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Boralex Ocean Falls Limited Partnership

2023 to 2027 Rates for Service to British Columbia Hydro and Power Authority

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Decision and Order G-351-23

December 14, 2023

Before:
B. A. Magnan, Panel Chair
W. M. Everett, KC, Commissioner

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Executive Summary

On April 28, 2023, Boralex Ocean Falls Limited Partnership (Boralex) applied to the British Columbia Utilities Commission for approval of permanent rates for service provided to British Columbia Hydro and Power Authority (BC Hydro) from January 1, 2023 to December 31, 2027 (Test Period), and for approval of various deferral accounts (Application). The Application was made pursuant to sections 59 to 61 of the *Utilities Commission Act* and Order G-143-19.

The BCUC established a public hearing for the review of the Application involving one intervener, BC Hydro. The regulatory review process included one round of information requests and final and reply arguments.

BC Hydro did not take issue with the forecast revenue requirement over the Test Period. The Panel finds Boralex's forecast revenue requirement over the Test Period to be reasonable, subject to the adjustments resulting from the corrections identified by Boralex in the proceeding and the determinations and directives in this Decision. The Panel approves the recovery of rates from BC Hydro on a permanent basis for the period January 1, 2023 to December 31, 2023, and on an interim and refundable or recoverable basis from January 1, 2024 to December 31, 2027. The interim rates will remain in place until such time as a final decision is issued in the BCUC's Generic Cost of Capital (GCOC) Stage 2 proceeding and any implications for Boralex's capital structure and equity return in relation to the benchmark utility are known.

BC Hydro did raise issues regarding Boralex's forecast methodology for non-BC Hydro load and revenue, Boralex's capital expenditure planning process, and the impact of the BCUC Decision and Order G-236-23 for the GCOC Stage 1 proceeding (GCOC Stage 1 Decision) on the Application.

The Panel finds that Boralex's forecast methodology for projecting non-BC Hydro load and revenue during the Test Period is reasonable. The Panel further finds Boralex's proposed capital plan for the Test Period to be reasonable and encourages Boralex to try to provide some additional long-term capital planning information in its next rates application. The Panel also finds that the GCOC Stage 1 Decision has addressed the matter raised by BC Hydro in regards to the impact of that decision on the Application.

Boralex seeks approval to continue to maintain the Capital Additions Deferral Account to record the revenue requirement impact, positive and negative, associated with differences between the forecast and actual capital additions in the Test Period, and approval to continue to maintain the First Nations Relationship Building Deferral Account to record any costs incurred by Boralex over the Test Period associated with its relationship building activities with the Heiltsuk Nation. Boralex proposes that interest on both deferral account balances accrue at Boralex's weighted average cost of debt. BC Hydro did not provide any comments on the proposed deferral accounts. The Panel approves Boralex's requested continuation of the Capital Additions Deferral Account and continuation of the First Nations Relationship Building Deferral Account for the Test Period.

1.0 Introduction

On April 28, 2023, Boralex Ocean Falls Limited Partnership (Boralex) filed an application with the British Columbia Utilities Commission (BCUC) for approval of rates for Boralex's service to British Columbia Hydro and Power Authority (BC Hydro) covering the period January 1, 2023 to December 31, 2027 (Application). In the Application, Boralex seeks the following BCUC approvals pursuant to sections 59 to 61 of the *Utilities Commission Act* (UCA):[1]

a) Approval of rates for Boralex's service to BC Hydro for the five-year period from January 1, 2023 to December 31, 2027 (Test Period) as set out in Table 1 below, subject to corrections noted by Boralex in the proceeding:

Table 1: Proposed Rates for the Test Period[2]

	2023	2024	2025	2026	2027
Tier 1 ($/MWh)	$340.71	$347.53	$354.48	$361.57	$368.80
Tier 2 ($/MWh)	$54.12	$55.20	$56.31	$57.43	$58.58
Tier 1/2 Threshold (GWh)	11.97	11.97	11.97	11.97	13.53

b) Approval to continue to maintain the Capital Additions Deferral Account; and

c) Approval to continue to maintain the First Nations relationship building deferral accounts.

In the Application, Boralex originally sought approval to maintain a permanent Participant Assistance/Cost Award (PACA) Funding Cost Deferral Account to record any PACA funding costs arising out of this and future rate applications.[3] When the Application was filed, Boralex assumed that there would be other interveners in addition to BC Hydro. Given that BC Hydro is the sole intervener in this proceeding and is not intending to seek PACA funding, Boralex is no longer requesting approval of a PACA Funding Deferral Account in this proceeding.[4]

On November 28, 2022, by Order G-342-22, the BCUC approved Boralex's existing rates on an interim and refundable or recoverable basis for service to BC Hydro, effective January 1, 2023.

The BCUC established a public hearing process for the review of the Application. BC Hydro was the sole registered intervener in this proceeding. The public hearing process included one round of BCUC and Intervener Information Requests (IRs) and final and reply arguments.[5]

[1] Exhibit B-1, pp. 3–4.

[2] Ibid., pp. 3–4. Subject to adjustments noted on pages 1 to 2 of Exhibit B-5 that result in a $25,000 net increase to the revenue requirement per year and a correction to salaries and benefits expense in 2023 and 2024 as noted in Boralex's response to BCUC IR 19.2 (Exhibit B-5).

[3] Exhibit B-1, p. 3.

[4] Exhibit B-5, BCUC IR 35.1.

[5] Orders G-130-23, G-214-23, and G-238-23.

1.1 Background

Boralex owns and operates hydroelectric generation, transmission and distribution facilities (the Ocean Falls Facilities) at Ocean Falls on the central coast of British Columbia. The Ocean Falls Facilities supply electricity to BC Hydro, which in turn serves customers in the communities of Bella Bella and Shearwater within a non-integrated area (NIA) referred to as the Bella Bella NIA, or BC Hydro's Rate Zone IB.[6] Boralex also supplies electricity to approximately 100 retail customers and two industrial customers, Mowi Canada West Inc. (Mowi) and Ocean Falls Blockchain Corp. (OFBC).[7]

The Ocean Falls Facilities were originally constructed in 1917 and have since gone through various ownership changes. In 1986, the then-owner of the Ocean Falls Facilities, Central Coast Power Corporation (CCPC), established an Electricity Purchase Agreement (EPA) with BC Hydro for a term of 30 years. CCPC was a public utility under the UCA but was granted an exemption, by Order G-40-86, from regulation under specific sections of the UCA. In 2009, Boralex acquired the Ocean Falls Facilities from CCPC as approved by Order G-180-08 and assumed CCPC's rights and obligations under the 1986 EPA.[8] The BCUC subsequently granted Boralex an exemption from the application of a majority of the provisions of the UCA by Order G-26-10, on the conditions that Boralex charge its retail customers at the same rates as BC Hydro Zone II rates and that it charge any new industrial customers at negotiated rates not to exceed the comparable BC Hydro industrial rates.[9]

The 1986 EPA expired on June 30, 2019, and Boralex and BC Hydro were unable to agree to terms for a new EPA. In 2019, the BCUC made certain amendments which resulted in lifting Boralex's previous exemption from regulated rates for its service to BC Hydro.[10] However, the exemption remains in effect for Boralex's service to its other (non-BC Hydro) customers.[11] As a result, the rates charged by Boralex to its retail and industrial customers remain exempt from BCUC review.[12]

On September 30, 2019, Boralex filed its first revenue requirement application (RRA) with the BCUC for, among other things, approval of interim and permanent rates for service to BC Hydro for the period of July 1, 2019 to December 31, 2022 (Boralex 2019-2022 RRA).[13] After a public review process of the Boralex 2019-2022 RRA, the BCUC approved rates for Boralex's service to BC Hydro from July 1, 2019 to December 31, 2022 by Decision and Order G-270-20 (Boralex 2019-2022 RRA Decision).[14]

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[6] Exhibit B-1, p. 1.
[7] Exhibit B-1, pp. 1, 31.
[8] Boralex Ocean Falls Limited Partnership Application for Rates and Terms and Conditions for Service to the British Columbia Hydro and Power Authority - July 1, 2019 to December 31, 2022 (Boralex 2019-2022 RRA), Decision and Order G-270-20 (Boralex 2019-2022 RRA Decision), p. 2.
[9] Exhibit B-1, p. 1.
[10] Order G-143-19 dated June 27, 2019 amended Order G-26-10 dated February 18, 2010.
[11] Boralex 2019-2022 RRA Decision, p. 2.
[12] Exhibit B-1, p. 1.
[13] Boralex 2019-2022 RRA Decision, p. 1.
[14] Boralex 2019-2022 RRA Decision, p. 2.

1.2 Organization of the Decision

The remainder of this Decision is organized as follows:

- Section 2.0 provides an overview of Boralex's forecast revenue requirement for its service to BC Hydro during the Test Period, including specific issues identified by BC Hydro, forecast salaries and benefits, and the Panel's overall determination on rates; and
- Section 3.0 addresses the approvals sought by Boralex related to its deferral accounts.

2.0 Test Period Forecast Revenue Requirement and Rates

Table 2 below summarizes the forecast revenue requirement over the Test Period. Boralex explains the main driver of the increase in its forecast revenue requirement over the Test Period is the increase in Boralex's rate base due to the capital expenditures necessary to maintain the safe, secure and reliable operation of the Ocean Falls Facilities.[15] Boralex notes that operations and maintenance (O&M) expenses are forecast to remain relatively flat from the prior test period actuals.[16] Boralex further notes several adjustments to the forecast revenue requirement in the course of this proceeding, which are not reflected in Table 2 below. Boralex proposes to reflect these adjustments in a compliance filing following the BCUC decision in this proceeding.[17]

Table 2: Test Period Forecast Revenue Requirement ($000's)[18]

	2023	2024	2025	2026	2027
Rate Base	$19,895	$23,940	$28,808	$32,973	$34,748
Deemed Equity	$9,251	$11,132	$13,396	$15,332	$16,158
Deemed Debt	$10,644	$12,808	$15,412	$17,641	$18,590
	2023	**2024**	**2025**	**2026**	**2027**
Return on Equity	$879	$1,058	$1,273	$1,457	$1,535
Return on Debt	$639	$768	$925	$1,058	$1,115
Depreciation Expense	$443	$511	$587	$650	$689
Income Taxes	$0	$0	$0	$0	$0
Property and School Taxes	$366	$377	$385	$392	$400
Water Rentals	$78	$80	$82	$83	$85
Net O&M Expense	$1,923	$2,100	$2,035	$2,053	$1,900
Deferral Accounts	-$66	$0	$0	$0	$0
Gross Revenue Requirement	**$4,261**	**$4,894**	**$5,286**	**$5,694**	**$5,725**
Ocean Falls Retail and Industrial Customer Revenue	$728	$746	$759	$772	$842
Net Revenue Requirement	**$3,533**	**$4,148**	**$4,526**	**$4,922**	**$4,883**

15 Exhibit B-5, BCUC IR 2.2.

16 Ibid.

17 Exhibit B-5, pp. 1–2, BCUC IR 19.2.

18 Exhibit B-1, Table 1, p. 5. Subject to four adjustments noted on pages 1 to 2 of Exhibit B-5 that result in a $25,000 net increase to the revenue requirement per year and a correction to salaries and benefits expense in 2023 and 2024 as noted in Boralex's response to BCUC IR 19.2 (Exhibit B-5).

The rates Boralex seeks to apply for its service to BC Hydro have been determined using a cost allocation methodology whereby the forecast revenue from Boralex's retail and industrial customers in Ocean Falls during the Test Period is subtracted from Boralex's gross forecast revenue requirement, resulting in a net revenue requirement which is allocated to BC Hydro. As noted in Section 1.1 of this Decision, the rates for Boralex's retail and industrial customers are exempt from BCUC review and are set in accordance with Order G-26-10.[19] Further discussion related to Boralex's forecast load from its retail and industrial customers can be found in Section 2.1 of this Decision.

To recover the forecast net revenue requirement allocated to BC Hydro, Boralex seeks BCUC approval of the same two-tier energy charge rate structure for its service to BC Hydro as approved in the Boralex 2019-2022 RRA Decision. The rate structure consists of a Tier 1 rate per megawatt hour (MWh) for the first tier of electricity in any year up to a threshold amount and a lower Tier 2 rate per MWh for all electricity above the Tier 1/2 threshold amount. The first step in setting the rate structure is to fix the Tier 2 rate, for which Boralex has proposed a 2 percent per annum escalation rate consistent with the prior test period. The Tier 2 revenue forecast (i.e. the Tier 2 rate multiplied by the forecast BC Hydro load above the Tier 1/2 threshold) is then deducted from the net revenue requirement allocated to BC Hydro leaving the amount to be recovered via the Tier 1 rate. The second step in setting the rate structure is levelizing the Tier 1 rate within the Test Period. Boralex proposes to levelize the Tier 1 rate at a 2 percent escalation rate within the Test Period consistent with the prior test period.[20] The resultant rates being proposed by Boralex for service to BC Hydro are outlined in Table 1 above in Section 1.0 of this Decision, subject to corrections noted by Boralex in this proceeding.

BC Hydro did not comment on Boralex's proposed revenue requirement and rate structure. However, BC Hydro did raise three specific issues regarding the resultant rates for the Test Period, which are addressed in Sections 2.1 through 2.3 below. Section 2.4 then discusses salaries and benefits included within O&M expense in the forecast revenue requirement. Section 2.5 provides an overall determination on rates.

2.1 Boralex's Non-BC Hydro Revenue Forecast

As explained above and shown in Table 2, the forecast non-BC Hydro revenue (retail and industrial customers) is deducted from Boralex's gross forecast revenue requirement to arrive at the net forecast revenue requirement to be collected from BC Hydro. Boralex's forecast revenue from retail customers is based on historical loads and the prevailing BC Hydro Zone II rates (i.e. the rates charged by Boralex to its retail customers) and adjusted annually for inflation.[21] The forecast revenue for Boralex's two industrial customers, Mowi and OFBC, is discussed separately below.

Boralex states that Mowi has historically had a stable load and the EPA between Boralex and Mowi was renewed in February 2023. Therefore, Boralex forecasts revenue from Mowi based on the rates in the renewed EPA and Mowi's historical load.[22]

[19] Boralex 2019-2022 RRA Decision, p. 3.
[20] Exhibit B-1, pp. 32–33.
[21] Ibid., p. 31.
[22] Ibid.

With respect to OFBC, Boralex explains that, as a cryptocurrency mining operation, its load can vary widely in direct response to fluctuations in the price of cryptocurrency. For example, at the beginning of the COVID-19 pandemic in 2020, the price of cryptocurrency dropped significantly and OFBC stopped operations for several months. OFBC resumed operations later that year and continued to operate throughout 2021. By 2022, OFBC had expanded its operations at Ocean Falls, which, together with improved cryptocurrency prices, resulted in an increase in load and revenue between 2021 and 2022.[23] Boralex states that while OFBC is capable of taking up to 2 megawatts it has not achieved that level of operations on any sustainable basis.[24] Given the highly unpredictable nature of its cryptocurrency mining business and its volatile load profile, Boralex forecasts revenue from OFBC based on the average energy sales to OFBC over the past five years and the electricity rates payable by OFBC in 2022 adjusted for inflation over the Test Period.[25]

Boralex confirms that due to the structure of BC Hydro rates, if forecast industrial customer loads are underestimated, BC Hydro rates would be higher than otherwise would be the case and result in an over-recovery of Boralex's revenue requirement. Conversely, if the forecast industrial customer loads are overestimated, BC Hydro rates would be lower than otherwise would be the case and result in an under-recovery of Boralex's revenue requirement.[26]

Positions of Parties

BC Hydro submits that the load forecast for the OFBC operation appears conservative and does not sufficiently weigh current information. BC Hydro further submits that the forecast load should be based on a period shorter than the five years proposed by Boralex, given OFBC's recent operational expansion in 2022 and the potential load fluctuation for the cryptocurrency industry. BC Hydro recommends the OFBC load forecast be based on 2022 actuals or the average of 2022 and 2023 actuals. BC Hydro submits that such an approach avoids the effect of setting Boralex's rates for serving BC Hydro higher than would otherwise be the case.[27]

In reply, Boralex submits that the load forecast for OFBC should be consistent with its actual load over the past five years, which better accounts for the inevitable swings in OFBC's unpredictable cryptocurrency operations and electricity load. Boralex also submits that there is no basis to support BC Hydro's assertion that OFBC's 2022 or 2023 actuals will be representative of the average annual OFBC load over the next five years. Additionally, Boralex notes that OFBC has been in arrears on its electricity and lease payments to Boralex on more than one occasion. Boralex explains that it is already entirely at risk for the OFBC load forecast, and overstating the forecast would have the effect of setting BC Hydro rates lower than would otherwise be the case and result in an under-recovery of Boralex's revenue requirement.[28]

[23] Exhibit B-7, BC Hydro IR 11.1.
[24] Ibid.
[25] Exhibit B-5, BCUC IR 2.2.
[26] Exhibit B-7, BC Hydro IR 11.10.
[27] BC Hydro Final Argument, p. 11.
[28] Boralex Reply Argument, p. 4.

Panel Discussion

The Panel finds that Boralex's forecast methodology for projecting OFBC's load during the Test Period is reasonable. Although BC Hydro indicates a concern over the possible understatement of OFBC's forecast load which could lead to overpayments by BC Hydro, it is difficult to justify projecting usage based on one or two years of data. This is especially true if one of those two years is significantly out of line with usage in other years. The projected use of a five-year average proposed by Boralex appears to be a more appropriate forecast methodology given the historic fluctuations in the price of cryptocurrency and OFBC's operations.

2.2 Boralex's Capital Expenditure Plan

Boralex states that the Ocean Falls Facilities are generally in good operating condition and as the plant is over 100 years old some components require replacement or rehabilitation.[29] Table 3 below summarizes Boralex's forecast capital additions for the Test Period which include a variety of capital projects to address the deteriorated condition of specific assets, including completion of the penstock rehabilitation project.[30]

Table 3: Test Period Forecast Capital Additions ($000's)[31]

	Project	2023	2024	2025	2026	2027	Total
1	Penstock Rehabilitation	$3,006	$3,555	$857	$3,301	$0	**$10,720**
2	Dam Reinforcement	$46	$91	$2,744	$198	$150	**$3,229**
3	Turbine-Generators	$0	$21	$11	$66	$94	**$192**
4	Powerhouse Electrical	$0	$1,045	$289	$0	$0	**$1,335**
5	Ocean Falls Switchyard	$278	$79	$0	$0	$0	**$357**
6	Interconnection Line	$77	$285	$275	$282	$320	**$1,239**
7	General Plant	$170	$344	$1,255	$284	$234	**$2,286**
	Total	**$3,577**	**$5,420**	**$5,431**	**$4,132**	**$797**	**$19,357**

Boralex has not prepared a formal 20-year facility asset plan that describes the capital investments required for the Ocean Falls Facilities beyond the Test Period. Boralex states that it determines on an ongoing basis the timing of the capital expenditures required for the Ocean Falls Facilities by:[32]

- Evaluating and assessing the risks to safety, reliability and customer service posed by current asset conditions;
- Developing project scopes to address potential risks;
- Prioritizing projects based on the assessment of potential risks and pacing spending over the forecast period; and
- Deferring any projects which can be reasonably deferred without unduly compromising safety, reliability and customer service.

[29] Exhibit B-1, p. 14.
[30] Ibid.
[31] Ibid., Table 9, p. 14.
[32] Exhibit B-7, BC Hydro IR 8.3.

Capital Planning Process

In the Boralex 2019-2022 RRA Decision, Boralex was directed to include a discussion and documentation regarding its capital planning and approval process in future rate applications.[33] In response to this directive, Boralex describes its capital planning and approval process as being relatively simple and driven primarily by sustaining requirements, which Boralex considers to be appropriate given its size and limited number of assets. Boralex describes the role of its operators in this process as follows: [34]

- Daily observation of performance and condition of Ocean Falls powerhouse, switchyard, penstock and dam facility;
- Regular observation of the Ocean Falls and Martin Valley distribution facilities;
- Inspection of the Shearwater Substation facilities up to six times per year;
- Daily remote monitoring of Shearwater substation equipment; and
- Annual helicopter inspection of interconnection line between Ocean Falls and the Bella Bella NIA, with additional walking inspections as required.

Boralex explains that when its operators identify an asset condition or performance-based concern, the standard process for non-urgent issues that may involve capital expenditures is to engage either internal or third-party experts. If the recommended mitigation options involve capital project alternatives, the project options are entered into the planned project portfolio for evaluation and approval. Once a portfolio of potential capital projects has been assembled, the Hydro Director of Boralex Inc. (Boralex's parent company) reviews it with operators and internal experts to prioritize projects and begin preliminary scheduling and preparation of budgetary estimates.[35]

Following approval and financing from the Boralex Inc. management team, Boralex Inc.'s Vice-President of Operations makes a final recommendation on capital expenditures for ultimate approval by the executive management and the Board of Directors as part of the annual budget approval process.[36] Boralex explains that for unplanned/urgent capital projects, budgeted projects may temporarily be displaced depending upon staff capacity or annual capital spending constraints.[37]

Capital Expenditures from Prior Test Period

Table 4 below summarizes the difference between forecast and actual capital expenditures by project in the prior test period.

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[33] Boralex 2019-2022 RRA Decision, Appendix A, p. 2.
[34] Exhibit B-1, Appendix B, p. B-2.
[35] Ibid., pp. B-2 to B-3.
[36] Ibid., p. B-3.
[37] Ibid.

Table 4: Difference between Forecast and Actual Capital Expenditure in 2019-2022[38]

	Project	2019 (Q3-Q4)	2020	2021	2022	Total	% Diff.
1	Penstock Rehabilitation	$22	$0	$694	$381	**$1,098**	29%
2	Turbine Rehabilitation	$0	-$212	-$240	-$217	**-$669**	- 81%
3	Powerhouse Electrical	$0	-$67	-$362	-$371	**-$800**	- 100%
4	Ocean Falls Switchyard	$0	-$53	$0	-$215	**-$268**	- 100%
5	Shearwater Substation	$0	$121	$258	-$27	**$352**	54%
6	Interconnection Line	$0	-$15	-$7	-$197	**-$219**	- 52%
7	General Plant	$52	$48	$25	-$195	**-$70**	- 11%
	Total	**$75**	**-$179**	**$368**	**-$841**	**-$577**	**- 8%**

Table 5 summarizes Boralex's rationale for the variance between the forecast and actual capital expenditures for each project in the prior test period, which includes scope changes and deferrals as identified in the table.

Table 5: Rationale for Variance in 2019-2022[39]

Project	Rationale for Variance
Penstock Rehabilitation	• Cost of penstock steel increased 30 percent above forecast due to global commodity market constraints; • Logistics and crew transportation costs increased due to high fuel costs and COVID-19 restrictions; and • General inflation above historical levels.
Turbine Rehabilitation	• Upon disassembly and inspection, the shafts and bearings of all units were in better condition than expected resulting in deferral of major turbine work.
Powerhouse Electrical	• Engineering, specification, and procurement problems due, in part, to global supply constraints resulting in deferral of unit analog exciter replacement. • Configuration and components are based on designs and specifications from a hundred years ago that have since been superseded by higher safety standards, modern specifications and improved configuration. Replacement and retrofit is a bespoke process requiring substantial back and forth between the owner and supplier.[40]
Ocean Falls Switchyard	• Deferral of breaker replacement by pursuing future installation of new pole-mounted recloser outside the switchyard; and • Deferral of transformer replacement due to delivery constraints.
Shearwater Substation	• Impacts of COVID-19 restrictions and general inflation above historical levels.
Interconnection Line	• Assessed line condition was better than anticipated, enabling the planned 2022 refurbishment work program to be deferred to next test period.

[38] Exhibit B-1, Appendix B, p. B-4.
[39] Ibid., pp. B-4 to B-8.
[40] Exhibit B-5, BCUC IR 5.2.

Project	Rationale for Variance
General Plant	• Avoided two 4x4 truck replacements through transfer of one at no cost to Boralex and deferral of the other; and • Deferral of planned stairway and dock repairs.

Positions of Parties

BC Hydro submits that Boralex's capital planning process has not shown to be adequate for Boralex to plan capital projects and forecast costs based on the following rationale:[41]

- There were significant variances between forecast and actual capital additions for almost all of its capital projects over the prior test period;
- Both the scope and timing of some projects keep changing and the overall project costs keep increasing even though Boralex engages both internal and external professionals to evaluate, select and prioritize projects; and
- Despite Boralex recognizing that certain facility components are based on older standards and codes which have been superseded by higher standards, modern specifications, and improved configurations, Boralex does not have a formal long-term investment plan covering the current Test Period and beyond.

BC Hydro submits that without an adequate capital planning process and visibility into Boralex's management and investment plan over the life of its assets/equipment, it is challenging to assess the reasonableness of Boralex's capital additions in the Test Period. BC Hydro recommends that prior to Boralex's next rates application, the BCUC require Boralex to prepare and submit a long-term capital planning document, such as a long-term asset/facility management plan. BC Hydro states that this will provide the context for a more fulsome understanding of Boralex's investment decisions over the life of its assets and the costs and benefits associated with the investment decisions affecting a given test period.[42]

In response, Boralex submits that it has no objection to preparing a long-term asset management plan as part of its next rate application, but that it strongly disagrees that its capital planning, approval and execution processes are inadequate. Boralex further disagrees that providing more capital planning information would in any way alter the Test Period capital program.[43] Boralex submits that it has an excellent record of providing safe, secure and reliable service since it acquired the Ocean Falls Facilities in 2009, which validates that its capital expenditure decision making processes are appropriate for the small size and limited scope of the facilities.[44]

With regards to the variances between the forecast and actual cost of capital additions over the prior test period, Boralex submits that the variances do not demonstrate any deficiency in Boralex's capital planning and execution processes. Boralex notes that despite serious project scheduling and global supply chain disruptions caused by the COVID-19 pandemic and the significant inflationary pressures, the total capital expenditures in the

[41] BC Hydro Final Argument, pp. 6–9.
[42] Ibid., p. 9.
[43] Boralex Reply Argument, p. 1.
[44] Ibid.

prior test period were within 8 percent of forecast expenditures.[45] More specifically, Boralex identifies the changed scope of the turbine rehabilitation project as being reasonable and prudent capital project execution based on information only available after the units were disassembled and inspected.[46]

Panel Discussion

The Panel finds Boralex's proposed capital plan for the Test Period to be reasonable. The Panel examined the need for and reasonableness of each of Boralex's planned capital projects based on the applicable evidence filed in this proceeding and finds this evidence to be sufficient for the purposes of setting rates for the Test Period.

Although BC Hydro questioned the variances between the forecast and actual capital expenditures in the prior test period, the Panel finds that Boralex has shown sufficient evidence to explain these variances. The Panel is persuaded by Boralex's explanations of the reasons for the prior test period variances including the COVID-19 pandemic, global supply constraints, general inflation above historical levels, and the unique characteristics of the Ocean Falls Facilities (i.e. updating capital work as more information is gathered upon inspection of historic assets). In addition, Boralex discovered that in some instances the equipment projected to be repaired and/or replaced was in better condition than originally thought which allowed Boralex to complete the projects at a lower cost and to postpone part of the project expenditures originally proposed to a later date. As a result of these factors, Boralex pushed forward some of these expenditures to be dealt with in the next test period (i.e. the current Test Period) along with some other identified projects as part of the capital plan.

Boralex did provide a description of its capital planning process as part of the Application pursuant to the BCUC's direction in the Boralex 2019-2022 RRA Decision.

BC Hydro has suggested that a more fulsome, long-term capital plan covering possible future expenditures beyond this Test Period should be filed in advance of the next RRA. Although the Panel is not persuaded that this should be done considering the size and operations of Boralex and given the capital planning process outlined in the Application, the Panel encourages Boralex to try to provide some additional long-term capital planning information in its next rates application.

2.3 The Impact of the Generic Cost of Capital Stage 1 Decision

In the Boralex 2019-2022 RRA Decision, the BCUC approved the use of a 46.5 percent common equity ratio (Capital Structure) and an equity risk premium of 75 basis points (bps) above the FortisBC Energy Inc. benchmark to calculate Boralex's revenue requirement, and in turn to set rates for service to BC Hydro.[47] The equity risk premium of 75 bps above the FortisBC Energy Inc. benchmark results in a return on equity (ROE) of 9.5 percent for Boralex.[48]

In the Application, Boralex calculates the Test Period revenue requirement using the Capital Structure and ROE as approved by the BCUC in the Boralex 2019-2022 RRA Decision.[49] Boralex notes that at the time of the

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[45] Ibid., p. 2.
[46] Boralex Reply Argument, p. 3.
[47] Boralex 2019-2022 RRA Decision, pp. 46–47.
[48] Ibid.
[49] Exhibit B-1, p. 21.

Application, there was an on-going proceeding to determine the Generic Cost of Capital (GCOC) in two stages. Boralex understands that depending on the outcome of the GCOC Stage 1 proceeding, it may at some point during the Test Period need to make adjustments to its Capital Structure and ROE and seek BCUC approval of any resulting change in its rates for service to BC Hydro.[50]

On September 5, 2023, the BCUC issued Decision and Order G-236-23 for the GCOC Stage 1 proceeding (GCOC Stage 1 Decision), which included a directive that "Interim rates are established, effective January 1, 2024, on a refundable or recoverable basis, for all other utilities, […] that currently use the Benchmark Utility to set their capital structure and equity return pending the BCUC's final decision on Stage 2 of the GCOC proceeding."[51]

Positions of Parties

BC Hydro submits that the outcome of the GCOC proceeding should be taken into consideration and recommends that the rates remain interim at the conclusion of this proceeding for the limited purposes of the BCUC determination of Boralex's cost of capital for the relevant years during the Test Period.[52]

In reply, Boralex notes that the BCUC's decision in this proceeding will establish rates for service to BC Hydro for the Test Period, with the rates for 2023 established on a permanent basis and the rates for 2024 to 2027 established on an interim and refundable or recoverable basis effective January 1, 2024 pending the BCUC's decision in the GCOC Stage 2 proceeding.[53] Boralex assumes that it will be required to make a compliance filing after the GCOC Stage 2 decision to reflect any change in Boralex's revenue requirement and rates for service to BC Hydro for 2024 to 2027 as a result of the GCOC Stage 2 decision.[54]

Panel Discussion

It was noted in the Application that a review of the GCOC Stage 1 proceeding was underway at the time of the filing of the Application and that the results of that deliberation could affect Boralex's Common Equity Ratio of 46.5 percent as well as its equity premium of 75 bps over that of FortisBC Energy Inc.'s ROE. The GCOC Stage 1 Decision was issued on September 5, 2023, and included a directive that any current application that could be affected by the GCOC Stage 2 decision would be given interim rates effective January 1, 2024, with permanent rates to be set after the issuance of the GCOC Stage 2 decision.

The Panel finds that the GCOC Stage 1 Decision has addressed this matter. Accordingly, this will be reflected in the overall determination on rates in Section 2.5 of this Decision.

2.4 Operations and Maintenance Expenditures – Salaries and Benefits

In the Application, Boralex sought approval of its forecast O&M expenses, which include salaries and benefits expense.[55] The forecast for salaries and benefits expense was subsequently updated by Boralex during the

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[50] Exhibit B-1, p. 21.
[51] British Columbia Utilities Commission Generic Cost of Capital Proceeding (Stage 1), Decision and Order G-263-23 dated September 5, 2023, p. 142.
[52] BC Hydro Final Argument, pp. 4, 12.
[53] Boralex Reply Argument, pp. 4–5.
[54] Ibid.
[55] Exhibit B-1, p. 25.

proceeding.[56] Table 6 below provides a breakdown of Boralex's forecast salaries and benefits expense over the Test Period.

Table 6: Test Period Forecast Salaries and Benefits Expense[57]

	2023	2024	2025	2026	2027
Salaries	$550,609	$659,550	$578,299	$607,213	$637,576
Benefits	$116,450	$139,490	$122,306	$128,421	$134,843
Retirement Allowances	$6,431	$6,431	$0	$0	$0
Total	$673,490	$805,471	$700,605	$735,634	$772,419.

Salaries and benefits represent the cost of the full-time employees of the Ocean Falls Facilities. The forecast costs in 2023 and subsequent years are consistent with actual costs in 2022 adjusted for inflation and account for overlaps in 2023 and 2024 between employee retirements and new hires.[58] Boralex states that its forecast reflects the continued tight labour market in Northern and remote British Columbia and the scarcity of the skills required for work at the Ocean Falls Facilities.[59]

The main drivers for the changes in salaries and benefits expense for the Test Period are the number of employees during the year and a 5 percent annual labour inflation rate.[60] The 2023 forecast is comprised of seven employees, of which four are full year employees, two are retiring during the year and one is a new hire during the year. The 2024 forecast is comprised of six employees, of which four are full year employees, one is retiring during the year and one is a new hire during the year. The 2025, 2026 and 2027 forecast is comprised of five full year employees.[61]

Boralex explains the one employee scheduled to be hired in 2023 is a supervisor, starting in October 2023, and the one employee scheduled to retire in 2024 is a supervisor, expected to retire in December 2024. The new and retiring supervisors have an overlapping tenure of 15-months. Boralex explains that a 15-month overlap period between the new and retiring supervisors is necessary to ensure sufficient on-the-job training during different seasons to facilitate a smooth continuation in operations following the retirement of the current supervisor. Boralex also notes that the new supervisor will be hired approximately six-months prior to a new operator joining the staff in June 2024, and this timing is to help ensure that the new supervisor has enough time with the experienced staff, prior to engagement with new staff training.[62]

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[56] Exhibit B-5, BCUC IR 19.2.
[57] Ibid.
[58] Exhibit B-1, p. 25.
[59] Exhibit B-5, BCUC IR 19.1.
[60] Ibid., BCUC IR 19.2.
[61] Exhibit B-1, pp. 25–26.
[62] Exhibit B-5, BCUC IR 19.3.

In the Boralex 2019-2022 RRA, Boralex filed its forecast O&M expenses originally including a two-year overlap period between new and retiring employees, specifically operators.[63] In the Boralex 2019-2022 RRA Decision, the BCUC directed Boralex to reduce the overlap period to 9-months per operator.[64]

Positions of Parties

BC Hydro did not comment on the 15-month overlapping tenure of the new and retiring supervisors in its Final Argument.

Panel Discussion

As in the Boralex 2019-2022 RRA Decision, the Panel had concerns related to the overlapping tenure of certain positions where retiring employees were being replaced during the Test Period and thus increasing O&M expenditures for a period of time. The Panel reviewed the proposed 15-month overlapping tenure of the one supervisor position in the current Application and finds the overlap and associated costs in the Test Period to be reasonable. The Panel acknowledges that the role of supervisor may be harder to fill than that of an operator, especially given the specificity of the skillset required and the remoteness of the Ocean Falls Facilities.

2.5 Overall Determination on Rates

Based on the evidence filed in this proceeding and the above reasons, the Panel finds Boralex's forecast net revenue requirement for the Test Period to be reasonable.

The Panel approves the proposed rates (Tier 1, Tier 2, and Tier 1/2 threshold) as presented in Table 1 of the Application on a permanent basis for the 2023 year and on an interim and recoverable or refundable basis for 2024 to 2027, subject to the adjustments resulting from the corrections identified by Boralex in the proceeding and the determinations and directives contained in this Decision. The interim rates will remain in place until such time as a final decision is issued in the BCUC GCOC Stage 2 proceeding and any implications for Boralex's Capital Structure and equity risk premium above the established benchmark utility in the BCUC GCOC Stage 2 decision are known.

3.0 Deferral Accounts

In addition to the approvals sought regarding rates for the Test Period, Boralex seeks approvals related to two existing deferral accounts which are reviewed below.

3.1 Capital Additions Deferral Account

In the Boralex 2019-2020 RRA Decision, the BCUC directed Boralex to create a deferral account to record the revenue requirement impact associated with any differences between the forecast and actual capital additions in the 2019-2022 test period only (Capital Additions Deferral Account) which attracts interest at Boralex's

[63] Boralex 2019-2022 RRA Decision, p. 30.
[64] Ibid., p. 31.

weighted average cost of debt (WACD).[65] In the Application, Boralex proposes that the balance in the previously approved Capital Additions Deferral Account be credited in one year to the 2023 revenue requirement.[66]

Boralex seeks BCUC approval to continue to maintain the Capital Additions Deferral Account to record the revenue requirement impact, positive and negative, associated with differences between the forecast and actual capital additions in the Test Period, with interest on any deferral account balance to accrue at Boralex's WACD.[67]

As discussed in Section 2.2 and shown in Table 3, Boralex is planning significant capital expenditures over the Test Period, including the completion of the penstock rehabilitation project and the dam anchoring project. While Boralex is confident that these projects can be completed as planned, it also recognizes that there are some project scope and cost uncertainties over the Test Period, particularly with the dam anchoring project and more generally with the current and uncertain inflationary environment and persistent supply chain issues.[68]

Positions of Parties

BC Hydro did not comment on Boralex's proposal to continue to maintain the Capital Additions Deferral Account for the Test Period in its Final Argument.

Panel Determination

The Panel approves Boralex's requested continuation of the Capital Additions Deferral Account for the Test Period. Given the project scope and cost uncertainties that Boralex acknowledges are present in the forecast capital additions during the Test Period, the Panel finds a deferral account is warranted to record the revenue requirement impact associated with any differences between the forecast and actual costs and timing of the capital projects.

3.2 First Nations Relationship Building Deferral Account

Boralex seeks BCUC approval to continue to maintain the First Nations Relationship Building Deferral Account to record any costs incurred by Boralex over the Test Period associated with its relationship building activities with the Heiltsuk Nation, with interest on any deferral account balance to accrue at Boralex's WACD. Boralex expects to continue negotiations of a Memorandum of Understanding (MOU) with the Heiltsuk Nation.[69]

Boralex states that it has endeavoured on a number of occasions to meet with the Heiltsuk Nation to engage in continued negotiations regarding the MOU and has not received a response to its initiatives. Thus, Boralex did not incur or record any costs in the First Nations Relationship Building Deferral Account over the prior test period related to the MOU. Boralex states that it will continue to reach out to the Heiltsuk Nation with a view to negotiating and completing the MOU.[70] Boralex does not have an estimated timeline for the finalization of the MOU and submits that the nature, extent and timing of any such costs cannot be reasonably forecasted. [71]

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[65] Boralex RRA 2019-2022 Decision, p. 24.
[66] Exhibit B-1, p. 28.
[67] Ibid., p. 34.
[68] Ibid.
[69] Ibid.
[70] Exhibit B-5, BCUC IR 34.1.
[71] Exhibit B-1, p. 34.

Boralex is not seeking approval of the disposition of any amounts that might be recorded in First Nations Relationship Building Deferral Account during the Test Period.[72]

Positions of Parties

BC Hydro did not comment on Boralex's proposal to continue to maintain the First Nations Relationship Building Deferral Account for the Test Period in its Final Argument.

Panel Determination

The Panel approves Boralex's requested continuation of the First Nations Relationship Building Deferral Account for the Test Period. The Panel directs Boralex to continue, as part of its annual report, to report on any specific progress made in negotiations with the Heiltsuk Nation as well as any costs incurred that are added to the deferral account.

DATED at the City of Vancouver, in the Province of British Columbia, 14th day of December 2023.

Original signed by:

B. A. Magnan
Panel Chair / Commissioner

Original signed by:

W. M. Everett, KC
Commissioner

[72] Exhibit B-1, pp. 3, 35.

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ORDER NUMBER
G-351-23

IN THE MATTER OF
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

Boralex Ocean Falls Limited Partnership
2023 to 2027 Rates for Service to British Columbia Hydro and Power Authority

BEFORE:
B. A. Magnan, Panel Chair
W. M. Everett, KC, Commissioner

on December 14, 2023

ORDER

WHEREAS:

A. On April 28, 2023, Boralex Ocean Falls Limited Partnership (Boralex) applied to the British Columbia Utilities Commission (BCUC) for approval of permanent rates for service provided to British Columbia Hydro and Power Authority (BC Hydro) from January 1, 2023 to December 31, 2027 (Test Period), as set out in the table below, and for approval of various deferral accounts (Application);

	2023	2024	2025	2026	2027
Tier 1 ($/MWh)	$340.71	$347.53	$354.48	$361.57	$368.80
Tier 2 ($/MWh)	$54.12	$55.20	$56.31	$57.43	$58.58
Tier 1/2 Threshold (GWh)	11.97	11.97	11.97	11.97	13.53

B. By Order G-342-22 the BCUC approved Boralex's existing rates for service provided to BC Hydro on an interim and refundable or recoverable basis, effective January 1, 2023;

C. By Orders G-130-23, G-214-23 and G-238-23, the BCUC established and amended the regulatory timetable for review of the Application, which included one round of BCUC and Intervener Information Requests and written final and reply arguments;

D. BC Hydro was the sole registered intervener in this proceeding;

E. On September 5, 2023, the BCUC issued the Generic Cost of Capital (GCOC) Stage 1 Decision and Order G-236-23 which, among other things, established interim rates, effective January 1, 2024, on a refundable or recoverable basis, for all other utilities, except FortisBC Inc., that currently use FortisBC Energy Inc. as a benchmark to set their capital structure and equity return pending the BCUC's final decision on Stage 2 of the GCOC proceeding; and

F. The BCUC has reviewed the Application, evidence and arguments filed in the proceeding and makes the following determinations.

NOW THEREFORE pursuant to sections 59 to 61 of the *Utilities Commission Act*, for the reasons stated in the decision issued concurrently with this order, the BCUC orders as follows:

1. Boralex is approved to recover on a permanent basis the rates for electric service to BC Hydro as presented in the Application, for the period January 1 to December 31, 2023, subject to the adjustments resulting from the corrections identified by Boralex in the proceeding and the determinations and directives contained in the Decision issued concurrently with this order.
2. Boralex is approved to recover on an interim and refundable or recoverable basis the rates for electric service to BC Hydro as presented in the Application, for the period January 1, 2024 to December 31, 2027, pending the outcome of the BCUC's concurrent GCOC Stage 2 proceeding and subject to the adjustments resulting from the corrections identified by Boralex in the proceeding and the determinations and directives contained in the Decision issued concurrently with this order.
3. Boralex is approved to continue the Capital Additions Deferral Account in the Test Period established by Order G-270-20.
4. Boralex is approved to continue the First Nations Deferral Account in the Test Period established by Order G-270-20.
5. Boralex is directed to file updated regulatory schedules within 30 days of this order.
6. Boralex must comply with all other directives and determinations outlined in the Decision issued concurrently with this order.

DATED at the City of Vancouver, in the Province of British Columbia, this 14th day of December 2023.

BY ORDER

Original signed by:

B. A. Magnan
Commissioner

Boralex Ocean Falls Limited Partnership
2023 to 2027 Rates for Service to British Columbia Hydro and Power Authority

Glossary and List of Acronyms

ACRONYM	DESCRIPTION
Application	Application for approval of permanent rates for service provided to British Columbia Hydro and Power Authority from January 1, 2023 to December 31, 2027 and for approval of various deferral accounts
BC Hydro	British Columbia Hydro and Power Authority
BCUC	British Columbia Utilities Commission
Boralex	Boralex Ocean Falls Limited Partnership
Boralex 2019-2022 RRA	Application for approval of interim and permanent rates for service to BC Hydro for the period of July 1, 2019 to December 31, 2022
Boralex 2019-2022 RRA Decision	Decision and Order G-270-22 dated October 27, 2020 - Boralex Ocean Falls Limited Partnership Application for Rates and Terms and Conditions for Service to the British Columbia Hydro and Power Authority - July 1, 2019 to December 31, 2022
bps	Basis points
Capital Additions Deferral Account	Deferral account to record the revenue requirement impact associated with any differences between the forecast and actual capital additions in the 2019-2022 test period only
Capital Structure	The proportions of common equity and debt approved by the BCUC in the Boralex 2019-2022 RRA Decision
CCPC	Central Coast Power Corporation
EPA	Electricity Purchase Agreement
GCOC	Generic Cost of Capital
GCOC Stage 1 Decision	BCUC Generic Cost of Capital Proceeding (Stage 1) Decision and Order G-263-23 dated September 5, 2023
IRs	Information Requests
MOU	Memorandum of Understanding
Mowi	Mowi Canada West Inc.

ACRONYM	DESCRIPTION
MWh	Megawatt hour
NIA	Non-integrated Area
O&M	Operations and Maintenance
Ocean Falls Facilities	Hydroelectric generation, transmission and distribution facilities owned and operated by Boralex located at Ocean Falls on the central coast of British Columbia
OFBC	Ocean Falls Blockchain Corp.
PACA	Participant Assistance/Cost Award
ROE	Return on Equity
RRA	Revenue Requirement Application
Test Period	January 1, 2023 to December 31, 2027
UCA	*Utilities Commission Act*
WACD	Weighted Average Cost of Debt

Boralex Ocean Falls Limited Partnership
2023 to 2027 Rates for Service to British Columbia Hydro and Power Authority

EXHIBIT LIST

Exhibit No.	Description
COMMISSION DOCUMENTS	
A-1	Letter dated June 1, 2023 – Appointing the Panel for the review of Boralex Application for Approval of Rates for Service to BC Hydro
A-2	Letter dated June 6, 2023 – BCUC Order G-130-23 establishing a regulatory timetable
A-3	Letter dated July 11, 2023 – BCUC Information Request No. 1 to Boralex
A-4	**CONFIDENTIAL** - Letter dated July 11, 2023 – BCUC Confidential Information Request No. 1 to Boralex
A-5	Letter dated August 10, 2023 – BCUC Order G-214-23 amending the regulatory timetable
A-6	Letter dated September 11, 2023 – BCUC Order G-238-23 establishing a further regulatory timetable
APPLICANT DOCUMENTS	
B-1	**BORALEX OCEAN FALLS LIMITED PARTNERSHIP (BORALEX)** – Application for Approval of Rates for Service to British Columbia Hydro and Power Authority (BC Hydro) dated April 28, 2023
B-2	Letter dated June 12, 2023 – Boralex submitting confirmation of compliance with Order G-130-23 Directives 3 and 4
B-3	**PUBLIC** - Letter dated June 20, 2023 – Boralex submitting public supplemental information in compliance with Order G-130-23 Directive 2
B-3-1	**CONFIDENTIAL -** Letter dated June 20, 2023 – Boralex submitting supplemental information confidential Financial Model
B-4	Letter dated August 9, 2023 – Boralex submitting extension request for filing of Information Request No. 1
B-5	Letter dated August 25, 2023 – Boralex submitting responses to BCUC Information Request No. 1
B-5-1	**CONFIDENTIAL -** Letter dated August 25, 2023 – Boralex submitting confidential response to BCUC Information Request No. 1 Question 15.3.1
B-6	**CONFIDENTIAL -** Letter dated August 25, 2023 – Boralex submitting confidential responses to BCUC Confidential Information Request No. 1

B-7	Letter dated August 25, 2023 – Boralex submitting responses to BC Hydro Information Request No. 1
B-7-1	**CONFIDENTIAL -** Letter dated August 25, 2023 – Boralex submitting confidential responses to BC Hydro Information Request No. 1 Questions 11.2 and 11.3

INTERVENER DOCUMENTS

C1-1	**BRITISH COLUMBIA HYDRO AND POWER AUTHORITY (BC HYDRO) –** Letter dated June 26, 2023 - Request for Intervener Status by Chris Sandve
C1-2	Letter dated July 18, 2023 – BC Hydro submitting Information Request No. 1 to Boralex