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March 23, 2020

Mr. Patrick Wruck
Commission Secretary and Manager
Regulatory Support
British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

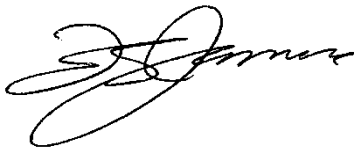
Dear Mr. Wruck:

RE: Project No. 1599046
British Columbia Utilities Commission (BCUC or Commission)
British Columbia Hydro and Power Authority (BC Hydro)
Boralex Ocean Falls Limited Partnership (Boralex LP)
Application for Rates and Terms and Conditions for Service to BC Hydro

BC Hydro writes to provide BC Hydro Information Request (IR) No. 2 to Boralex LP with respect to its application for approval of rates and terms and conditions for service to BC Hydro. This submission is in accordance with the current regulatory schedule for this proceeding set out in BCUC Order No. G-37-20.

For further information, please contact Anthea Jubb at 604-623-3545 or by email at bchydroregulatorygroup@bchydro.com.

Yours sincerely,



Fred James
Chief Regulatory Officer

hr/rh

Enclosure

Copy to: **Boralex**
Attention: Maxime Tremblay
maxime.tremblay@boralex.com

British Columbia Hydro and Power Authority

**Information Request No. 2 to
Boralex Ocean Falls**

Project No. 1599046

**Boralex Ocean Falls Limited Partnership
Application for Rates and Terms and Conditions for Service to BC Hydro**

**20.0 Reference: Exhibit B-1, Section 4 – Boralex LP Customer Base
Exhibit B-6, Boralex LP’s response to BCUC IR 2.3.2, page 7
and 8, paragraph 7.**

20.1 Please confirm that in the event that Boralex LP incurred a capacity-related issue requiring it to shed load, Boralex’s two industrial customers would be curtailed before electricity service to BC Hydro is curtailed.

20.2 Is the matter of load shedding addressed in the service agreements Boralex LP has with Mowi Canada West and Ocean Falls Blockchain? If so, please provide the applicable wording from these agreements.

**21.0 Reference: Exhibit B-1, Section 5.4 – Ocean Falls Penstocks,
Paragraph 51 and Section 8.1.1 - Project 1: Penstock
Rehabilitation
Exhibit B-6, Boralex LP’s response to BCUC IRs 1.1 and 1.2,
page 1 and 2.**

On page 3 of Boralex LP’s Submission of Supplemental Information (Exhibit B-5), Boralex provides an estimate of annual peak demand by customer class, as follows:

	Historic Peak Demand (kW)						Forecast Peak Demand (kW)		
	2014	2015	2016	2017	2018	2019	2020	2021	2022
BC Hydro Bella Bella NIA (metered demand and estimated line losses)	3035	2829	3515	3268	3100	3532	3593	3654	3717
Ocean Falls Industrial Customers (estimate only)	430	410	440	450	1150	1150	1150	1150	1150
Ocean Falls Retail Customers (estimate only)	143	134	164	153	146	165	168	170	173

21.1 If only 3 of the 4 generating units (e.g., G3, G4, and G1 or G2) underwent major refurbishment, how would this approach impact the current service reliability of the Ocean Falls generating facility? Please quantify the expected impact and include the basis of the analysis.

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- 22.0 Reference:** **Exhibit B-1, Section 8.1 – Forecast Capital Additions: 2019 to 2022;**
Exhibit B-1, Section 7.2 – Capital Additions: 2009 to 2018 – Table 6
Exhibit B-7, Boralex LP’s response to BC Hydro IRs 2.1 and 2.1.1, page 2 and 3, paragraph 5.
- 22.1 Did the materials (approval documents, presentations, etc.) presented to Boralex Inc.’s Board of Directors for approval in mid-November 2019 or materials presented to the Board at any other time, include any specific references to Boralex LP capital expenditures?
- 22.1.1 If yes, please provide these materials, redacting any information not specifically pertaining to Boralex LP and the facilities at Ocean Falls.
- 22.1.2 If no, please explain why not.
- 23.0 Reference:** **Exhibit B-1, Section 8 – Forecast Rate Base Additions: 2019 to 2022**
Exhibit B-6, Boralex LP’s response to BCUC IRs 7.3 and 7.3.1, pg. 21.
- 23.1 What are the treatment plans to address the key risks identified for the proposed capital program?
- 23.2 Has the Boralex Inc. Board of Directors or any Senior Management within Boralex group approved any capital expenditures and/or projects for the Ocean Falls facilities beyond the test period of this Application? Please explain.
- 24.0 Reference:** **Exhibit B-1, Section 8.1 – Forecast Capital Additions;**
Exhibit B-1, Section 7.2 – Capital Additions: 2009 – 2018
Exhibit B-7, Boralex LP’s responses to BC Hydro IR 2.1 Step 3, pg. 3.
- 24.1 Please provide all of the capital planning, status reports and cost estimate documents related to the penstock 2 rehabilitation project or any other penstock upgrade or replacement projects that were submitted to senior management within Boralex group over the past 10 years.
- 25.0 Reference:** **Exhibit B-1, Section 8.1 – Forecast Capital Additions: 2019 to 2022**
Exhibit B-7, Boralex LP’s responses to BC Hydro IR 3.4, pg. 7.
- 25.1 Please provide a list of projects greater than \$500,000 that have been completed at the Ocean Falls Facility in the past five years. For each project please compare the approved forecast costs and schedule (completion date) at time of project approval by senior management to the actual completion date and actual costs. Please explain or discuss any project variances to budget by more than 15 per cent and any delays to in-service dates.

- 26.0 Reference:** Exhibit B-1, Section 8.1 – Forecast Capital Additions: 2019 to 2022; Exhibit B-9 Boralex LPs Updated Response to Commission Information Requests No. 1: IRs 2.1, 7.1, 7.8, 8.3, 15, 20.1, Exhibit 7, Boralex LP’s responses to BC Hydro IR 4.4, pg. 12; Boralex LP’s response to BCUC IRs 7.1 and 8.4, pgs. 20-21, and pg. 27.

Updated Table 11: Forecast Capital Additions (2020 to 2022) (\$000)

Project #	Project	2019 (Q3-Q4)	2019 (Full Year)	2020	2021	2022	Total
1	Penstock Rehabilitation	\$137	\$407	\$1,137	\$2,311	\$1,833	\$5,688
2	Turbine Rehabilitation	-	-	\$313	\$268	\$244	\$824
3	Powerhouse Electrical	-	-	\$67	\$362	\$371	\$800
4	Ocean Falls Switchyard	-	-	\$53	-	\$215	\$268
5	Shearwater Substation	-	-	\$104	\$288	\$262	\$654
6	Interconnection Line	-	-	\$15	\$200	\$205	\$420
7	General Plant	\$37	\$135	\$125	\$125	\$354	\$739
	Total	\$174	\$542	\$1,816	\$3,553	\$3,483	\$9,393

- 26.1 Is the method of staging the penstock 2 rehabilitation work, as described in the Application, the lowest cost option for rehabilitating penstock 2?
- 26.2 Please indicate what objectives (e.g., minimize cost, minimize risk of service disruption for specific customers, etc.) were considered when evaluating the different options for the penstock 2 rehabilitation work, including the different options for staging the work.
- 26.2.1 How are financial and non-financial factors considered in the decision making process?
- 26.3 Please describe what analysis was undertaken to evaluate the trade-offs between any competing objectives (e.g., cost, service impact, etc.) when deciding how to stage the penstock 2 rehabilitation work.
- 26.3.1 Please describe key assumptions underlying the decision to propose carrying out the penstock 2 rehabilitation over multiple annual outages.
- 26.3.2 Please include what specific assumptions were used regarding relying on the Shearwater diesel generating station.
- 26.4 Please discuss how the penstock 2 replacement project has evolved over the past 10 years (2010 to 2019) in terms of scope and estimated costs, including a discussion of alternatives to penstock refurbishment that were investigated.

27.0 Reference: Exhibit B-1, Section 8.3 – Working Capital Requirements

The following table was prepared by BC Hydro using information from Boralex LP taken from the documents described in the preamble to this IR.

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Working Capital (1) - (2)	449	483	156	540	1,323	400	400	400	400
Payables:									
Trade Payables	48	35	0	49	139				
Related party payables	610	615	322	699	1,397				
Accrued liabilities	69	76	81	17	90				
Other payables				34	63				
Total Payables (1)	727	726	403	799	1,689				
Receivables									
Trade Receivables	266	239	237	247	358				
Other Receivables	12	4	10	12	8				
Total Receivables (2)	278	243	247	259	366				
				*	*				
Note *: Amounts are transposed in Appendix A Section 5									

Exhibit B-7, Boralex LP's responses to BC Hydro IR 9.1, pg. 21:

9.1 Please complete the table above so that the missing information for 2019 to 2022 is inserted.

RESPONSE

	2019-(\$000)
Working Capital	2,917
Payables	
Trade Payables	204
Related Party Payables	3,012
Accrued Liabilities	31
Other Payables	51
Total Payables	3,298
Receivables	
Trade Receivables	361
Other Receivables	20
Total Receivables	381

Boralex LP does not have a forecast for future balance sheet amounts for the years 2020, 2021 and 2022.

27.1 Why is revenue receivable not considered in the working capital requirement?

27.1.1 Why does related party payables more than quadruple between 2017 and 2019?

- 28.0 Reference: Exhibit B-1, Section 7.2 Depreciation Expense: 2009 to 2018; Exhibit B-1, Section 7.3 and 7.4 Tables 8 and 10. Exhibit B-7, Boralex LP's responses to BC Hydro IR 1.1.1 pg. 2**

Table 8: Depreciation Expense (2009 to 2018) (\$000's)

Asset Category	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
1	\$4	\$15	\$25	\$29	\$30	\$32	\$32	\$32	\$32	\$32	\$264
2	\$10	\$10	\$17	\$24	\$25	\$26	\$27	\$27	\$27	\$27	\$218
3	-	-	-	-	-	\$1	\$3	\$5	\$7	\$11	\$26
4	\$20	\$20	\$20	\$20	\$20	\$21	\$21	\$21	\$21	\$21	\$205
5	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$28	\$29	\$29	\$278
6	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$6	\$6	\$55
7	\$7	\$7	\$7	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$76
8	\$30	\$30	\$33	\$36	\$36	\$36	\$36	\$36	\$36	\$36	\$348
9	\$10	\$10	\$10	\$10	\$10	\$10	\$11	\$32	\$52	\$52	\$206
10	\$31	\$33	\$33	\$35	\$37	\$38	\$38	\$38	\$38	\$38	\$357
Total	\$144	\$157	\$178	\$194	\$199	\$204	\$208	\$232	\$256	\$261	\$2,033

Table 10: Rate Base Additions and Depreciation Expense 2009 to 2018 (\$000's)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Initial Rate Base	\$7,243	\$8,020	\$9,234	\$11,107	\$11,130	\$11,315	\$11,464	\$11,512	\$12,617	\$12,742
Capital Additions	\$922	\$1,371	\$2,050	\$218	\$384	\$353	\$257	\$1,336	\$381	\$352
Total	\$8,164	\$9,391	\$11,284	\$11,325	\$11,514	\$11,668	\$11,721	\$12,848	\$12,998	\$13,095
Depreciation	-\$144	-\$157	-\$178	-\$194	-\$199	-\$204	-\$208	-\$232	-\$256	-\$261
Ending Rate Base	\$8,020	\$9,234	\$11,107	\$11,130	\$11,315	\$11,464	\$11,512	\$12,617	\$12,742	\$12,834

- 28.1 Please reconcile the amortization expenses (approx. \$700K+) reported on audited financial statements with the depreciation expenses (approx. \$200K+) shown in Tables 8 and 10 in the period of 2014 to 2017.
- 29.0 Reference: Exhibit B-1, Section 9.1 – Capital Structure and Rate of Return on Common Equity Exhibit B-7, Boralex LP's response to BC Hydro IR 10.14, pg. 29.**
- 29.1 Please confirm whether Boralex LP has employed contingencies in its estimates of its large capital expenditure projects as a means to manage uncertainty?
- 29.1.1 If yes, please provide a description of the estimating methodology Boralex LP uses to manage uncertainty in its cost estimates for large capital investments over the Application plan period.
- 29.1.2 If no, please explain why not.
- 30.0 Reference: Exhibit B-1, Section 8.1 – Forecast Capital Additions: 2019 to 2022**

Boralex LP's responses to BC Hydro IR 3.4, pg. 7.

30.1 Please provide examples of Boralex LP's projects greater than \$500,000 that have been completed on time and on budget.

31.0 Reference: Exhibit B-1, Section 9.1 – Capital Structure and Rate of Return on Common Equity Table 21, Line 14 – Regulatory Uncertainty
Exhibit B-7, pg. 23 Boralex LP's responses to BC Hydro IR 10.20.

Table 21: Risk Matrix Applied to Boralex LP

Risk Factor		FEI Natural Gas Class of Service	Boralex LP Commentary	Risk Comparison
14	Regulatory Uncertainty	Low to medium: exists for service offerings within the nature gas class of service	An adverse regulatory decision could have a disproportionate impact upon the ability of Boralex LP to achieve its allowed ROE, relative to the impact upon FEI for a similar adverse decision. Regulatory uncertainty is exacerbated by the fact that this is Boralex LP's first rate application and by the small size, location, configuration and unique history of the Ocean Falls Facilities.	Higher

31.1 Please explain why Boralex LP believes that lack of experience with Commission regulation for its Ocean Falls facility should be a factor that contributes to it being granted both a higher deemed return on equity and a higher common equity ratio when benchmarked against other public utilities operating in British Columbia.

32.0 Reference: Exhibit B-1, Section 9.1 – Operating and Maintenance Expenses, Paragraph 145a – Employee Salary and Benefits
Exhibit B-7, Boralex LP's responses to BC Hydro IR 14.1.1, pg. 23.

The figures in the table below come from Boralex LP's audited financial statements, which were submitted as Exhibit B-4. Figures come from Note 11 – Expenses by Employee Nature (see page 10 in 2015, 2016, 2017 Audited Financial Statements)

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Employee Benefits									
Current salaries and benefits	156	148	127	110					
Other post-employment benefits	58	72	98	121					
Total	214	220	225	231	-	-	-	-	-

Boralex LP's response states that Boralex LP has not accounted for these costs [retirement allowances] as a future liability in prior years in its financial statements. The retirement allowances are defined post-employment benefits that are required to be accrued over the period of service provided by the employee under IAS 19 Employee Benefits.

32.1 Why wasn't a liability recorded for these post-employment benefits and the costs expensed in prior years as the employees provided service?

- 32.2 Please provide the applicable wording from the applicable employment contracts.
- 32.3 When did Boralex LP enter into the applicable employment contracts?

33.0 Reference: Exhibit B-1, Section 9.6 – Operating and Maintenance Expenses, Paragraph 145a and b– Employee Salary and Benefits / Employee Expenses: Table 27, Paragraph 144 Exhibit B-7, Boralex LP’s responses to BC Hydro IR 14.2, pg. 38.

Table 27: Forecast O&M Expenses (\$000’s)

O&M Line Item	2019 (Q3-Q4)	2020	2021	2022
Employee Costs				
<i>Salaries and Benefits</i>	\$243	\$838	\$769	\$781
<i>Expenses</i>	\$95	\$224	\$225	\$164
<i>Recruitment</i>	\$7	\$13	-	-
<i>Training</i>	\$8	\$38	\$46	\$46

Table 27 shows the “Salaries and Benefits” significantly increase and remain elevated through 2020 to 2022. As its experienced crew retires and is soon replaced by new recruits, one expects to see a drop in salaries in the near future, not the sustained increase shown in Table 27.

33.1 Please explain why the Salaries and Benefits remain elevated through the time period shown in Table 27.

34.0 Reference: Exhibit B-1, Section 9.2 – Debt Interest Rate, pgs. 36-37; BCUC Stage 2 Generic Cost of Capital Decision, March 25, 2014, Pg 123 Exhibit, B-8, Boralex LP’s responses to BCOAPO IR 21.1, 21.1.1 and 21.2. Pg. 15 and 16.

The Stage 2 Generic Cost of Capital Decision states: “In reference to the Stage 1 Decision, the Panel confirms that the default debt component of the capital structure is set to track a benchmark credit spread that reflects BBB or BBB(low) rated debt relative to the 10-year Government of Canada bond yield.”

- 34.1 Please provide a detailed explanation justifying why Boralex LP or Boralex LP’s lender believes the yield on 30-year bonds is more relevant than the yield on 10-year bonds. Please also explain the extent to which the characteristics of Boralex LP’s existing debt for the Ocean Falls facility are relevant (i.e., single tranche from a single debtor; 13-year term; debt matures after Application plan period in April 2024).
- 34.2 Please provide a detailed explanation justifying why a more relevant and meaningful measure is not the spot rate, but a three-year average of the 10-year Government of Canada yield over the February 13, 2017 to February 13, 2020 period.

- 34.3 Please confirm that no additional debt is currently anticipated to be sought over the Application plan period.
- 34.4 How does the 350 basis points used by Boralex LP compare with the spread between BBB or BBB(low) rated debt relative to the 10-year Government of Canada bond yield?
 - 34.4.1 Please include inputs for the determination of the 350 basis point spread, show calculations of how the 350 basis point spread was determined.
 - 34.4.2 Please explain why a spread of 350 basis points is appropriate.
 - 34.4.3 Please provide justification for Boralex LP comparing itself to a BBB/BBB-(low) index instead of a BBB+/BBB/BBB- index.