WHENEVER. WHEREVER.
We'll be there.

NEWFOUNDLAND POWER
A FORTIS COMPANY

January 6, 2023

Board of Commissioners
of Public Utilities
P.O. Box 21040
120 Torbay Road
St. John's, NL A1A 5B2

Attention: G. Cheryl Blundon
Director of Corporate Services
and Board Secretary

Dear Ms. Blundon:

Re: CIAC Cost Factors

In Order No. P.U. 4 (1997-98) (the "Order"), at Item 16, the Board ordered that:

> "Newfoundland Power file annually, together with an affidavit, a schedule of current costs and the effective CIAC Policy appendices entitled, Distribution Plant Upgrade Cost for CIACs and both Residential and General Service Distribution Line Cost per Metre for CIACs."

Attached, in compliance with the Order, are the following schedules, together with the required affidavit, which constitute the Company's update to the cost factors used in the *Contribution in Aid of Construction Policy: Distribution Line Extensions to Domestic Customers* (the "Domestic Policy") and the *Contribution in Aid of Construction Policy: Distribution Line Extensions and Upgrades to General Service Customers* (the "General Service Policy"):

Schedule A - Distribution Line Cost per Metre for Domestic CIACs
(Appendix A, page 1 of 1, to the Domestic Policy)
Schedule B - Distribution Line Cost per Metre for General Service CIACs
(Appendix A, page 1 of 1, to the General Service Policy)
Schedule C - Distribution Plant Support Table for General Service CIACs
(Appendix B, page 1 of 1, to the General Service Policy)
Schedule D - Distribution Plant Upgrade Cost for General Service CIACs
(Appendix C, page 1 of 1, to the General Service Policy).

Newfoundland Power has also included an explanatory note which provides detailed explanations for the cost factor changes for 2023.

Newfoundland Power Inc.
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The changes to the schedules reflect updates of the various inputs used to derive the cost factors. The major sources of data used to derive the cost factors include the 2021 cost of service study, the regulated cost of financing new capital assets, and current labour and material costs associated with the construction of line extensions.

Summary of Changes

Schedules A and B show the updated distribution line cost per metre and charges for brush clearing and easements. The cost per metre for single-phase line extensions increased from $45 to $49 while the cost per metre for three-phase line extensions increased from $65 to $70. The cost per metre for upgrading from single-phase to three-phase increased from $54 to $57 and from two-phase to three-phase increased from $32 to $34. The increases are primarily the result of increases in material and labour costs.

The brush clearing cost per metre has increased from $4.00 to $4.75 and the easement charge has increased from $400 to $450. The increases are primarily the result of increases in contract labour costs. This is the first increase in the cost of brush clearing and the easement charges since 2017.

Schedule C provides the distribution plant support table that is used to determine the additional load-based investment in computing CIACs for General Service customers. The additional load-based investment has decreased by approximately 2% over 2022. This change is primarily a result of a decrease in the distribution primary costs recovered through rates as indicated by the Company's 2021 cost of service study.

Schedule D shows the additional costs applied in determining a CIAC for General Service customers requiring a plant upgrade (e.g. the costs associated with the replacement, transfer or installation of additional poles or anchors). These costs are in addition to construction costs derived from the cost per metre to upgrade a main line set out in Schedule B. The changes in these charges are primarily the result of increases in material and labour costs.

Detailed explanations for the cost factor changes for 2023 are set out in the Explanatory Note included with this filing.

Implementation Approach

When implementing the updated cost factors, the Company proposes that all outstanding CIAC quotations (issued but neither accepted nor expired) calculated using the current cost factors will be recalculated where such recalculation is advantageous to the customer. This is in accordance with previous practice as ordered by the Board.

Newfoundland Power proposes that the revised cost factors be made effective five business days after Board approval.

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A draft of the order requested is enclosed for the Board's convenience.

If there are any questions regarding the revised schedules, please contact the undersigned.

Yours truly,

Dominic Foley
Legal Counsel

Enclosures

c. Shirley Walsh
Newfoundland & Labrador Hydro

Dennis Browne, K.C.
Browne Fitzgerald Morgan Avis & Wadden

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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 the requirement to annually file with the Board updated cost factors and updated CIAC policy appendices pursuant to Order No. P.U. 4 (1997-98).

AFFIDAVIT

I, Michael Comerford, of the City of Mount Pearl, in the Province of Newfoundland and Labrador, make oath and say as follows:

1. That I am Director, Rates and Supply of Newfoundland Power Inc.;

2. That I have read and understand the foregoing Application; and

3. That, to the best of my knowledge, information and belief, the attached schedules, marked as Schedules A, B, C and D, provide an accurate representation of the costs related to CIACs for distribution line extensions and upgrades for customers of Newfoundland Power Inc., as required to be filed with the Board pursuant to Order No. P.U. 4 (1997-98).

SWORN TO before me at St. John's in the Province of Newfoundland and Labrador this 6th day of January, 2023:

Barrister, NL

Lindsay S. Hollett
Barrister, NL

Michael Comerford, P. Eng

SCHEDULE A

Domestic Policy

Distribution Line Cost per Metre for Domestic CIACs

NEWFOUNDLAND POWER INC.
DISTRIBUTION LINE COST PER METRE FOR DOMESTIC CIACs

TYPE OF CONSTRUCTION	**COST / METRE** [1] $
LINE EXTENSIONS	
SINGLE PHASE	**49**

[1] This cost factor does not include any costs for clearing or obtaining easements. When clearing is required, an additional charge of $4.75 per metre will apply to the section of line beyond the distance of the Basic Investment. A $450 charge will be applied for each required easement beyond the distance of the Basic Investment.

SCHEDULE B

General Service Policy

Distribution Line Cost per Metre for General Service CIACs

NEWFOUNDLAND POWER INC.

DISTRIBUTION LINE COST PER METRE
FOR GENERAL SERVICE CIACs

TYPE OF CONSTRUCTION	COST / METRE [1] $
LINE EXTENSIONS	
SINGLE PHASE	**49**
THREE PHASE	**70**
UPGRADES [2]	
SINGLE PHASE TO THREE PHASE	**57**
TWO PHASE TO THREE PHASE	**34**

1 These cost factors do not include any costs for clearing or obtaining easements. When clearing is required, an additional charge of $4.75 per metre will apply to the section of line beyond the distance of the Basic Investment. A $450 charge will be applied for each required easement beyond the distance of the Basic Investment.

2 These costs include only the cost associated with primary conductors and related hardware in upgrades. For additional costs refer to Appendix C: Distribution Plant Upgrade Cost for General Service CIACs.

SCHEDULE C

General Service Policy

Distribution Plant Support Table for General Service CIACs

NEWFOUNDLAND POWER INC.
DISTRIBUTION PLANT SUPPORT TABLE
FOR GENERAL SERVICE CIACs

Annual Load Factor	Dollars per kW/kVA [1]
Less than 5%	**113**
5%-9.9%	**163**
10%-14.9%	**178**
15%-19.9%	**203**
20%-24.9%	**219**
25%-29.9%	**229**
30%-34.9%	**242**
35%-39.9%	**257**
40%-44.9%	**272**
45%-49.9%	**283**
50%-54.9%	**292**
55%-59.9%	**300**
60%-64.9%	**313**
65%-69.9%	**318**
70% and Over	**323**

[1] The Additional Load based Investment, which applies to customers with a maximum annual demand exceeding 10 kW, will be determined by multiplying (i) the estimated maximum annual demand, less 10 kW, and (ii) the appropriate dollars per kW/kVA.

SCHEDULE D

General Service Policy

Distribution Plant Upgrade Cost for General Service CIACs

NEWFOUNDLAND POWER INC.
DISTRIBUTION PLANT UPGRADE COST
FOR GENERAL SERVICE CIACs

TYPE OF TRANSFER OR REPLACEMENT	COST [1] ($)
REPLACE POLES - UP TO 45'	3,170
ADDITIONAL POLES	1,810
DISTRIBUTION SECONDARY PER POLE / SPAN	
Transfer Only	970
Replace Conductor	1,260
SERVICE DROP PER POLE / SPAN	
Transfer Only	100
Replace Conductor	190
TRANSFORMER MOUNTINGS	
Single Transformer	1,220
Two or Three Transformers	2,750
POLE GUY	
Transfer Only	50
Replace Guy	100
REPLACE ANCHOR	870
ADDITIONAL ANCHOR	500
STREETLIGHTING - TRANSFER SINGLE FIXTURE	290
STREETLIGHTING DUPLEX PER POLE / SPAN	
Transfer Only	100
Replace Conductor	170

[1] Includes all overheads.

Explanatory Note

Schedules A and B – Distribution Line Costs per Metre

Table 1 provides a comparison of the CIAC cost factors for line extensions and upgrades for 2023 with those approved for 2022. The single-phase line extension cost per metre applies to both Domestic (Schedule A) and General Service (Schedule B) customers.

Table 1
CIAC Cost Factor Comparison 2022 vs 2023

Cost per Metre

	2022	2023	Change	
Line Extensions				
Single-Phase	$45	$49	$4	9%
Three-Phase	$65	$70	$5	8%
Upgrades				
Single to Three-Phase	$54	$57	$3	6%
Two to Three-Phase	$32	$34	$2	6%

There is a $4 increase in the CIAC cost factor for single-phase line extensions and a $5 increase for three-phase line extensions relative to 2022. The detailed calculation of the line extension cost per metre is shown in Table 3.

There is a $3 increase in the CIAC cost factors for upgrades from single-phase to three-phase and a $2 increase for upgrades from two-phase to three-phase.

The change in the cost of distribution line extensions primarily reflects increases in the cost of poles, contractor costs related to the installation of poles and anchors, and the cost of other distribution materials. The cost of purchasing and installing poles and anchors increased the cost of single-phase and three-phase line extensions by 6% and 4%, respectively.[1,2] The cost associated with other distribution materials increased the cost of single-phase and three-phase line extensions by 2% and 4%, respectively.[3] The remainder of the increase for line extensions is attributable to rounding to the nearest dollar.

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1 Newfoundland Power participates with other Fortis Inc. subsidiaries in negotiating contracts for the supply of wood poles. The latest contract was signed by Newfoundland Power on August 24, 2022.

2 Newfoundland Power negotiated contract extensions for the installation of poles and anchors in the Burin, Clarenville, Gander, Grand Falls, Corner Brook, and Stephenville areas in 2022. The increase in pole and anchor installation costs in 2022 was approximately 7%. Prior to this, pole and anchor installation costs had remained unchanged since 2018.

3 Other distribution materials include insulators, conductor, clamps, and other hardware used in the construction of distribution line extensions. Newfoundland Power procures this material through tendering processes. In certain cases, such as conductor, the cost of the materials fluctuates based on commodity prices.

The changes in the cost of single-phase and three-phase upgrades primarily reflects higher labour costs and an increase in the cost of other distribution materials.[4] Labour costs increased the cost of single-phase and three-phase upgrades by 3% and the cost associated with other distribution materials increased the costs of single-phase and three-phase upgrades by 2%. The remainder of the cost increase is attributable to rounding to the nearest dollar.[5]

Table 2 provides a comparison of the Company's construction costs per metre used in determining the CIAC cost factors for line extensions and upgrades for 2022 and 2023. The construction costs shown in Table 2 are not adjusted to reflect cost savings related to joint use of support structures.

Table 2
Construction Cost Comparison 2022 vs. 2023
Cost per Metre

	2022	2023	Change	
Line Extension				
Single-phase	$59.94	$63.92	$3.98	6.6%
Three-phase	$79.42	$84.93	$5.51	6.9%
Upgrade				
Single to Three-phase	$54.18	$56.84	$2.66	4.9%
Two to Three-phase	$31.95	$33.52	$1.57	4.9%

Table 3 provides the calculation of the blended CIAC line extension costs per metre reflecting the relative proportions of the various joint use arrangements, updated for 2023. The costs labelled "NP Non-Joint Use" are the 2023 Line Extension costs shown in Table 2. In Table 3, those costs are adjusted to reflect the impact of joint use revenue and weighted according to the relative proportions of the total support structures under the various joint use arrangements.

[4] Higher labour costs reflect changes in the allocation of pension costs. Previously, pension costs were recovered through the calculation of General Expenses Capitalized ("GEC"), which allocated pension costs over all cost types, including materials and labour costs. Effective January 1, 2023, pension costs are recovered through a labour loader and thus are allocated fully to labour costs. Changes in the allocation of pension costs formed part of the Settlement Agreement for Newfoundland Power's *2022/2023 General Rate Application* and was approved by the Board in Order No. P.U. 3 (2022).

[5] The impact of rounding on the cost factors for upgrading distribution from single to three-phase and two to three-phase can be seen by comparing the figures in Tables 1 and 2. For example, for 2023 single-phase to three-phase upgrades the difference due to rounding is approximately 1% (($54.18 - $54.00 +$57.00 - $56.84) / $54.00 x 100% = 1%).

Table 3
Computation of Blended CIAC Line Extension Costs per Metre

Arrangement	Single-Phase Cost per metre A	Three-Phase Cost per metre A	% of Support Structures (2022) C
1. NP Non-Joint Use	$63.92	$84.93	20.0%
2. NP and Bell Aliant Only	$46.00	$67.00	16.5%
3. NP and Cable Only	$61.07	$82.08	5.0%
4. NP, Bell Aliant and Cable	$43.15	$64.15	58.5%
Blended Cost[6] (∑(A x C))	$48.66	$69.68	
Rounded Cost	**$49**	**$70**	

The distribution cost factors shown in Table 1, and in Schedules A and B, do not include the costs of clearing land or obtaining easements. The brush clearing cost per metre has increased from $4.00 to $4.75 and the easement charge has increased from $400 to $450. This is the first increase in the cost of brush clearing and the easement charges since 2016.[7]

Schedule C – Distribution Plant Support for General Service CIACs

Schedule C provides the distribution plant support table that is used to determine the additional load-based investment in computing CIACs for General Service customers with a demand exceeding 10 kW. The load-based investment is deducted from the amount to be charged to the customer, since a portion of the distribution primary cost is recovered through rates.[8]

The 2023 update of the distribution plant support table shows a decrease in plant support of approximately 2%. This decrease in plant support is primarily a result of a decrease in the distribution primary costs recovered through rates as indicated by the Company's 2021 cost of service study.

Schedule D – Distribution Plant Upgrade Costs for General Service CIACs

Schedule D shows the additional costs that may be applicable in determining a CIAC for General Service customers requiring a distribution plant upgrade. These upgrade costs are in addition to construction costs derived from the cost per metre to upgrade the main line as set out in Schedule B.

The average upgrade costs related to service drops increased by 11% which reflects an increase in the cost of conductor, higher labour costs and rounding to the nearest ten dollars. The average upgrade costs related to additional poles, distribution secondary, transformer mountings, guy wires, anchors, and street lighting increased by between 4% and 7% due to increases in contractor,

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6 For example, the Single-Phase Cost per metre of $48.66 is approximately equal to ($63.92 x 20.0%) + ($46.00 x 16.5%) + ($61.07 x 5.0%) + ($43.15 x 58.5%).

7 The change in brush clearing and easement charges in 2023 is largely attributable to higher contractor costs associated with vegetation management and obtaining easements.

8 The distribution secondary, transformation, services and metering costs are included in the Basic Investment which does not require a CIAC.

material and labour costs, as well as rounding to the nearest ten dollars. There was no change in the average upgrade costs related to anchors.

NEWFOUNDLAND AND LABRADOR
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

NO. P.U. ___ (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 a filing by Newfoundland Power Inc. in accordance with Order No. P.U. 4 (1997-98) to update the cost factors used in its Contribution in Aid of Construction Policy.

WHEREAS Newfoundland Power Inc. ("Newfoundland Power") is a corporation duly organized and existing under the laws of the Province of Newfoundland and Labrador, is a public utility within the meaning of the *Act*, and is also subject to the provisions of the *EPCA*; and

WHEREAS on January 6, 2023 Newfoundland Power submitted an update to the cost factors used in its Contribution in Aid of Construction ("CIAC") Policy to be effective **[date five days following Board approval,]** including:

i) Revised Schedule A, Distribution Line Cost per Metre for Domestic CIACs (Appendix A, page 1 of 1, to the Domestic Policy);
ii) Revised Schedule B, Distribution Line Cost per Metre for General Service CIACs (Appendix A, page 1 of 1, to the General Service Policy);
iii) Revised Schedule C, Distribution Plant Support Table for General Service CIACs (Appendix B, page 1 of 1, to the General Service Policy);
iv) Revised Schedule D, Distribution Plant Upgrade Cost for General Service CIACs (Appendix C, page 1 of 1, to the General Service Policy); and

WHEREAS Order No. P.U. 4 (1997-98) required, among other things, that:

> Newfoundland Power file annually, together with an affidavit, a schedule of current costs, and the effective CIAC Policy appendices entitled, Distribution Plant Upgrade Cost for CIACs, and both Residential and General Service Distribution Line Cost per Metre for CIACs; and

WHEREAS the current CIAC Policy of Newfoundland Power effective January 1, 2022 was approved in Order No. P.U. 35 (2021); and

WHEREAS the Board has reviewed the Schedules submitted by Newfoundland Power, as well as the supporting information received with respect to these Schedules, and is satisfied the revised cost factors should be approved.

IT IS THEREFORE ORDERED THAT:

1. The revised cost factors as set out in Schedules A, B, C and D to this Order are approved to be used in the calculation of all CIACs effective from **[date five days following date of order]** and, where advantageous to the customer, on all CIACs quoted but unpaid as of **[date five days following date of order]**.

2. Newfoundland Power submit a revised CIAC Policy in its entirety incorporating the revisions approved herein.

3. Newfoundland Power shall pay the expenses of the Board arising from this Application.

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

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G. Cheryl Blundon
Board Secretary