interconnected System as a result of changes in Rural load between test years. The **Rural Revenue Adjustment** is calculated on a monthly basis, in accordance with the following formula:

$$[(N_T - N_A) \times O_T] + [(P_T - P_A) \times Q_T]$$

Where:

N_T = Test Year Cost of Service rural rates;

N_A = Existing rural rates;

O_T = Test Year Billing Units (kWh, bills, billing demand);

P_T = Test Year kWh sales for Hydro Rural Island Interconnected (excluding street and area lighting);

P_A = Actual kWh sales for Hydro Rural Island Interconnected (excluding street and are lighting); and

Q_T = Test Year rates per class for Rural Island Interconnected System (excluding street and area lighting).

The **Rural Revenue Adjustment** will be allocated between Newfoundland Power and regulated Labrador Interconnected customers in the same proportion that the Rural

NEWFOUNDLAND AND LABRADOR HYDRO
SUPPLY COST VARIANCE DEFERRAL ACCOUNT DEFINITION

Deficit was allocated in the approved Test Year Cost of Service Study. The portion allocated to Hydro Rural Labrador Interconnected will be removed from the plan and written off to Hydro's net income (loss).

10.0 Greenhouse Gas Credit Revenues Variance

The **Greenhouse Gas Credit Revenues Variance** is computed on monthly basis, beginning on January 1, 2021, by the following formula:

$$(T_T - T)$$

Where:

T_T = Test Year Greenhouse Gas Credit Revenues ($); and

T = Actual Greenhouse Gas Credit Revenues ($).

Section B

1.0 Plan Balances

Separate plan balances for the Utility and Island Industrial customers will be maintained in this account as required. Transfers to the Utility balance will continue to reflect the monthly adjustments for the **Rural Rate Alteration**. No other transfers to the Utility balance and Industrial Customer balance will occur until further approval is obtained from the Board of Commissioners of Public Utilities ("Board").

2.0 Financing Costs

Financing charges on the plan balances will be calculated monthly using a financing rate calculated based on Hydro's short-term borrowing costs. The calculation of the annual short-term borrowing rate is as follows:

(U + V + W) divided by (X + Y)

Where:

U = Credit Facility Interest and fees;

V = Promissory Note Interest and fees;

W = Recoverable portion of debt guarantee fees associated with promissory note balances;

X = Weighted Average Credit Facility Debt; and

Y = Weighted Average Promissory Note Debt Balances.

NEWFOUNDLAND AND LABRADOR HYDRO
SUPPLY COST VARIANCE DEFERRAL ACCOUNT DEFINITION

For the period of January to November the interest rate used will be the rate calculated based on the prior year-end. In the month of December, the interest expense will be trued up for the current year as the interest rate will be re-calculated and applied to the deferral account balance outstanding at the end of each month, inclusive of compound interest.

3.0 Customer Allocation

Customer Allocation of balances in the Supply Cost Variance Deferral Account will be subject to further approval by the Board.

4.0 Balance Disposition

Disposition of balances in the Supply Cost Variance Deferral Account will be subject to further approval by the Board.

5.0 Balance Transfers

The balances in the Supply Cost Variance Deferral Account shall be adjusted by other amounts as ordered by the Board.