July 29, 2020

Sent by email (commission.secretary@bcuc.com)

Ms. Marija Tresoglavic
Acting Commission Secretary
British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

Re: British Columbia Utilities Commission
Boralex Ocean Falls Limited Partnership (Boralex LP)
Application for Rates and Terms and Conditions of Service to British Columbia Hydro and Power Authority
Project No. 1599046
Boralex LP Reply Argument

Dear Ms. Tresoglavic,

In accordance with the updated regulatory timetable set out in Order G-142-20, enclosed is Boralex LP's Reply Argument in this proceeding.

Yours truly,

Boralex Ocean Falls Limited Partnership

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Boralex Ocean Falls Limited Partnership

Application to the
British Columbia Utilities Commission
for Approval of Rates and
Terms and Conditions of Service for Service to
British Columbia Hydro and Power Authority
July 1, 2019 to December 31, 2022
Project No. 159046

Reply Argument of Boralex Ocean Falls Limited Partnership

July 29, 2020

Reply Argument of Boralex Ocean Falls Limited Partnership

Following is Boralex LP's reply to the written arguments filed by BC Hydro, BCOAPO and the Zone IB Ratepayers Group in this proceeding.

A. BC HYDRO ARGUMENT

1. Boralex LP's reply to the specific submissions made by BC Hydro is set out below. However, Boralex LP would like to first address two general matters regarding BC Hydro's submissions.

2. First, at various places in its argument BC Hydro makes broad and unsubstantiated assertions about alleged shortcomings in the information provided by Boralex LP. For example, on page 2 of its argument BC Hydro asserts that Boralex LP "has presented inadequate evidence on the actual costs incurred to date by Boralex LP and on the costs Boralex LP will incur during the test period, which makes the determination of just and reasonable rates extremely challenging". On page 7 (paragraph 15), BC Hydro makes the vague assertion that "in many instances, the foundation of Boralex LP's Application does not meet a reasonable standard because information is either lacking or does not exist". In its conclusion on page 45 (paragraph 151), BC Hydro makes the sweeping claim that "the ultimate issue with the Application continues to be the general across the board lack of robust evidence supporting Boralex LP's claims of high risks and increasing operating costs, and urgent need for very high capital expenditures".

3. Boralex LP strongly rejects these assertions. The Application and supporting information provided by Boralex LP during the course of this proceeding, including Boralex LP's responses to the many information requests from the Commission and interveners, provides full and complete explanation, justification and support for all the capital and operating costs that make up the revenue requirement over the test period and full and complete explanation of the various risks faced by Boralex LP in owning and operating the Ocean Falls Facilities. At the very outset of the proceeding last year the Commission asked for submissions from BC Hydro and the other interveners whether any supplemental information was required before proceeding with the regulatory review process.[1] The supplemental information requested by BC Hydro and BCOAPO was, to the extent relevant, provided by Boralex LP prior to the information request process. BC Hydro did not object to the supplemental information that was provided by Boralex LP nor did it claim then that the Application was incomplete or lacked "foundation". BC Hydro submitted two rounds of information requests to Boralex LP which BC Hydro acknowledges, in direct contradiction to its assertions of "inadequate evidence", were responded to by

[1] Order G-265-19 dated October 31, 2019 (Exhibit A-2).

Boralex LP in a "transparent and constructive manner" (page 6, paragraph 11). After Boralex LP had responded to the second round of information requests, the Commission asked parties whether any further process was required for the review of the Application and whether interveners intended to file evidence.[2] In response, BC Hydro said that it would not be filing evidence and that no further process was required before proceeding to final argument.[3] Now, in final argument, BC Hydro says that the "foundation" of the Application "does not meet a reasonable standard".

4. Boralex LP also rejects the similar assertion by BC Hydro on page 7 (paragraph 13) of its final argument that there is a "shortcoming in information" with respect to Boralex LP's forecast capital projects and expenditures. Boralex LP provided extensive justification of the need and timing for each capital project and information regarding the forecast cost of the projects in the Application, in its responses to information requests regarding the projects and with the third party professional engineering studies and reports that were filed by Boralex LP in support of the projects. It is apparent from BC Hydro's submissions on specific capital projects and expenditures that BC Hydro could not have reviewed these third party engineering reports. Nowhere is this clearer than in the case of the Penstock 2 rehabilitation project and the supporting engineering studies and recommendations prepared by BBA Engineering. Boralex LP filed these reports on a confidential basis because they contain confidential and commercially sensitive information, but in doing so Boralex LP made clear that it had no objection whatsoever to BC Hydro or any other intervener reviewing the reports if the Commission's usual processes for protecting confidential information were followed. As far as Boralex LP is aware, BC Hydro simply chose not to review the reports.

5. Second, BC Hydro's recommendation that the Commission should disallow significant amounts of Boralex LP's forecast O&M costs would, if accepted by the Commission, result in BC Hydro benefiting from those aspects of the Application that are extremely favourable to BC Hydro without responsibility for all the costs, including a fair return on capital, that need to be incurred by Boralex LP to continue to provide safe, secure and reliable service to the Bella Bella NIA. The numerous features of the Application that are very favourable to BC Hydro include those summarized in paragraph 181 of Boralex LP's final argument, all of which BC Hydro supports in its final argument. BC Hydro's one-sided approach of seeking on the one hand to extract these benefits, and on the other hand to avoid all the costs of providing service to it, is neither fair nor reasonable and would not result in just and reasonable rates for Boralex LP's service to BC Hydro.

[2] Commission letter dated May 11, 2020 (Exhibit A-11).

[3] BC Hydro letter dated May 26, 2020 (Exhibit C1-5).

6. While Boralex LP does not agree with many of BCOAPO's submissions, in contrast to BC Hydro BCOAPO does not allege that the "foundation" of the Application lacks a "reasonable standard" or that Boralex LP has provided "inadequate evidence" to support the forecast revenue requirement. It is also clear that BCOAPO conducted a more fair, reasonable and balanced review of the evidence regarding the capital projects that Boralex LP needs to undertake in order to maintain safe, secure and reliable service.

Equity Ratio and Allowed ROE

7. **Argument**: BC Hydro recommends that the Commission set Boralex LP's equity ratio at 42.5% with an allowed ROE of 9.5%. In doing so, BC Hydro acknowledges that it is correct to evaluate the risks faced by Boralex LP by comparing those risks to those faced by FEI, as Boralex LP has done with the modified version of the Commission's risk matrix. However, BC Hydro asserts that Boralex LP "puts too much weight on risks associated with the remote location of the Ocean Falls Facilities" (page 9, paragraph 21).

Response: It is not just that the Ocean Falls Facilities are in "a remote location". The facilities are isolated and can only be reliably accessed by water and the physical environment in this part of the Province is extremely harsh. These facts impose real and tangible risks which are not faced by FEI or any of the other utilities regulated by the Commission. For example, they impose significantly higher operating cost risks in operating and maintaining the facilities (including the non-redundant 45 km transmission line between Ocean Falls and Shearwater that is exposed to significant adverse weather events, particularly in the winter) and responding to emergencies; they impose significantly higher construction risks in forecasting, planning and executing capital projects; and they make it more difficult and costly to recruit, train and retain qualified operating personnel in Ocean Falls.

Moreover, these risks cannot be viewed in isolation from the rate structure for Boralex LP's service to BC Hydro. While BC Hydro supports and benefits from the 100% energy charge rate structure in that it only pays for the electricity that it actually needs and Boralex LP is able to deliver, conversely it means that the cost of any service interruptions attributable to the difficult operating environment at Ocean Falls are borne directly by Boralex LP, not BC Hydro.

8. **Argument**: BC Hydro asserts that there are "a number of factors that greatly reduce the risks Boralex LP faces as compared to the benchmark" (pages 9 and 10, paragraph 23), including:

- BC Hydro is Boralex LP's primary customer and provides it with approximately 85 per cent of its revenue
- BC Hydro has a low to insignificant risk of defaulting
- The rate design assumes that BC Hydro takes the volume risk

Response: Boralex LP acknowledges that BC Hydro is Boralex LP's primary customer, providing approximately 85% of its revenue, and that there is a low risk of BC Hydro defaulting on its electricity bills. However, that does mean that BC Hydro is guaranteeing the recovery by Boralex LP of 85% of its revenue requirement. Again, Boralex LP faces significant cost forecasting risks and, under the energy charge rate structure, Boralex LP, not BC Hydro, is assuming all of the risks associated with its ongoing ability to delivery electricity to BC Hydro.

Moreover, 100% of FEI revenue comes from a very large and very diverse, both economically and geographically, customer base. While FEI may face some customer default risk, through this extensive diversification it is likely that any default risk faced by FEI involves only a small fraction of its customer base. Accordingly, for all practical purposes, far more than 85% of FEI's overall customer base has a "low to insignificant risk of defaulting".

Also, focusing on the 85% ignores the remaining 15%. Of the 15%, approximately 3% of Boralex LP's gross revenue requirement is forecast to be recovered from Boralex LP's retail customers in Ocean Falls and about 12% is forecast to be recovered from Boralex LP's two industrial customers. BC Hydro ignores the significant risks associated with the forecast revenue from the industrial customers in particular, and the fact that this revenue accounts for about 65% of Boralex LP's average annual return on equity over the test period.[4] FEI has no such exposure or equivalent customer risk.

Furthermore, contrary to BC Hydro's assertion, the rate design does not assume "that BC Hydro takes the volume risk"; it assumes the opposite. Again, under the energy charge rate structure Boralex LP, not BC Hydro, is assuming all of the volume risks. Also, as explained in paragraph 64 of Boralex LP's final argument, under the two tier declining block rate structure Boralex is exposed to asymmetrical risk/benefit impacts should the actual Bella Bella NIA load be different than forecast for *any* reason (including, for example, if the load growth is less than the 1.6% forecast or Boralex LP experiences a system outage and is unable to deliver electricity to BC Hydro). If for any reason the actual load is less than the Tier 1/Tier 2 threshold, Boralex LP will lose significantly more revenue (all at the Tier 1 rate) than it would gain if the actual load is greater than the threshold (all at the lower Tier 2 rate). On average, a 10% reduction in the

[4] Application Update, Table 7 (Exhibit B-11).

amount of electricity purchased by BC Hydro would result in the loss of approximately $300,000 in annual revenue, which represents approximately 40% of Boralex LP's average annual return on equity between 2020 and 2022.[5]

9. **Argument:** BC Hydro argues that a "number of significant risk factors faced by other utilities (e.g., other utilities are making significant capital investments in greenfield plants, have technology risks, and the need to build customer bases from zero while facing competition from established alternatives) are simply not present for Boralex LP" (page 10, paragraph 24).

   Response: Although it does not say so directly, BC Hydro appears to be referring here to the TES Utilities regulated by the Commission. While Ocean Falls is not a greenfield facility, Boralex LP in fact does need to make significant new capital investments in order to maintain the structural and operational integrity of the facilities. Hydroelectricity is not a new technology, but TES Utilities building greenfield facilities do not face any of the risks associated with operating and maintaining facilities like Ocean Falls with major and critical components that are over 100 years old. Contrary to BC Hydro's assertion, TES Utilities do not build their customer bases from "zero" since there would be no TES project in the first place without an initial customer base, and the economics of the projects are designed from the outset to be cost competitive with the alternatives. Also, the TES Utilities operate in urban areas and do not face any of the inherent risks faced by Boralex LP associated with operating in a remote and isolated location with a very harsh physical environment. Moreover, the TES Utilities do not face the single customer risk and exposure that Boralex LP faces with its two industrial customers.

10. **Argument:** BC Hydro also asserts that there are "a number of significant risks that Boralex LP has low to no exposure to. These include exposure to foreign exchange risks, fluctuating price risk, interest rate risk, credit risk, and liquidity risks" (page 11, paragraph 27).

    Response: The object of the exercise is to compare Boralex LP's risks to those faced by the benchmark, FEI. Even if for the sake of argument Boralex LP has "low to no exposure" to these risks, there is no evidence FEI also has any exposure to these risks. With regard to "fluctuating price risk", Boralex LP does not understand the claim made by BC Hydro in footnote 19 of its argument that "Boralex LP has a long-term indexed fixed-price energy sales contract which is not subject to fluctuations in electricity prices". Boralex LP has no long-term indexed fixed price sales contracts, indexed or otherwise.

    With regard to interest rate risk, Boralex LP assumes that FEI recovers its actual cost of long term third party debt in its customer rates, otherwise it would not be

[5] Boralex response to BCUC IR 51.3 (Exhibit B-13).

able to achieve its allowed return on ROE. In this case, BC Hydro is recommending that the Commission ignore altogether Boralex LP's actual cost of debt of 6.55% and instead impose a significantly lower arbitrary rate that, as discussed below, has no evidentiary basis and would ensure that Boralex LP would not come close to recovering its actual cost of debt.

11. **Argument:** With regard to regulatory risk, BC Hydro contends that "any regulatory uncertainty Boralex LP is facing in connection with its rate application does not result from regulation by the BCUC pursuant to the *Utilities Commission Act*, but rather is due to Boralex LP's approach to its Application, including for instance, the request for a higher risk premium and equity ratio than any other utility in the province. Boralex LP should not be compensated for the risk that its requests for extremely favourable treatment, in its Application, might not be approved" (page 11, paragraph 26).

Response: Boralex LP is confident that the Commission will conduct a fair and impartial review of the evidence regarding Boralex LP's forecast costs and the risks of owning and operating the Ocean Falls Facilities, just as it does when reviewing applications from FEI. Regulatory risk though relates to the influence that a regulatory framework and individual regulatory decisions can have on a utility's business. This includes all regulations to which the utility is subject, not just regulation by the Commission. While the regulatory framework in B.C. is generally stable and predictable, *compared* to FEI Boralex LP submits that it faces higher regulatory risk because an individual regulatory decision or action from a governmental or regulatory body could have a disproportionate adverse impact on Boralex LP's ability to earn its allowed ROE, which is exacerbated by the very small size and isolated location of the Ocean Falls Facilities (for example, step changes in water rental rates or property taxes or new dam safety regulations).

Moreover, Boralex LP is not asking for "extremely favourable treatment" from the Commission. Boralex LP is though asking the Commission to recognize that Boralex LP faces significantly higher overall risks than FEI, and indeed higher overall risks than the other utilities regulated by the Commission, and consequently warrants a higher equity ratio and equity risk premium than FEI and the other utilities.

Debt Interest Rate

12. **Argument**: BC Hydro recommends a deemed debt interest rate in the range of 3.0% to 3.8%. In doing so, BC Hydro asserts that the 6.55% actual rate of interest on the third party debt issued by Boralex LP is "not relevant to determining a deemed debt interest rate for the test period" because the debt was secured in 2011 and "the current market cost of debt is much lower" (page

12, paragraph 31), and that the "irrelevance of the 6.55 per cent rate is further evidenced" by two financings cited by BC Hydro from 2017 (Boralex Inc.'s Moose Lake wind project and Corix's Burnaby Mountain District Energy Utility) (pages 12 and 13, paragraph 32).

Response: BC Hydro's argument that the actual interest rate on Boralex LP's existing debt is irrelevant because it was issued in 2011 is tantamount to arguing that the cost of any utility's embedded cost of debt is irrelevant because the debt was issued in years prior to the utility's current rate application. That, of course, is not the case as the cost of prior debt issuances represents real costs of financing that must be (and are) recovered by the utility in its cost of service.

With regard to the Moose Lake and Burnaby Mountain DEU financings, which have been introduced for the first time by BC Hydro in its final argument, there is no evidence that the facts and circumstances surrounding these financings from 2017 have any relevance whatsoever to the Ocean Falls Facilities. If fact, there is no evidence at all on the record regarding these financings. If BC Hydro believes that these financings are somehow relevant, it should have introduced its own evidence to explain why. Or, at the very least, it should have provided Boralex LP with an opportunity through an information request to provide its views on relevance.

The fact remains that the actual cost rate on Boralex LP's existing third party debt is 6.55%. It is also Boralex LP's evidence, based on the advice of its current lender who is intimately familiar with the Ocean Falls Facilities, that if Boralex LP were to finance the debt component of Boralex LP's capital structure (not the capital structure of some other entity with some other facilities located somewhere else), the interest rate on that debt would be 5.3%.

13. **Argument**: BC Hydro also takes issue with the use by Boralex LP's lender of the 30-year GoC bond yield as the appropriate comparator and suggests the 10-year GoC bond yield is more appropriate (page 13).

Response: The credit spread over the underlying GoC bond yield is primarily a function of the underlying risks of the borrower. The advice of Boralex LP's lender is that in Boralex LP's case, based on its knowledge of Boralex LP's business and operations, the credit spread would be 350 basis points over a 30-year GoC bond yield of 1.80%. The equivalent spot rate on the 10-year GoC bond yield in mid-June 2019 was 1.53%.[6] Accordingly, there is no material different between the 30-year GoC bond yield quoted by Boralex LP's lender at this same time (about 30 basis points), which is indicative of a relatively flat yield curve.

[6] Boralex LP response to BCOAPO IR 21.1.1 (Exhibit B-8).

Not only does BC Hydro's recommended deemed interest rate in the range of 3.0% to 3.8% have no basis in any evidence in this proceeding, it is demonstrably unreasonable as it would not even cover (or at the high end just barely cover) the 350 basis point credit spread required for Boralex LP.

14. **Argument:** BC Hydro argues that "the BCUC's Stage 2 GCOC decision mandates the use of debt that tracks a benchmark credit spread that reflects BBB or BBB(low) rated debt relative to the 10-year GoC bond yield" (page 14, paragraph 38) and that "Recent BBB+/BBB/BBB- indices indicate a spread over 10-year GoC bond yield in the range of 200 basis points, far short of Boralex LP's 350 suggested basis points" (page 14, paragraph 39).

Response: First, the Stage 2 GCOC Decision does not mandate the use of this methodology. It is a default interest rate methodology that may be appropriate in circumstances where the utility does not issue its own third party debt. It is not appropriate in this case because Boralex LP has actually issued third party debt and Boralex LP's borrowing costs can be assessed by the actual cost rate on that debt and the evidence of the advice of Boralex LP's lenders of what the cost of new financing would be. The cost rate on Boralex LP's existing third party debt is 6.55% and, as the debt does not mature until April, 2024, this rate will remain in effect for the entire duration of the test period. Moreover, the presence of the make-whole provisions in the current loan agreement precludes Boralex LP's ability to effectively refinance the loan at a lower rate.[7]

Second, *no* evidence was filed in this proceeding regarding credits spreads for the indices cited by BC Hydro. The "range of 200 basis points" is simply a figure introduced by BC Hydro for the first time in its final argument without any evidentiary support whatsoever on the record.

Working Capital

15. **Argument**: BC Hydro submits that the 45-day lag rule discussed in BCUC IR 41.3 is a reasonable approach for estimating Boralex LP's working capital requirement (page 16, paragraph 47).

Response: Boralex LP maintains that a working capital allowance equal to approximately three months of O&M expenses is not unreasonable, particularly in light of the fact that Boralex LP is not proposing to recover any provision for the cost of financing its capital expenditure program (i.e., AFUDC). Nevertheless, Boralex LP has acknowledged in its response to BCUC IR 41.3 and in its final argument that, in the absence of a formal lead/lag study, the use

[7] Boralex LP response to BC Hydro IR 34.1 (Exhibit B-15).

of the 45-day rule is not unreasonable.[8] However, as indicated in that same response, Boralex LP believes that the working capital requirement determined by this method should use Boralex LP's average forecast O&M requirements over the entire test period (not 2019 alone as suggested by BC Hydro in paragraph 46 of its final argument), which would result in a working capital allowance of $262,000.

Cost Escalation Factors

16. **Argument:** BC Hydro generally agrees that the cost escalation factors used by Boralex LP in forecasting its costs over the test period are reasonable, but submits that some of the values should be slightly modified. In particular, BC Hydro submits that a 2% inflation rate should be used for property and school taxes and labour costs, not the 3% used by Boralex LP. BC Hydro appears to be saying that 2% is appropriate because "BC Hydro traditionally has used a 2 per cent inflation rate for its own capital cost forecasts" (page 17, paragraph 52).

Response: Boralex LP (and the Commission) has no ability to test the veracity of BC Hydro's claim that it uses a 2% inflation rate for its own capital projects because BC Hydro did not file any evidence in this proceeding. Moreover, it is not apparent why an inflation rate used by BC Hydro for its capital projects is relevant to the appropriate inflation rate for Boralex LP's property and school taxes and labour costs.

Boralex LP's property taxes have gone up significantly in recent years and the most recent increase (approximately 39% between 2018 and 2019) is due to a significant increase in the tax rate charged by the Ocean Falls Improvement District due to an increase in the District's operating budget.[9] Given the recent increases, Boralex LP believes that 3% is a reasonable escalator for property taxes and, if anything, may understate the actual increases over the test period.

With regard to labour costs, Boralex LP anticipates that its labour costs will continue to increase at a rate above forecast inflation. Boralex LP has forecast an annual increase of 3% because of the increasing difficulty Boralex LP has experienced in hiring qualified persons who have the diverse skills necessary to successfully operate and maintain the Ocean Falls Facilities, as well as the difficulty in retaining employees in this remote and isolated location given the alternative employment opportunities available elsewhere.

[8] Exhibit B-13.

[9] Boralex LP final argument, paragraph 146, and Boralex LP response to BCUC IR 44.1 (Exhibit B-13).

Operating Costs

17. Boralex LP's reply to BC Hydro's submissions on individual operating and maintenance cost items is set out below. However, BC Hydro claims that, in aggregate, the forecast O&M costs can "reasonably" be reduced by an average of approximately $600,000 per year (page 2). For context, this would represent about a 28% reduction in the forecast costs. As can be seen from BC Hydro's submission on the individual cost items, this reduction is arbitrary and untethered to the evidence. If accepted by the Commission, this reduction would make it impossible for Boralex LP to recover its actual costs of providing service, including the Commission's allowed ROE.

Operating Costs: Capitalized Overheads

18. **Argument:** BC Hydro submits that it is appropriate to allocate a portion of Boralex LP's O&M costs as capitalized overhead and suggests that an allocation of 5% is reasonable (page 20, paragraph 59).

Response: As BC Hydro notes, Boralex LP agrees that it may be appropriate to allocate a portion of O&M costs as capitalized overhead and is amenable to doing so for the test period. Boralex LP is also not opposed to BC Hydro's suggested allocation of 5% for the test period. Boralex LP will, however, reevaluate and address this issue in its next rate application to confirm that a 5% allocation remains reasonable and appropriate for Boralex LP's circumstances.

Operating Costs: Employee Costs

19. **Argument:** BC Hydro's submissions regarding Boralex LP's forecast of direct employee costs (i.e., those costs under the heading "Employee Costs" in Table 27) are two-fold. First, BC Hydro questions the need for a two year overlap period between the retiring and new employees and submits that an overlap time period of three to six months "ought to be sufficient for the new employees to gain sufficient familiarity with the equipment and procedures at the Ocean Falls Facilities, and to complete the listed training and certifications" (pages 21 and 22, paragraph 64). Second, BC Hydro argues that the one-time employee retiring allowances "should be removed from the current revenue requirements in their entirety, or pro-rated such that only the years between becoming a regulated entity and the retirement of the workers are included in Boralex LP's revenue requirements" (page 23, paragraph 68).

Response: With regard to the employee overlap period, Boralex LP explained in its response to BCUC IR 45.1 why a period of approximately two years is

required.[10] As explained in that response, the operators of the Ocean Falls Facilities have a much broader range of responsibilities than operators of a typical hydroelectric generating plant. For example, BC Hydro has a very large fleet of hydroelectric facilities and a commensurately large staff of operators and undoubtedly the operators of those facilities are much more specialized with more focused responsibilities and can be rotated if necessary amongst the various facilities. At Ocean Falls, the staff complement is much smaller and the operators are responsible to ensure that the power plant, dam and reservoir are kept in good operating condition, as well as having full responsibility for carrying out numerous other duties that would be provided by specialized teams in the case of an integrated utility like BC Hydro. The operators at Ocean Falls also act as the system controllers for the Ocean Falls/Bella Bella electrical island, they inspect and maintain the switchyard and substation facilities in Ocean Falls and Shearwater, they inspect and maintain the 45 km transmission line between Ocean Falls and Shearwater and the local distribution facilities in the Ocean Falls town site and Martin Valley, and they operate and maintain the vehicles, vessels, heavy equipment and tools necessary to operate and maintain the Ocean Falls Facilities.

Moreover, as also explained in Boralex LP's response to BCUC IR 45.1, the operators at Ocean Falls have to be trained to operate trucks, heavy equipment and vessels (tug, crew boat, barge); they have to be able to gather, yard and dispose of large woody debris from the reservoir forebay; they have to be trained in switching operations, firefighting duties and first aid; and they need to be certified in multiple trades in order to carry out their basic duties as Ocean Falls operators. Also, the operators work on a shift basis and the required training courses are at locations throughout the Province. The sequence and timing of the courses do not always coincide with the shift schedules which adds to the time required to complete the required courses and training.

BC Hydro's suggestion that an overlap period of three to six months "ought to be sufficient for the new employees to gain sufficient familiarity with the equipment and procedures at the Ocean Falls Facilities, and to complete the listed training and certifications" is entirely unsubstantiated. The required courses, certification and training that the operators need to complete could not be completed in six months, let alone three months. It is Boralex LP's judgement that a shorter overlap period than has been planned for the new employees would potentially put operational continuity and system reliability at risk.

With regard to the one-time employee retiring allowances, contrary to the suggestion by BC Hydro in paragraph 66 of its final argument, Boralex LP did not acknowledge in its response to BC Hydro IR 32.0 that the retiring allowances "are defined post-employee benefits that are required to be accrued over the

[10] Exhibit B-13.

period of service provided by the employee under IAS 19 Employee Benefits". That was simply an assertion made by BC Hydro in its IR 32.0.

Recognizing this expense as a lump sum amount in the year the allowances are actually paid to the retiring employees is entirely consistent with the nature of the obligation. These are not pension type obligations and they only become payable (i) if the employee reaches the age of 62 and is still employed at that time, and (ii) when the employee retires. Accordingly, the accrual of this expense as BC Hydro argues is incorrect. Boralex LP also notes that its financial statements are audited and there have been no audit statement qualifications regarding the retiring allowances.

Operating Costs: Corporate Services

20. **Argument:** With regard to the cost of corporate services provided by Boralex Inc. to Boralex LP, BC Hydro argues that the "fundamental problem" with these costs is that there is no documented transfer pricing policy in place between Boralex LP and Boralex Inc. to ensure that the costs "are reasonable" (page 23, paragraph 70), that the methodology used to estimate these costs is "not sufficiently accurate for determining the amount of corporate services costs to factor into cost of service revenue requirements" (page 24, paragraph 73) and, although BC Hydro "does not suggest that Boralex LP's figures are completely incorrect or have been modified prejudicially" (page 25, paragraph 78), BC Hydro nevertheless argues that:

> "In lieu of a more robust methodology for estimating the corporate services costs appropriately allocated to Boralex LP, BC Hydro submits that the corporate services costs ought to be set at 30% of salaries plus 30% of the amount of the new regulatory affairs person that Boralex LP intends to hire, capped at a total of $100,000/year" (page 24, paragraph 74).

Response: It is not clear what "salaries" BC Hydro is referring to or why "salaries" is a relevant metric in the first place. If BC Hydro is referring to the salaries of Boralex LP's direct employees, 30% of average annual salaries between 2020 and 2022 of those employees is about $218,000 (30% of $725,000 as shown in Table 27), which raises the question of why BC Hydro would suggest a formula that would always default to the cap of $100,000/year. And to put this cap in context and to show just how arbitrary and unreasonable it is, the forecast actual cost of the various services provided by Boralex Inc. is approximately $475,000 over the 2020 to 2022 period.

The forecast costs of corporate services as set out under the heading "Corporate Services" in Table 27 include the cost of head office type functions (the

subcategory and line item labelled "*Corporate Services*" in Table 27), Engineering and Environmental services, Operations Senior Management and Operations Site Management. Boralex LP does not have its own employees to carry out and provide these services and functions (which cover a full range of professional services, including accounting, tax, finance, communications, human resources, legal, information technology, development, regulatory affairs, engineering, environment and operations management), all of which are necessary to enable Boralex LP to operate and maintain its utility operations at Ocean Falls and to provide safe, secure and reliable service.

Boralex LP vehemently disagrees that the methodology used to forecast the cost of these services is not "sufficiently accurate" or "robust". The methodology used to estimate the cost of the head office type functions (the subcategory "*Corporate Services*") started with the canvassing of every department head at Boralex Inc. to ascertain whether the department, and if so, who in the department, provides support or services to Boralex LP on a regular basis. All individuals within each identified department were then contacted to obtain details regarding the nature of the support or services provided and an estimate of the number of hours on an annual basis they expect to spend on Boralex LP matters over the test period. An average hourly rates per employee category was then determined based on the salary of that employee category, and the estimated hours by department employee were then multiplied by applicable average hourly rates for the employee to arrive at individual employee costs. Finally, the individual employee costs within each department were then totaled to arrive at the total department costs and the individual department costs were totaled to arrive at the total estimated cost of the Corporate Services. The methodology is thus "accurate" and "robust".

With regard to the cost of *Engineering and Environment* services, *Operations Senior Management* and *Operations Site Management*, the cost of these services is based on a forecast of time spent by the relevant personnel on Ocean Falls matters.[11] Yes, the Operations Site Management costs do include the allocated time of an additional site supervisor (BC Hydro argument page 26, paragraph 79), but an additional supervisor is required because the current site supervisor will be retiring and because the planned capital program requires greater on-site management. As noted in the Application Update, the hiring of the additional site supervisor has been deferred from Q1 2020 to Q2 2021 due to COVID-19 and the delayed commencement of the Penstock 2 rehabilitation work.

Also, the site supervision costs reflect only a 56% time allocation to Ocean Falls operations, so the effective pro rata overlap period between the new and retiring

[11] Boralex LP response to BC Hydro IR 16.1 (Exhibit B-7).

site supervisor is just over half of the time suggested by BC Hydro.[12] Moreover, it is critically important that the overlap period cover at least one full year cycle to ensure that the idiosyncrasies and challenges pertaining to each operational season are subject to the period of overlap. For example, the challenges of operating and repairing, as necessary, the 45 km transmission line during winter storms presents a very different set of challenges than planning and executing the annual hydro plant shut down period. Additionally, Boralex LP is responsibly managing the extra demands on the current site supervisor's time by hiring the replacement site supervisor at a time where the replacement can play an important role in managing portions of the capital expenditure program. For example, since the Penstock 2 rehabilitation project is a multi-phase and multi-year project, Boralex LP believes that continuity and institutional knowledge is an important risk mitigation strategy. BC Hydro has noted that Boralex LP is undertaking a greater number of capital projects when compared to recent history, but fails to credit Boralex LP for ensuring that it has sufficient and appropriate management resources to oversee the capital program.

Far from being unreasonable, the methodology used to estimate the cost of all the corporate services provided by Boralex Inc. ensures that Boralex LP only bears the appropriate cost for the services commensurate with the level of service. In contrast, what BC Hydro suggests is completely arbitrary and bears no relationship whatsoever to either the nature of the full suite of services provided by Boralex Inc. or to the cost of these services. Ironically, BC Hydro complains about the lack of a "robust methodology" and then argues that these costs should be capped at an arbitrary $100,000 per year, which is no methodology at all.

Moreover, the absence of a formal documented transfer pricing policy between Boralex Inc. and Boralex LP does not make the costs "unreasonable", nor would it "obviate the need for increased corporate services personnel" (page 27, paragraph 81). Transfer pricing policy or not, all of the services provided by Boralex Inc. are required and are necessary to enable Boralex LP to operate and maintain its utility operations at Ocean Falls. Boralex LP would also use the same methodology under such a policy for estimating the cost of these services.

[12] In its footnote 61 BC Hydro notes that in addition to Ocean Falls Boralex Inc. owns two other facilities in B.C. (Jamie Creek and Moose Lake), suggesting that a 56% time allocation for site management to Ocean Falls is too high. However, Jamie Creek and Moose Lake are established operating generation plants that are significantly less complex than the Ocean Falls operations and, unlike at Ocean Falls, neither project is not undertaking any major capital projects.

Operating Costs: Regulatory Costs

21. **Argument:** BC Hydro submits that the regulatory costs incurred by Boralex LP for third party consulting and legal costs associated with the Application and this proceeding "seem high for a small utility". BC Hydro also submits that these costs "appear to include costs Boralex LP incurred negotiating an EPA renewal", and as such "should not be included in the test period revenue requirements and rates" (pages 27 and 28, paragraph 85).

Response: Boralex LP agrees that it is a small utility and the dollar amounts involved are less than those of larger utilities. However, it does not follow that the time and resources required to prepare the Application and participate in the Commission's application review process, including responding to over 615 information requests, was a small undertaking. Not only is this Boralex LP's first rate application, but the matters and issues that needed to be addressed in developing the cost of service model, the individual components of the revenue requirement, the load and revenue forecasts, the rate design and the terms and conditions of service, are very similar to those faced by much larger utilities which have significant internal regulatory personnel and resources. Moreover, this Application has involved a number of additional issues due to the unique history of the Ocean Falls Facilities and the shift to cost of service rate regulation after many years of operating under a negotiated EPA with BC Hydro. As Boralex LP does not have a regulatory affairs department, it has had to rely heavily on its third party advisors for assistance in preparing the Application and cost of service financial model, as well as participating in the Application review process, including with regard to responding to the two rounds of information requests.

With regard to BC Hydro's second point, the costs in question were incurred by Boralex LP commencing in June 2019 after BC Hydro and Boralex LP had advised the Commission that they had been unable to successfully negotiate terms and conditions for a new EPA.[13] Accordingly, none of these costs include costs incurred by Boralex LP in its efforts to negotiate a new EPA with BC Hydro.

Capital Expenditures and Additions

22. **Argument:** BC Hydro states that Boralex LP's historic capital additions were on average approximately $760,000 per year between 2009 and 2018 and that the forecast capital expenditures are on average $3.1 million per year over the test period (page 28, paragraphs 87 and 88), leading BC Hydro to conclude that:

[13] Boralex LP response to BC Hydro IR 17.1 (Exhibit B-7).

> "Given the large increase (quadrupling) in capital work and expenditures relative to recent expenditure levels and reasonable doubt that Boralex LP can actually complete the forecast work on the assumed schedule, BC Hydro submits that the BCUC should require Boralex LP to establish a deferral account to record the impact of differences between forecast capital additions, as set out in the Application, and actual capital additions. The deferral account balance can be reviewed in future revenue requirement applications and any credit balance refunded" (pages 29 and 30, paragraph 91).

Response: The largest capital project over the test period is the Penstock 2 rehabilitation project. Excluding the cost of this project, the forecast capital expenditures average $1.05 million per year over the test period. Accounting for inflation, this is not significantly different than the average annual expenditures from 2009 to 2018.

Boralex LP is confident that it can complete the forecast work as scheduled. Boralex LP is part of a "large multinational group" (BC Hydro argument, page 11, paragraph 26) and has considerable experience in undertaking and completing capital projects at Ocean Falls. As noted in Boralex LP's response to BC Hydro IR 3.4, the primary constraint on undertaking and completing the capital projects is not the volume of work or Boralex LP's internal capacity, but rather the risks identified in Boralex LP's response to BCUC IR 7.3.1.[14]

With regard to BC Hydro's proposed deferral account for capital projects, on page 3 of its argument BC Hydro submits that the "BCUC should require Boralex LP to establish a deferral account to record the impact of differences between forecast capital additions, as set out in the Application, and actual capital additions, and <u>to carry forward the balance</u> in the account for consideration in future revenue requirement applications". As noted above, in paragraph 91 of its argument BC Hydro says that the "deferral account balance can be reviewed in future revenue requirement applications and <u>any credit balance refunded</u>". So it is not clear what BC Hydro is actually proposing, but if the intent is that the deferral account be used only to refund "credit balances" to BC Hydro, then in Boralex LP's submission such a proposal would be patently unreasonable.

Again, Boralex LP strongly disagrees with BC Hydro's assertions that there has been any lack of information necessary to evaluate the need for and timing of the capital projects or that Boralex LP lacks the internal capability to undertake and complete the projects. However, Boralex LP does acknowledge that COVID-19 has introduced a level of uncertainty that no one could have anticipated. If the pandemic persists for the balance of this year and into next year or even beyond,

[14] Boralex LP response to BC Hydro IR 3.4 (Exhibit B-7).

this could impact Boralex LP's ability to procure materials and supplies and hire contractors in Ocean Falls. For this reason, Boralex LP is not adverse to the establishment of a deferral account to record the revenue requirement impact associated with any differences between the forecast and actual cost and timing of the capital projects. The disposition of any credit or debit balance in such an account could then be addressed in Boralex LP's next rate application. However, to be clear, Boralex LP is strongly opposed to the asymmetrical treatment of cost differences suggested by BC Hydro and that such an account be used to only record credit balances for refund to BC Hydro.

Capital Project Planning Process

23. **Argument:** BC Hydro "highlights the lack of formal written policies in place for Boralex LP and Boralex Inc. to evaluate the proposed capital investments" (page 30, paragraph 92) and says it is concerned that "Boralex LP does not have a 10-year capital plan or other longer term planning document for investments in the Ocean Falls Facilities" (page 30, paragraph 93). BC Hydro claims that as a result it:

> "is unable to verify whether Boralex LP's proposed capital projects in the Application are reasonably needed at the time Boralex LP proposes to undertake them (or whether the projects can reasonably be deferred for example); whether the projects are the most cost-effective solution to the need in terms of costs, benefits and risks; or whether Boralex LP has the resources to complete the projects on time and on budget as forecast in the revenue requirements" (page 31, paragraph 99)

Response: First, Boralex Inc. does have a formal corporate governance process for the review and approval of capital expenditures by its subsidiaries, including the Ocean Falls Facilities, notwithstanding that the process is not set out in a written document. The budget and governance process is rigorous and involves extensive review and input from the most senior executives at Boralex Inc., including the President and Chief Executive Officer.[15] Just because the process is not spelled out in writing does not make it any less rigorous.

Second, Boralex LP's excellent record of providing dependably safe and reliable utility service since it acquired the Ocean Falls Facilities speaks for itself and validates that its capital expenditure decision making processes are appropriate and more than adequate for the scope of the Ocean Falls Facilities. Boralex LP has without exception successfully executed capital projects at Ocean Falls when and as needed to maintain service reliability.

[15] Boralex LP response to BCUC IR 39.1 (Exhibit B-13).

Third, Boralex LP rejects BC Hydro's claim that there is insufficient information available to verify the need for and cost effectiveness of the proposed capital projects. As further discussed below, Boralex LP has provided extensive evidence justifying the need for and timing of each of the capital projects during the test period, and in addition has provided information identifying and discussing other potential capital projects extending well beyond the test period.

Fourth, Boralex LP rejects BC Hydro's contention that the absence of written longer-term formal planning documents has any bearing upon "whether Boralex LP has the resources to complete the projects on time and on budget as forecast in the revenue requirements".

Evidence Supporting Proposed Capital Projects

24. **Argument:** BC Hydro claims that Boralex LP's justification for the seven capital projects "is largely the same in each case: the equipment is old and therefore in need of rehabilitation or replacement" (page 32, paragraph 101).

Response: Any fair and reasonable review of the record regarding the planned capital projects shows that Boralex LP did not merely say that the equipment in question is old and on this basis alone must be rehabilitated or replaced. To the contrary, Boralex LP has provided extensive justification of the need and timing for each of the planned capital projects in the Application itself,[16] in Boralex LP's responses to the requests for supplemental information at the commencement of the regulatory review process,[17] and in Boralex LP's responses to the two rounds of information requests from the Commission and interveners.[18] Further justification and support for the projects is set out in the third party engineering reports regarding the dam, the penstock and the powerhouse and substation electrical facilities.[19]

G2 and G3 Turbine Rehabilitation Project

25. **Argument**: BC Hydro says that it "believes that Boralex LP is able to quantify the risks [of maintaining three generating units rather than four] but has not done so" (page 34, paragraph 109) and takes issue with the fact that Boralex LP has not produced "analysis demonstrating that maintaining all four turbines is the

[16] Application paragraphs 82 to 122 (Exhibit B-1).

[17] Exhibit B-4.

[18] Including Boralex LP's responses to BCUC IRs 7.1 to 7.17, 8.4 and 8.5 (Exhibits B-6 and B-9) and 37.1 to 40.3 (Exhibit B-13), BC Hydro IRs 2.1 to 8.1.1 (Exhibit B-7) and 22.1 to 26.4 (Exhibit B-15).

[19] Exhibits B-4-1 and B-12.

most cost-effective alternative" (page 34, paragraph 110). Further, BC Hydro claims that there is little value in maintaining both of the two smaller generating units since most of the other 25 kV interconnection facilities and equipment between Ocean Falls and the Bella Bella NIA are non-redundant (page 34, paragraph 111).

Response: BC Hydro's belief that Boralex LP is able to meaningfully quantify the expected future performance and the resulting impact on service reliability of four century-old generating units is incorrect. Boralex LP could possibly conduct probabilistic analysis to compare the theoretical cost-effectiveness of the three and four unit alternatives, but doing so would require Boralex LP to make assumptions about numerous factors, including unknowable parameters such as when irreparable failure of one or more of these 100 year old units or major subcomponents might occur.

Boralex LP does not agree that the results of such theoretical "analysis" should outweigh 35 years of practical experience operating the Ocean Falls Facilities, during which period Boralex LP and its predecessor sold power to BC Hydro under the terms of a fixed rate EPA and would have had a strong financial motivation to minimize operating and capital costs to maximize profits, yet determined that the economically optimal Ocean Falls configuration was to maintain all four units in operating condition. It should also be recognized that the generating equipment has aged 35 years since the prevailing operating practice was originally employed – the equipment is now over a century old and the risk mitigation benefits of maintaining all four units in operating condition has increased rather than decreased.

The fact that the Ocean Falls to Bella Bella interconnection facilities are not redundant has no bearing on the value of maintaining both of the two smaller generating units. It would be impractically costly to duplicate the transmission line, but most transmission line outages can be restored by replacing failed overhead components (or by swapping in spare undersea conductors, as has already been done once at the Johnson Channel crossing), as long as the overall condition of the line is diligently maintained. The non-redundant transformers and breakers comprising the 25 kV terminals at Ocean Falls and Shearwater are at end of service life and scheduled for replacement, despite being half as old as the Ocean Falls generators.

The cost effectiveness of maintaining three rather than four units is in any case a hypothetical consideration for the purpose of the present application, since only three of the units (G2, G3 and G4) are undergoing or are scheduled to undergo rehabilitation during the test period. Rehabilitation work on the smaller G1 unit is not scheduled until 2023 and therefore the costs associated with this work are not included in the test period revenue requirement, although the reliability and

operational flexibility benefits of having this unit available for service will continue.

Boralex LP notes that BCOAPO has no issue with this project.

Powerhouse Breakers Project

26. **Argument:** BC Hydro is supportive of Boralex LP undertaking the powerhouse breaker project, acknowledging that among other issues, the breakers are old, pose environmental risks and represent obsolete technology which has long since been improved upon, but wonders if the project is as urgent as described, and is also concerned that Boralex LP may choose to defer replacement beyond the test period. BC Hydro also states that Boralex LP has not provided evidence assessing the risk that the breakers will fail or that other low-cost alternatives have been investigated, although BC Hydro does not identify any low-cost alternatives.

Response: BC Hydro agrees with Boralex LP that the powerhouse breakers are old, obsolete and pose environmental risk (page 35, paragraph 116), but believes that additional theoretical analysis should be done to demonstrate their probability of failure, and that Boralex LP should investigate some other unidentified alternative solution rather than replacing old, obsolete equipment for which spare parts cannot now be obtained.

The Gap Analysis conducted by Prime Engineering, which assessed compliance of the Ocean Falls Facilities with prevailing BC Hydro interconnection standards, recommended replacement of the unit breakers due to their age, the inability to confirm their service duty parameters and the resulting risk posed to system operations.[20] Boralex LP is not aware of any low-cost alternatives to breaker replacement, a position supported by the Prime Engineering report findings and the professional judgment of Boralex LP's engineering and operating staff. Additional risk analysis and engineering studies would not be cost effective, nor result in a materially different outcome.

Boralex LP notes that BCOAPO has no issue with this project.

Penstock 2 Rehabilitation

27. **Argument**: BC Hydro asserts that Boralex LP has not conducted a trade-off analysis nor adequately investigated alternatives to the proposed Penstock 2 replacement project. BC Hydro mentions alternatives such as repurposing Penstocks 1(a) and 1(b) or constructing a new separate penstock. BC Hydro

[20] Prime Engineering Gap Analysis, page 9 (Exhibit B-4-1).

then states that since Boralex LP acquired the Ocean Falls facilities it has investigated a range of alternative solutions. BC Hydro takes issue with Boralex LP's reliance on BBA Engineering's independent professional recommendations, which are based upon detailed penstock condition assessments and provide failure analysis and cost comparison of different mitigation alternatives. BC Hydro suggests that Boralex LP should have conducted its own separate analysis, and then proposes that Boralex LP should be required to seek approval of the project through a CPCN process.

Response: As acknowledged by BC Hydro, Boralex LP has investigated multiple project alternatives over the past decade and after deliberation, comparison of costs and benefits, and collaborative discussions with its third party engineering consultant has developed a project scope and staging that will impose the least economic and service interruption impacts upon its customers, minimize the risk of extended schedule overruns during any project year (and the resulting risk of outages extending into winter peak load periods), and will ultimately deliver a safe, reliable, seismically stable penstock able to supply water to the Ocean Falls generating facilities for many decades.

Boralex LP explained why it did not conduct a formal trade-off analysis in its response to BC Hydro IR 26.3.[21] Regarding the specific alternatives cited by BC Hydro, Boralex LP described that it would be cost prohibitive to install a separate penstock in its response to BC Hydro IR 3.7 and explained why repurposing Penstocks 1(a) and 1(b) is not a feasible solution in its response to BC Hydro IR 26.4.[22]

The BBA Engineering reports filed by Boralex LP demonstrate that Boralex LP has actively evaluated different project configurations collaboratively with its engineering consultants. While BC Hydro takes issue with Boralex LP's reliance upon BBA's findings, Boralex LP notes that BBA Engineering is widely acknowledged as a leading engineering firm in this field, and that preparing the reports involved active collaboration and exchange between BBA Engineering and Boralex LP over a period of several years, and included detailed internal and external penstock condition assessments, extensive failure analysis and itemized cost comparison of different mitigation alternatives. BC Hydro does not explain what benefits would accrue from Boralex LP conducting a separate analysis; doing more analysis toward some indeterminate and unspecified alternative outcome would only delay the needed rehabilitation work and add to project costs.

The project as now proposed will follow the same staged execution approach

[21] Exhibit B-15.

[22] Exhibits B-7 and B-15, respectively.

indicated in the original Application but will replace rather than repair the existing penstock in sections. The revised project scope was selected after Boralex LP's review of a recent rehabilitation project involving a penstock of similar construction and vintage which yielded unsatisfactory results, and ultimately required replacement of the penstock.[23] Project urgency (as detailed in the most recent BBA Engineering report) does not allow latitude for ongoing analysis without conclusion.

BC Hydro's recommendation that Boralex LP seek approval of the Penstock 2 rehabilitation project through the CPCN process flies in the face of BC Hydro's earlier submission that the regulatory costs of the present application "seem high for a small utility", as there would certainly be additional regulatory costs incurred by undertaking a separate CPCN process. The Penstock 2 rehabilitation project has already been fully justified by Boralex LP. The penstock urgently needs mitigation and indeed the first stage of the project would have been completed by now but for the delay caused by COVID-19.

Boralex LP notes that BCOAPO has no issue with this project.

Share of Revenues from Industrial Customers

28. **Argument:** BC Hydro argues that "there is uncertainty as to whether Ocean Falls Blockchain or MOWI Canada West will expand their operations, which would increase their electrical purchases from and revenues to Boralex LP" (page 40, paragraph 136), and therefore a deferral account should be established so that BC Hydro can "benefit from any increase in revenues from Ocean Falls Blockchain or other industrial customers not forecast in the Application" (pages 3 and 4).

Response: The real uncertainty is not whether the two industrial customers will expand their operations and increase their electric loads over the test period, but whether for the reasons set out in paragraphs 72 to 76 of Boralex LP's final argument the forecast revenue from these two customers will actually be realized. Since all the forecast revenue has been credited to the revenue requirement to reduce BC Hydro's rates over the test period, Boralex LP is entirely at risk if this revenue does not materialize.

BC Hydro's proposed deferral account is clearly unreasonable and inappropriate. It would provide Boralex LP with no incentive to try to grow its industrial load and revenue, but leave it exposed to all of the downside risks associated with a reduction in this revenue, or worse, the entire loss of one of these customers.

[23] Boralex LP response to BCUC IR 7.1 (Exhibit B-6) and updated response to BCUC IR 7.8 (Exhibit B9).

While Boralex LP maintains that it is best suited to manage the risks of its industrial customers – provided it is incentivized to do so – any consideration given by the Commission to BC Hydro's suggested deferral account should be symmetrical in nature, such that it would account for both positive and negative variances between the forecast and actual industrial customer revenue.

BCUC Supplementary Questions

29. With regard to the questions posed by the Commission in its letter dated June 5, 2020[24], BC Hydro confirms that it does not object to the methodology used by Boralex LP to allocate costs and setting rates for its service to BC Hydro (i.e., calculating a revenue requirement and rates for service to BC Hydro by forecasting Boralex LP's gross revenue requirement and deducting the forecast revenue from its retail and industrial customers in Ocean Falls) (page 42, paragraph 140). BC Hydro states that it "considers that the methodology proposed by Boralex LP is just and reasonable in the circumstances" (page 42, paragraph 141).

30. In paragraph 143 of its final argument BC Hydro reiterates its submission that any additional revenue Boralex LP receives from its industrial customers that is not forecasted be recorded in a deferral account for the benefit of BC Hydro. Boralex LP reiterates its submission above regarding the unreasonable and asymmetrical nature of this submission by BC Hydro.

Rate Structure and Terms and Conditions of Service

31. **Argument:** BC Hydro supports approval of the two-tier energy change rate structure as proposed by Boralex LP in the Application. This includes (i) the 13.1 GWh threshold between Tier 1 and Tier 2, (ii) the setting of the Tier 2 rate at $50/MWh initially and escalating at 2% per annum, (iii) the setting of the Tier 1 rate to recover the net revenue requirement, and (iv) the setting of Tier 1 rates on a levelized basis with 2% escalation applied per year to the initial approved rate (page 43, paragraph 146).

Response: It is not surprising that BC Hydro supports the applied-for rate structure. As explained in Boralex LP's final argument, the rate structure is very beneficial to BC Hydro and creates a very strong incentive for Boralex LP to continue to provide highly reliable service because Boralex LP, not BC Hydro, will be directly responsible for any lost revenue from BC Hydro and its other customers if it fails or is unable to provide service.

[24] Exhibit A-12.

But of course the reasonable corollary of this is that in order to continue to provide safe, secure reliable service, Boralex LP must be permitted to recover its cost of providing service, including its forecast O&M costs and capital costs as set out in the Application.

32. **Argument:** BC Hydro also supports the proposed terms and conditions for Boralex LP's service to BC Hydro set out in Appendix B to the Application, subject to the revisions set out in paragraph 150 of BC Hydro's final argument.

Response: Boralex LP does not object to BC Hydro's proposed removal of the words "take and" in Section 4 of the terms and conditions. As BC Hydro notes, this is not a "take and pay" (or "take or pay") service; BC Hydro is only required to pay for the electricity that it actually requires and that Boralex LP actually delivers.

However, with regard to Section 10, this section deals with the lease by BC Hydro to Boralex LP of the lands on which Boralex LP's Shearwater substation is located. While Boralex LP has no objection to negotiating a simple interconnection agreement with BC Hydro that does not impose additional costs on Boralex LP that are not reflected in the Application, there is no need to tie the continuation of the lease to the interconnection agreement. The lease should simply remain in effect so long as Boralex LP supplies electricity to BC Hydro.

B. BCOAPO ARGUMENT

33. Following is Boralex LP's reply to the submissions of BCOAPO.

Opening Rate Base – December 31, 2018

34. **Argument:** BCOAPO has no submissions with respect to the December 31, 2008 rate base value used by Boralex LP as the starting point for the determination of the rate base over the test period (i.e., the Commission's accepted valuation as described in paragraphs 71 to 74 of the Application), but says it has two concerns regarding the derivation of the rate base as of December 31, 2018, namely:

a) BCOAPO submits that any remaining book value associated with three facilities that were replaced between 2009 and 2018 (the original powerhouse crane, Inlet Gates #1 and #2, and the Link River bridge) should be removed from the determination of the 2018 closing rate base value (page 10); and

b) BCOAPO submits that for the period 2009 to 2018 Boralex LP should use the same depreciation rates that were used in its audited financial statement over this period, and not the rates set out in Table 7 of the Application, and recalculate the December 31, 2018 rate base values on this basis (page 13).

Response: With regard to BCOAPO's first issue (i) the powerhouse crane would have had a nominal remaining book value at the time of its replacement in 2012/2013 because, as shown in Table 5 of the Application, the value of the entire Powerhouse of which the crane was a part was only $500,000 in total, (ii) as shown in Tables 4 and 5 of the Application, the two original Inlet Gates #1 and #2 were (like the dam, spillway and trailrace) assigned zero value in the Commission's accepted valuation when Boralex LP acquired the facilities from CCPC and, accordingly, had no book value when they were replaced between 2014 and 2018, and (iii) the original Link River bridge was owned by the Province of B.C. prior to its replacement by Boralex LP and, accordingly, there was no book value recorded by Boralex LP for the original bridge when it was replaced by Boralex LP in 2011.

With regard to BCOAPO's second issue, BCOAPO submits that "as Boralex LP was not subject to rate regulation for the 2009-2018 period, there is no rationale for applying any depreciation rates other than those used in Boralex LP's audited financial statements for the years preceding the proposed test years" (page 12). This is not correct for a number of reasons:

First, when the Commission approved the acquisition of the Ocean Falls Facilities by Boralex LP from CCPC it did so on the basis that rates would be set based on the historical depreciated cost of the assets at the time of acquisition in the event that a future customer complaint could not be resolved and the Commission decides to set cost-based rates. Accordingly, based on information provided by CCPC the Commission prepared a tabulation of the assets with a total value as at December 31, 2008 of $7,242,500. This had the effect of ensuring that Boralex LP's rate base (and rates derived therefrom) would not include any goodwill or acquisition premium paid by Boralex LP over and above this initial value in the event the Commission decided to fix cost-based rates in the future. It would not be consistent with the Commission's intent to use this initial value to fix cost-based rates in the future, to then use depreciation rates commencing in 2008 other than those appropriate for a rate regulated entity.

Second, the depreciation rates set out in Table 7 of the Application do reflect depreciation lives and rates appropriate for a rate regulated entity. Also, the depreciation lives set out in Table 7 reflect an estimate of the depreciation life of each asset category as of 2009 when Boralex LP acquired the facilities from CCPC, not as of July 1, 2019 at the beginning of the test period. Accordingly,

using the higher depreciation rates used in Boralex LP's audited financial statements over the 2009-2018 period for ratemaking purposes as proposed by BCOAPO would have the effect of artificially shortening the depreciation lives shown in Table 7 and result in higher depreciation rates during the test period than are warranted by the estimated life of each asset category set out in Table 7.

Third, Boralex LP's balance sheet asset valuation shown on the audited financial statements includes a significant amount of goodwill that was not broken out separately in the financial statements for the 2009-2018 period. Accordingly, the depreciation rates used in the audited financial statements were effectively blended rates applied both to the physical assets and goodwill. Had Boralex LP been subject to rate regulation at the outset, the goodwill would have been broken out separately and amortized over a different period than the estimated life for each physical asset category set out in Table 7. Accordingly, the depreciation rates used in the financial statements during this period are not comparable to the appropriate depreciation rates applicable to the physical assets under cost of service rate regulation. Expressed another way, given that the goodwill component is itself not included in the initial rate base value (i.e., it is not part of the $7,242,500), it would not be appropriate to use depreciation rates to calculate the rate base value as of December 31, 2018 under cost of service regulation that reflect amortization of the goodwill component (as was done in the financial statements for the 2009-2018 period).

Boralex LP notes that BC Hydro has raised no issues with regard to the derivation of the rate base as of December 31, 2018 as set out in the Application.

35. **Argument:** On pages 12 and 13 of its final argument BCOAPO states that a "related concern" is that Boralex LP has applied the depreciation rates set out in Table 7 to "the initial 2008 asset values which are based on net book value", that the depreciation rates "are based on average service life or useful life which takes into account the entire expected life of the relevant assets", and therefore "it is not appropriate to apply depreciation rates defined in this manner to the remaining net book value of an asset, as Boralex LP has done in the case of the initial 2008 asset values" because "if the depreciation is to be applied to the net book value, then it would have to be calculated based on the average <u>remaining</u> life of the associated assets and the resulting rate would be higher."

Response: As noted above, the depreciation lives set out in Table 7 of the Application reflect an estimate of the depreciation life of each asset category as of 2009 when Boralex LP acquired the Ocean Falls Facilities from CCPC. Accordingly, the rates used in Table 7 do reflect the expected life of the relevant assets from the time they were acquired by Boralex LP, and not some shorter

"remaining life" as suggested by BCOAPO.

Capital Additions (2019-2022)

36. Based on its review of the evidence and having regard for age of the assets, their current condition and the resulting risks posed to both safety and reliability, BCOAPO has no issues with the Penstock 2 rehabilitation project, the turbine rehabilitation project, the powerhouse electrical system upgrades, the switchyard rehabilitation project, or the Shearwater substation rehabilitation project.

Specifically with regard to the Penstock 2 rehabilitation project, in assessing the reasonableness of the project BCOAPO indicates that it has considered that (i) Penstock 2 is roughly 100 years old, (ii) while regular inspections have been carried out over the last 10 years since Boralex LP's acquisition, no condition-based maintenance has been performed, (iii) Boralex LP sought and considered independent advice on the need for the project, (iv) Boralex LP considered a number of alternatives, and (v) staging the project as proposed by Boralex LP has several economic and operational benefits compared to the alternative method of taking an extended six-month outage in a single year (page 17).

However, BCOAPO does submit that adjustments should be made to the forecast cost of the transmission line capital maintenance costs and the General Plant expenditures.

Transmission Line

37. **Argument:** With regard to the 45 km transmission line between Ocean Falls and Shearwater, BCOAPO states that there are no third party asset condition reports regarding the transmission line, but acknowledges that Boralex LP has provided a schedule of inspections and repairs completed from 2011 to 2019. BCOAPO then argues that the historical pace of replacements and repairs to the transmission line is the appropriate benchmark to establish spending on this facility over the test period, and proposes imposition of a $50,000 spending cap in each of 2021 and 2022 (page 23).

Response: Boralex LP's proposed capital work on the transmission line is not based on the historical rate of capital maintenance spending, but is rather based on the actual condition of the facilities. Boralex LP has prudently and diligently monitored, inspected and maintained the transmission line, which is critical to its ability to continue to provide a high level of service reliability to the Bella Bella NIA. The proposed spending is based on the estimated cost of necessary repairs, as indicated by the actual facility condition assessed by Boralex LP and its line contractors.

BCOAPO's suggestion that production of a third party condition assessment report should be required to justify necessary line repairs is a standard that Boralex LP doubts has been imposed upon other utilities in B.C. BC Hydro has not suggested that such a third party report is required for the Ocean Falls transmission line. Requiring Boralex LP to produce a formal third party condition assessment report to justify line maintenance spending would, in Boralex LP's submission, only add to the project costs without creating additional value. Furthermore, capping maintenance spending below the required level will increase the likelihood of transmission line structure failures, which are already the most frequent cause of service interruptions between Ocean Falls and the Bella Bella NIA. Transmission line failures result in Boralex LP not being able to supply BC Hydro, which imposes additional costs on BC Hydro relating to its need to run its back-up diesel generation at Shearwater to meet the load requirements of the Bella Bella NIA.

General Plant

38. **Argument**: BCOAPO takes issue with the 2019 cost of $127,000 for the staff living quarters upgrade shown in the Application Update (as compared to the $75,000 cost for this work shown the initial Application), and also that $98,000 of the actual project cost was incurred in Q1/Q2 2019 with the remaining $29,000 incurred in Q3/Q4 2019, whereas the entire cost was projected to be capitalized in Q3/Q4 2019 in the initial Application. BCOAPO is also notes that the capital additions associated with vehicles, machinery and equipment have increased from $289,000 during the period 2009 to 2018 to $563,000 from 2020 to 2022. BCOAPO then proposes that General Plant spending for the test period be capped at the $680,000 as identified in the initial Application (page 24).

Response: Boralex LP acknowledges the change in the actual cost and timing of the living quarter upgrades between the initial Application and the Application Update. As identified in the initial Application, asbestos was discovered when the upgrade project commenced, and the actual cost impact of the required asbestos abatement work methods was greater than was estimated at the time the initial Application was being prepared. The situation was exacerbated by the project invoicing and accounting lag with respect to the mid-year 2019 start of the test period; the 2019 accounts were not available at the time the filing was prepared and the project cost discrepancies were not able to be reconciled until the 2019 accounts were finalized. Although the costs of the living quarter upgrades were higher than originally estimated, the actual costs were prudently incurred and there is no net impact on rates, whether the expenditures took place in 2019 Q1/Q2 or 2019 Q3/Q4**.**

With respect to the increased spending on vehicles, machinery and equipment in the test period, the initial Application had already allowed for deferral of any planned General Plant expenditures which could be reasonably deferred outside of the test period without posing unacceptable safety or operational risks. All remaining General Plant expenditures as identified in the Application Update are necessary and cannot be deferred beyond the test period without creating unacceptable risks to worker safety and operational and project execution effectiveness.[25] The crew boat is unseaworthy, the trucks are becoming unserviceable, and the planned heavy equipment acquisitions will be critical to enable efficient completion of the upcoming project work schedule (zoom boom) and to keep the forebay debris-free (log loader)**.**

Depreciation

39. **Argument:** BCOAPO states that "it considers the depreciation rates proposed by Boralex to be less than ideal, but reasonable for the purposes of this Application. Given the cost, BCOAPO does not see a full deprecation study warranted at this time." BCOAPO also refers back to the earlier issues raised by it regarding the application of the depreciation rates in determining the 2018 closing rate base (page 26), which Boralex LP has addressed above.

Response: Boralex LP submits that it has adopted a reasonable approach to establishing depreciation rates for the Ocean Falls Facilities, particularly in light of the very small size of the Ocean Falls asset base. Boralex LP notes that BC Hydro has raised no issues with regard to the proposed deprecation rates or with regard to the application of the rates in determining the 2018 closing rate base value.

Working Capital

40. BCOAPO's submissions and recommendation regarding working capital are similar to those of BC Hydro. Accordingly, in reply to BCOAPO's submissions on working capital, Boralex LP refers to its submissions above in reply to BC Hydro on this matter. Boralex LP notes, however, that BCOAPO agrees with Boralex LP that the working capital requirement determined using the 45-day rule should use Boralex LP's average forecast O&M requirements over the entire test period (not 2019 alone as suggested by BC Hydro in paragraph 46 of its final argument).

[25] Boralex LP response to BC Hydro IR 3.2 (Exhibit B-7).

Rate Base Determination

41. **Argument:** BCOAPO submits that Boralex LP should be directed to calculate the rate base using the average of the opening and closing net book value of the assets in-service during the year plus the allowance for working capital (page 29).

Response: Boralex LP has calculated the rate base for each year based on the closing net book value of the assets in-service for the year (excluding capital additions during the year), plus the allowance for working capital and 50% of the amount of the capital additions during the year (i.e., capital additions are assumed to go into service mid-year) less depreciation expense on such amount.[26]

Under the methodology proposed by BCOAPO, the rate base would be calculated based on the average of the opening and closing net book value of the assets in-service during the year (i.e., including 100% of capital additions during the year), plus the allowance for working capital. Boralex LP provided a revised Table 3 (based on the Application Update) using BCOAPO's proposed methodology in its response to BCOAPO IR 39.1, which shows that under BCOAPO's proposed methodology the forecast revenue requirement would be slightly higher than under the methodology used by Boralex LP.[27] While Boralex LP does not object to BCOAPO's proposed methodology, Boralex LP believes that its methodology for calculating the rate base is reasonable.

Capital Structure and Rate of Return on Rate Base

42. **Argument:** BCOAPO "acknowledges that the risks faced by Boralex LP are higher than FEI's for many of the risk factors in the Commission's risk matrix" (page 30), but submits that the risks faced by Boralex LP are no greater than those faced by the TES Utilities and therefore Boralex LP's common equity ratio and equity risk premium should be no greater that 42.5% and 100 basis points respectively (i.e., a 9.75% ROE) (page 32).

Response: Boralex LP disagrees that it faces lower overall risks than the TES Utilities regulated by the Commission. In this regard, Boralex LP adopts and relies on its submissions above concerning BC Hydro's argument regarding the TES Utilities.

While some of the individual risks faced by some of the TES Utilities (such as

[26] Boralex LP's response to BCOAPO IR 11.1 (Exhibit B-8).

[27] Exhibit B-16.

fuel availability and cost risk and, perhaps in some instances, technology risk) may be marginally higher, Boralex LP submits that it faces higher risks with respect to a number of risk factors that have the potential to have a much greater adverse impact on Boralex LP's forecast costs and revenues. With regard to costs, the remote and isolated location of the Ocean Falls Facilities and the extremely harsh physical environment in this area of the Province exposes Boralex LP to inherently higher operating risks and much higher operating and construction cost risks. Higher operating risks also translates into revenue risks for Boralex LP, compounding the risk, because under the energy charge rate structures with BC Hydro and its industrial customers, Boralex LP is exposed to revenue shortfalls if it is unable to provide service due to system outages. Furthermore, Boralex LP has no certainty that it will be able to retain its two industrial customers. As noted above, this revenue accounts for about 65% of Boralex LP's average annual return on equity over the test period.

Debt Interest Rate

43. **Argument:** BCOAPO agrees with Boralex LP that since Boralex LP obtained a quote on the cost of debt from a relevant lender (i.e., Boralex LP's existing lender) this "precludes the need to rely on a deemed stand-alone rating" as discussed in the Commission's Stage 1 and Stage 2 Generic Cost of Capital Decisions (page 33), but that Boralex LP's approach differs in that the quote from Boralex LP's lender is based on a 30 year term whereas the Stage 2 Decision specifically calls for the use of a 10 year GoC bond yield in determining the deemed debt rate. BCOAPO submits that, accounting for the difference between 10-year and 30-year GoC rates and using the most recent 12 month average of the 10-year GoC rate, the appropriate debt rate for Boralex LP should be no more than 5.3% (page 34).

Response: Boralex LP agrees that there is a relatively small difference between 10-year and 30-year GOC rates, but maintains that a rate of 5.5% is reasonable having regard for both Boralex LP's current actual cost of debt of 6.55% and the advice of its lender that Boralex LP's cost of new debt would be 5.3%.

Income Tax Expense and Property and School Taxes

44. BCOAPO has no submissions with respect to Boralex LP's proposed income tax expense and proposed property and school tax expenses for the test period.

Water Rentals

45. BCOAPO notes that water rental expenses for the test period were not revised in the Application Update notwithstanding the one year delay in the commencement of the Penstock 2 rehabilitation project, and invited Boralex LP to address this in its reply submissions (page 35).

Boralex LP notes that the water rental charge consists of a fixed capacity charge and a variable energy charge. Because the Ocean Falls Facilities have a low capacity factor, the fixed charge component is larger than the variable charge component. Accordingly, the increase in the water rental cost in 2020 resulting from a one year deferral of the Penstock 2 rehabilitation project is very small (approximately $3,000) and therefore not material to Boralex LP's overall cost of service.

O&M Expenses – Employee Costs

46. **Argument:** With regard to employee costs, BCOAPO indicates that its only issue is with respect to the increase in salaries and benefits between 2019 and 2020 (and the implication this may have for the forecast costs for 2021 and 2022). BCOAPO submits that absent a satisfactory explanation for why salaries and benefits increase from $550,000 in 2019 to $606,000 in 2020, salary and benefit costs in 2020 and subsequent years should be reduced by $30,000 (pages 36 and 37).

Response: As noted in Boralex LP's response to BCUC IR 45.2[28], the change in the cost of Salaries and Benefits between 2019 and 2020 is due to both increases in the base salaries (including cost of living adjustment) and an increase in benefit costs. Boralex LP submits that the forecast cost of Salaries and Benefits of $606,000 in 2020 is reasonable and appropriate.

O&M Expenses – Corporate Services

47. **Argument:** BCOAPO raises two issues with regard to the cost of Corporate Services. First, in light of the one year delay in the Penstock rehabilitation project and other minor adjustments to capital spending set out in the Application Update, BCOAPO questions why no adjustment was made in the update for the allocation of either i) the engineering and environment segment costs, or ii) the overhead/corporate segment costs "to account for the lower level of activity in the capital program". BCOAPO submits that in the absence of an explanation why

[28] Exhibit B-13.

no adjustment was made, the overall test period spending in each of these segments should be reduced by 10% (page 39).

Second, BCOAPO argues that because the rates to Boralex LP's retail and industrial customers continue to be determined in accordance with Order G-26-10, some of the costs of Corporate Services should be allocated to and borne by Boralex LP:

> "In the past, when none of Boralex LP's rates were set on a cost-of-service basis, Boralex Inc. accepted as appropriate the recovery of an amount significantly less than a full "allocation" of Corporate Services costs (i.e., a small general fee for corporate services, approximately $35,000 per annum, and an allocation of certain engineering costs). In BCOAPO's view the BCUC should recognize that Boralex LP's rates are not fully regulated on a cost of service basis and determine the cost of Corporate Services to be allocated to Boralex LP accordingly." (pages 39 and 40)

On this basis, BCOAPO submits that the revenue requirement should include the forecast cost for the engineering and environment segment of Corporate Services, plus 70% of the remaining forecast cost of Corporate Services for each year of the test period. BCOAPO arrives at 70% based on BC Hydro's sales and demand as a proportion of total sales and demand (page 40).

Response: With regard to BCOAPO's first issue, Boralex LP notes that BCOAPO provides no basis for determining the suggested 10% reduction in the corporate services costs. Boralex LP submits that none of its engineering, environmental or overhead/corporate costs have been reduced, but to the contrary, operating and supervising the Ocean Falls Facilities has become more complex and costly because of the restrictions associated with COVID-19. The one year deferral of the commencement of the Penstock 2 rehabilitation project caused by COVID-19 has not materially reduced the workload of engineering, supervision and corporate services staff, as project-related activities have become more complicated and additional administration and project management costs incurred because of the need to reschedule planned work, equipment deliveries and contractor personnel deployments

With regard to BCOAPO's second issue, the first response is that Boralex Inc. did not in the past "accept as appropriate" the recovery of less than the full cost of providing corporate services to Boralex LP. Just like the rates that were payable by BC Hydro under the 1986 EPA, the rates payable by Boralex LP's retail and industrial customers during this period were (and still are) also fixed, so on a consolidated basis charging the full cost of corporate services to Boralex LP, when Boralex LP could not recover these costs under the 1986 EPA with BC Hydro, the regulated rates charged to the retail customers or the negotiated rates

paid by the industrial customers, would have had no net financial impact to Boralex Inc.

Second, 100% of the forecast revenue from Boralex LP's retail and industrial customers has been credited to the gross revenue requirement to reduce BC Hydro's rates. Accordingly, given that Boralex LP does not share in any of the forecast revenue from these other customers, it would not be fair, reasonable or appropriate to require Boralex LP to absorb any portion of the forecast cost of corporate services under BCOAPO's theory that some of these particular costs should be specifically allocated to these customers and borne by Boralex LP. Under BCOAPO's proposal, Boralex LP would have no incentive to service its industrial customers as it would effectively be passing through all the forecast industrial revenue to BC Hydro, but retaining a portion of corporate services costs thereby creating a loss.

Third, the cost of the services provided by Boralex Inc. to Boralex LP constitute the cost of services required by Boralex LP to carry on its utility business and operations in Ocean Falls, like all other required operating costs. While Boralex Inc. did not previously charge Boralex LP the full costs of providing the services, this does not change the fact that these are real costs for real services required by Boralex LP, regardless of whether they are provided by Boralex Inc., Boralex LP itself or some other service provider. Accordingly, all of these costs are properly part of Boralex LP's gross revenue requirement, like all other costs of providing service. Boralex LP notes that although the rates charged by Boralex LP to its non-BC Hydro customers are not being determined by the Commission in this proceeding, the gross revenue requirement is nevertheless recovered from all customers through the rates charged to those customers.

BC Hydro Load Forecast and Non-BC Hydro Revenue Forecast

48. **Argument:** BCOAPO has no submissions with respect to Boralex LP's load forecast for the Bella Bella NIA or with respect to Boralex LP's revenue forecast for its two industrial customers. With regard to Boralex LP's retail customers, BCOAPO submits that the revenue forecast for these customers is understated because the methodology employed by Boralex LP does not account for the fact that BC Hydro's rates (and therefore the rates for Boralex LP's retail customers) will increase annually over the test period. BCOAPO acknowledges that this impact is likely to be small given that the forecast revenues from these customers are less than $100,000 per year (page 43).

Response: Boralex LP does not agree that the revenue forecast for the retail customers is understated for the reasons cited by BCOAPO. The forecast is based on average historical revenue from these retail customers over the 2014 to

2018 period and an assumed 2% annual increase in that revenue over the test period. Accordingly, contrary to BCOAPO's contention, the base revenue forecast does account for increases in BC Hydro's rates over the 2014 to 2018 period because Boralex LP's retail customer rates are tied to BC Hydro's Zone II retail customer rates, including over this same prior period. Moreover, since the number of customers has been stable over the years, the 2% increase does account for an increase in the rates to these customers over the test period due to increases in the corresponding rates to BC Hydro's Zone II customers over the same period.

While BC Hydro's permanent rates effective April 1, 2019 will not be known until the Commission's decision on BC Hydro's F2020-F2021 RRA, as shown in Boralex LP's response to BCUC IR 54.2, if rather than using an assumed 2% increase in annual revenue from its retail customers Boralex LP used an assumed 6.85% general rate increase effective April 1, 2019, a 0.99% decrease effective April 1, 2019 and a 2% increase thereafter, the difference in total forecast revenue from these customers would be less than $5,000 per year.

BC Hydro Net Revenue Requirement

49. **Argument:** With regard to the first question the Commission invited parties to make submissions on in its June 5, 2020 letter, BCOAPO argues that "Boralex LP's conclusions that: i) the recovery of the Net Revenue Requirement from BC Hydro represents a fair, reasonable and appropriate allocation of costs and the methodology is beneficial to BC Hydro are based on a flawed methodology for determining cost responsibility" because a Fully Allocated Cost of Service (FACOS) study using embedded costs, and not marginal/incremental costs, is the appropriate tool to assign cost responsibility to different customer classes (page 45). BCOAPO submits that "the methodology used by Boralex LP does not result in a fair allocation of costs that is just and reasonable", and that this creates a "tension" between i) the Commission's obligation under Sections 59 and 60 of the *Utilities Commission Act* (UCA) to fix the rates for Boralex LP's service to BC Hydro that will permit Boralex LP the opportunity to recover all of its costs of providing service, including the ROE approved by the Commission for Boralex LP, and ii) the Commission's statutory obligation under Section 59 of the UCA to not to fix rates for BC Hydro that are unjust and unreasonable (page 47).

With regard to the Commission's second question, BCOAPO suggests that there are two alternatives to resolving this "tension", namely, i) make all the rates charged by Boralex LP for electric service subject to the rate setting provisions of the UCA, or ii) re-define Boralex LP's "utility business" to include just the service provided to BC Hydro and establish appropriate methodologies for allocating costs incurred by Boralex LP to its utility and non-utility businesses. However,

BCOAPO acknowledges that neither of these alternatives can be applied in this proceeding.

Response: First, BC Hydro itself disagrees with BCOAPO. BC Hydro is of the view that the methodology for calculating the rates for Boralex LP's service to BC Hydro (i.e., using the net revenue requirement) is just and reasonable in the circumstances.

Second, BCOAPO conclusion that the methodology does not result "in a fair allocation of costs that is just and reasonable" is based on its disagreement with the results of the cost allocation that Boralex LP was asked to undertake in response to BCUC IR 32.2, and its belief that Boralex LP should have conducted a FACOS study that would have allocated costs based on customer class demands and energy usage. However, there is nothing in the UCA that mandates the cost allocation that BCOAPO prefers and Boralex LP believes that the response to BCUC IR 32.2 does show, for the reasons set out in that response, that BC Hydro is being allocated a fair and reasonable share of costs.

Third, conducting a FACOS study would not serve any ratemaking purpose because, regardless of the results of such a study, Boralex LP cannot adjust the rates charged to its retail and industrial customers because those rates are already regulated and determined in accordance with Order G-26-10 (as confirmed by Order G-143-19). Boralex LP believes that these rates are appropriate in any event because, in the case of its retail customers, the rates ensure that the retail customers in Ocean Falls pay the same rates as customers in the Bella Bella NIA for electricity from the same Ocean Falls Facilities, and, in the case of its industrial customers, the rates reflect the rates negotiated with the these customers, in accordance with the terms of the Commission's exemption order, when they made their decisions to develop facilities at Ocean Falls. BCOAPO acknowledges and agrees (on page 46) that if there was an economic justification to the rates charged to the industrial customers, then the rates could be justified on that basis. In Boralex LP's submission, the justification is clear; without the ability to negotiate industrial customer rates under the Commission's order the customers would not have established operations in Ocean Falls. Moreover, because Boralex LP does not incur any significant costs to serve these customers and would not avoid any costs other than some minor distribution costs if they were not customers,[29] the revenue that Boralex LP is able to generate from the sale of electricity to these customers makes a significant net positive contribution to Boralex LP's cost of providing service and enables Boralex LP to reduce its rates for service to BC Hydro.

Fourth, implicit in BCOAPO's submissions regarding cost allocations is that the

[29] Boralex LP's responses to BCUC IR 2.3.2 (Exhibit B-6) and Zone IB Ratepayers Group IR 6.1 (Exhibit B-17).

rates charged by Boralex LP to its retail and industrial customers cannot be just and reasonable, even though these rates have been determined in accordance with the Commission's exemption order. In Boralex LP's submission, the Commission would not have made an order establishing the basis on which the rates for Boralex LP's retail and industrial customers were to be determined if it believed that this would result in Boralex LP charging rates to these customers that were not just and reasonable.

Fifth, there are many instances where the Commission has determined that rates for all customer classes are just and reasonable even though the rates for some customers are negotiated or determined on some other basis that does not involve a FACOS study. PNG, for example, has had negotiated rates with industrial customers that were found to be just and reasonable in the circumstances and the Commission held that the revenue deficiency resulting from the negotiated rates should be recovered from PNG's other customers.[30] This allocation of the revenue deficiency did not make PNG's rates to its remaining customer unjust or unreasonable under the UCA. Similarly, in the case involving Centra Vancouver Island (*Terasen Gas*) discussed in paragraphs 59 and 60 of Boralex LP's final argument, the Commission directed that a significant portion of the accumulated revenue deficiency from Centra's residential customers on Vancouver Island should be recovered in Centra's transmission rates charged to BC Hydro even though BC Hydro made no use of the distribution facilities, and this decision was upheld by the Court of Appeal for British Columbia. This allocation of the residential customer revenue deficiency to BC Hydro did not make Centra's rates to either BC Hydro or its other customers unjust or unreasonable contrary to Section 59 of the UCA. Also, to Boralex LP's knowledge even BC Hydro's rates for its service to customers in its non-integrated areas are not based on a FACOS study. This does not mean that these non-integrated area rates or the rates to BC Hydro's remaining customers elsewhere in the Province are unjust or unreasonable.

Finally, the obligation on the Commission under Sections 59 and 60 of the UCA to fix rates that will permit Boralex LP the opportunity to recover all of its reasonable and prudent costs, including the Commission's allowed ROE, is in the words of Mr. Justice Locke in *B.C. Electric*, "absolute". Just like in the situation in *Terasen Gas,* if the rates for Boralex LP's service to BC Hydro are not based on Boralex LP's gross revenue requirement less the forecast revenue from its retail and industrial customers, Boralex LP will not be able to recover its costs of providing service, including the ROE approved by the Commission in this proceeding, contrary to Sections 59 and 60.

Accordingly, the answer to the Commission's first question is that the

[30] Boralex LP response to BCUC IR 43.1 (Exhibit B-13).

methodology is just and reasonable. Therefore there is no "tension" to be resolved and it is unnecessary to answer the Commission's second question.

BC Hydro Rate Structure

50. **Argument:** BCOAPO has no objections to the methodology used by Boralex LP to determine the rates for Boralex LP's service to BC Hydro. However, BCOAPO does raise the question of how to address any differences between the revenue collected from BC Hydro under the interim and final or permanent rates approved by the Commission (pages 48 and 49).

Response: This is not an issue that BC Hydro addressed in its final argument and Boralex LP does not believe that implementing the Commission's permanent rate order should be controversial. Order G-143-19 dated June 27, 2019 approved interim rates effective July 1, 2019 equal to that of the existing EPA rates for Boralex LP's service to BC Hydro. Order G-265-19 dated October 31, 2019 confirmed that these interim rates will remain in place until permanent rates are established and that "any difference between the interim and permanent rates will be refundable or recoverable with interest calculated at the average prime rate of Boralex LP's principal bank for its most recent year".

Accordingly, following the Commission's permanent rate order Boralex LP will calculate the difference between BC Hydro's electricity bills from July 1, 2019 using the interim and permanent rates and the difference will then either be refunded to or recovered from BC Hydro, with interest. Boralex LP would propose to refund or recover the difference in equal installments through a rate rider to BC Hydro's monthly bills for the balance of the test period. BC Hydro should have no difficulty verifying and confirming Boralex LP's calculation and the rate rider amount.

C. ZONE IB RATEPAYERS GROUP ARGUMENT

51. The Zone IB Ratepayers Group has simply adopted some of the positions already advanced by BC Hydro in its final argument. Boralex LP has responded to most of these submissions above in its reply to BC Hydro's argument and will not repeat them here.

52. However, as a general observation Boralex LP believes that the communities in the Bella Bella NIA have a clear interest in ensuring that Boralex LP is able to continue to provide highly reliable and secure service to BC Hydro with clean and renewable electricity from the Ocean Falls Facilities. Accordingly, it is not apparent to Boralex LP why the Zone IB Ratepayers Group would support BC Hydro's recommended arbitrary 28% annual reduction in Boralex LP's O&M

costs as set out in paragraph 9 of its final argument, or BC Hydro's submissions regarding the need for and timing of Boralex LP's proposed capital projects (in particular with regard the G1 and G2 generating units and the Penstock 2 rehabilitation project) as set out in paragraphs 11 to 14 of its final argument.

53. With regard to the planned capital projects, it is Boralex LP's evidence that all of these projects are essential to maintain safe and reliable operation of the Ocean Falls Facilities and that Boralex LP has deferred beyond the test period project work that it believes can reasonably be delayed without materially impacting safety or operational reliability.[31] Safe, secure and reliable clean electricity from Boralex LP is important because it means that BC Hydro does not need to run its expensive and environmentally undesirable diesel generating station at Shearwater. This allows BC Hydro to defer or avoid major capital upgrades of the diesel generating station, it significantly reduces the risks associated with transporting diesel fuel by barge on the west coast to Shearwater and storing it there, it prevents imposing continuous diesel exhaust emissions and noise on the local communities, and it significantly reduces the amount of greenhouse gas and other emissions associated with diesel generation.

54. With regard to any concerns that the Zone IB Ratepayers Group may have about Boralex LP's O&M costs, the forecast costs are both reasonable and necessary to enable Boralex LP to continue to continue to provide safe, secure and reliable service over the test period, which means that BC Hydro does not need to operate its diesel generating station. BC Hydro did not file evidence in this proceeding so Boralex LP was unable to pose information requests to BC Hydro regarding the current condition and the cost of owning, upgrading and operating and maintaining the diesel generating station. Nevertheless, Boralex LP is confident that the cost of generating electricity from the Shearwater diesel generating station significantly exceeds Boralex LP's applied-for rates for service to BC Hydro. Boralex LP buys power from BC Hydro under Tariff Supplement No. 7 that is generated at the diesel generating station and back-fed to Ocean Falls when the Ocean Falls generating facilities are not operating. The cost of this power was $474.90 per MWh for the period July 1, 2019 to June 30, 2020 and it is expected to be even higher in the future.[32] Also, Boralex LP understands from the terms of Tariff Supplement No. 7 that this rate only includes fuel and operating costs, and does not include any BC Hydro capital costs including depreciation and financing costs.

55. Moreover, according to BC Hydro, the diesel generating station at Shearwater is not in suitable condition to act as the primary electrical generating station for the Bella Bella NIA for any extend time and that substantial upgrades would be

[31] Boralex LP responses to BCUC IR 7.2 (Exhibit B-6), BC Hydro IRs 3.2 and 3.4.1 (Exhibit B-7) and BCOAPO 34.1 (Exhibit B-16).

[32] Boralex LP response to BCUC IR 20.2.1.

required before the station could safely and reliably generate sufficient electricity to serve the Bella Bella NIA.[33] This makes it even more imperative that Boralex LP undertake the capital projects set out in the Application over the test period in order to be able to continue to provide safe, secure and highly reliable service to BC Hydro.

56. Boralex LP notes that the Zone IB Ratepayers Group supports Boralex LP's request for approval to establish a First Nations Deferral Account to record costs arising from the contemplated MOU with the Heiltsuk Nation during the test period that are not otherwise reflected in the Application (paragraph 15). Boralex LP confirms that it is not seeking any approvals from the Commission at this time regarding the disposition of any amounts recorded in the deferral account. The treatment of any such amounts recorded in the deferral account will be addressed in Boralex LP's next rate application to the Commission.

57. Boralex LP also notes that the Zone IB Ratepayers Group takes no issue with the Commission "maintaining the existing methodology for setting rates for service to the other [non-BC Hydro] customers of the Ocean Falls Facilities" (paragraph 20). This implies that the Zone IB Ratepayers Group also takes no issue with the use by Boralex LP of the forecast net revenue requirement (i.e., the forecast gross revenue requirement less the forecast revenue from the non-BC Hydro customers) to calculate the rates for Boralex LP's service to BC Hydro.

58. Finally, the Zone IB Ratepayers Group disagrees with BC Hydro with regard to BC Hydro's proposed deferral account for non-BC Hydro revenue. Unlike BC Hydro, the Zone IB Ratepayers Group recognizes that fairness dictates that any such deferral account should record both increases and decreases in the actual versus forecast revenue from Boralex LP's other customers in Ocean Falls:

> "If Boralex LP's other customers revenues during the period covered by the Application vary from forecast, such incremental (i.e., beyond the amount forecast in the Application) or decremental revenues should be recorded in a new deferral account established for that purpose. The benefit of such incremental revenue, or in fairness the burden of decremental revenue, should be passed on to BC Hydro and ultimately to its own Zone 1B customers." (page 6, paragraph 19).[34]

[33] BC Hydro Application to the Commission to set a Rate for Boralex LP's service to BC Hydro dated August 29, 2017, page 14.

[34] Although not relevant to the Application, Boralex LP would note that it understands that BC Hydro's Zone IB rates are not determined by reference to Boralex LP's rates for service to BC Hydro. Accordingly, it is not clear how any such deferral account balance would be ultimately passed on to the Zone IB customers.

D. CONCLUSION

59. For the reasons set out in its Final Argument dated June 30, 2020 and in these reply submissions, Boralex LP submits that the Commission should determine that the applied-for rates and terms and conditions of service for Boralex LP's service to BC Hydro and the applied-for First Nations Deferral Account are just and reasonable.

ALL OF WHICH IS RESPECTFULY SUBMITTED this 29th day of July, 2020.