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## ORDER NUMBER G-302-22

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

and

Kyuquot Power Ltd.
Investigation into the Safety and Reliability of the KPL System

#### **BEFORE:**

D. M. Morton, Panel Chair C. M. Brewer, Commissioner T. A. Loski, Commissioner

on October 27, 2022

#### **ORDER**

#### WHEREAS:

- A. On May 15, 2020, by Order G-115-20A, the British Columbia Utilities Commission (BCUC) established a hearing to review the safety and reliability of the Kyuquot Power Ltd. (KPL) system, following a complaint by the Ka:'yu:'k't'h' / Che:k'tles7et'h' First Nations (KCFN);
- B. The KPL power distribution system (KPL System) is interconnected to the British Columbia Hydro and Power Authority (BC Hydro) electric system and supplies customers, including KCFN, the Village of Houpsitas and others on the outer coast of Kyuquot Sound, with electricity;
- C. On October 19, 2020, by Order G-261-20, the BCUC directed KPL to provide a vegetation management plan identifying urgent vegetation work on the KPL system (Vegetation Plan) and a maintenance plan identifying all outstanding maintenance work on the KPL system (Maintenance Plan). On January 27, 2021, by Order G-29-21, the BCUC directed KPL to file quarterly progress reports outlining the status of completion of the remaining items identified in the Vegetation and Maintenance Plans (Quarterly Report);
- D. On May 28, 2021, pursuant to Order G-129-21, KCFN filed its submissions and stated that KCFN does not meet the definition of a public utility. KCFN further submitted that even if it did meet the definition of public utility under the *Utilities Commission Act* (UCA), the BCUC should recommend an exemption for KCFN from all portions of the UCA. On May 28, 2021, KPL filed its submissions pursuant to Order G-129-21;
- E. On June 2, 2021, KCFN submitted correspondence to KPL addressing a number of safety, reliability and legal matters, including concerns that KPL is transmitting power across KCFN's infrastructure on the Crown Corridor without appropriate legal agreements and KCFN's concerns over the safety of KPL's "fly-over" line through Houpsitas;
- F. On July 9, 2021, by Order G-212-21, the BCUC established a further regulatory timetable seeking submissions from parties on whether the BCUC has jurisdiction on treaty land, with respect to the fly-over line through Houpsitas on shared KCFN/KPL poles and KPL-owned poles and submissions on who is currently

Final Order with Reasons 1 of 3

- responsible for the maintenance of the fly-over line through Houpsitas on shared KCFN/KPL poles and KPL-owned poles. Order G-212-21 also directed KPL to follow Section 24 of its Electric Tariff with respect to providing notice to Customers when suspending service for repairs or improvements on the KPL system;
- G. On December 10, 2021, by Order G-368-21, the BCUC determined that KCFN is a public utility as defined in section 1(1) of the UCA and directed KCFN and KPL to negotiate an agreement concerning the joint use of the facilities within the Crown Corridor within three months of issuance of the order. Order G-368-21 also established a further regulatory timetable seeking Panel Information Request No. 1 from KPL and submissions from KCFN and KPL on reasons why an exemption granted to KCFN from each of the specific sections of the UCA is warranted;
- H. On December 31, 2021, KPL filed its latest Quarterly Report and on January 6, 2022, KPL submitted a request to the BCUC that it no longer be required to submit Quarterly Reports as all action items detailed in the Vegetation Plan and Maintenance Plan are now complete. The BCUC granted KPL relief from filing Quarterly Reports;
- I. On January 14, 2022, KCFN submitted an application with the BCUC for reconsideration of Directives 1 and 2 of Order G-368-21 (Reconsideration Application) and on February 10, 2022, by Order G-27-22, the BCUC established a hearing to review KCFN's Reconsideration Application;
- J. On February 11, 2022, by Order G-30-22, the BCUC adjourned the proceeding investigating the safety and reliability of the KPL system pending the outcome of the Reconsideration Application;
- K. By Order G-157-22 dated June 10, 2022, the BCUC reconsidered Order G-368-21 and rescinded the directives that KCFN is a public utility as defined in Section 1(1) of the UCA and that KCFN was required to negotiate a joint use agreement with KPL and provide submissions on its exemption from sections of the UCA;
- L. By Order G-177-22, dated June 29, 2022, the BCUC established the remainder of the regulatory timetable and directed KPL to negotiate an agreement with KCFN regarding the use of KCFN facilities within the Crown Corridor or otherwise on KCFN-owned structures or land and to file an agreement with the BCUC within 6 months from the date of the order. If KPL is unable to negotiate such an agreement with KCFN, the BCUC directed KPL to submit a plan explaining how KPL intends to access land and KPL equipment as necessary to perform maintenance activities and ensure the ongoing safe and reliable operation of its system;
- M. On July 14, 2022, KPL submitted its Final Argument Submission and on July 28, 2022, KCFN submitted its Final Argument Submission (KCFN Final Submission). The KCFN Final Submission included new evidence that was not previously part of the evidentiary record in this proceeding, including a 2008 BC Hydro Report related to the KPL line (2008 BC Hydro Report) that was submitted confidentially;
- N. By Order G-220-22, dated August 11, 2022, the BCUC adjourned the proceeding pending review of the new evidence and follow-up on confidential information with BC Hydro. On August 25, 2022, KPL submitted its reply to KCFN's final argument submission and submitted that KCFN has filed new evidence without applying to the BCUC to reopen the evidentiary record. KPL further submitted that KCFN Final Argument goes beyond the bounds of the BCUC's Rules of Practice and Procedure. On August 26, 2022, BC Hydro submitted a redacted version of the 2008 BC Hydro Report to be shared with the parties in this proceeding;
- O. By Order G-251-22, dated September 12, 2022, the BCUC determined that the new evidence contained in KCFN's Final Submission is excluded from the evidentiary record in this proceeding and resumed the hearing to review the safety and reliability of the KPL system; and
- P. The BCUC, after considering the submissions made, find that the following determinations are warranted.

Final Order with Reasons 2 of 3

**NOW THEREFORE** pursuant to sections 23, 24, 25 38 and 44.1 of the *Utilities Commission Act*, and for the reasons attached as Appendix A to this order, the BCUC orders the following:

- 1. KPL is directed to retain a Certified Utility Arborist to patrol the line annually to identify and remediate urgent vegetation work.
- 2. KPL is directed to provide as part of its annual report, a summary of vegetation management work that was completed in the previous fiscal year, signed off by a Certified Utility Arborist.
- 3. KPL is directed to provide to the BCUC, and to KCFN, results of system inspection, on an annual basis, reviewed by a qualified professional. Completed remediation work should be reviewed and signed off by a qualified professional, and any remaining outstanding deficiencies should be prioritized for completion as necessary to ensure the safe and reliable operation of the KPL System. A maintenance plan with planned inspection or maintenance intervals should be prepared for any assets not annually inspected.
- 4. KPL is directed to ensure that its professional engineer(s) monitor the condition of the submarine cable and include updated assessments in their annual report to the BCUC.
- 5. Within 30 days of this Order, KPL is to provide evidence that a professional engineer is engaged in monitoring the KPL System.
- 6. KPL is directed to provide a plan setting out how KPL intends to access lands and KPL equipment as necessary to perform maintenance activities and ensure the ongoing safe and reliable operation of its system no later than January 31, 2023, should KPL be unable to negotiate an agreement with KCFN regarding the use of KCFN facilities within the Crown Corridor or otherwise on KCFN-owned structures or land.
- 7. Within one year of this Order, KPL is directed file a long-term resource plan with a 10 year forecast and plan setting out how it will meet the forecasted load that supports KCFN's community aspirations.
- 8. KPL is directed to provide an update on the status of the recommendations made in the April 2021 Condition Assessment Report no later than January 31, 2023.

<b>DATED</b> at the City of Vancou	uver, in the Province of British C	olumbia, this 2°	7 <sup>th</sup> day	of October 2022
	,		,	

BY ORDER

Original signed by:

D. M. Morton Commissioner

Attachment

Final Order with Reasons 3 of 3

# Kyuquot Power Ltd. Investigation into the Safety and Reliability of the KPL System

## **REASONS FOR DECISION**

## **Table of Contents**

			Page no.
Execu	tive Su	mmary	2
1.0	Introd	duction	4
2.0	Backg	ground	4
3.0	Regul	latory Process	5
4.0	Legisl	lative Framework	10
5.0	Key Is	ssues Identified	12
	5.1	Vegetation Management of the KPL System	12
	5.2	Maintenance of the KPL System	15
	5.3	KPL's Fly-over line and KPL's jointly used infrastructure	19
	5.4	KPL's System Capacity and Load Management	22
6.0	Overa	all Panel Determination	26

## **Executive Summary**

On May 15, 2020, the British Columbia Utilities Commission (BCUC) established a hearing to review the safety and reliability of the Kyuquot Power Ltd. (KPL) system following a complaint filed by the Ka:'yu:'k't'h' / Che:k'tles7et'h' First Nations (KCFN) (Complaint). The KPL power distribution system (KPL System) is interconnected to the British Columbia Hydro and Power Authority (BC Hydro) electric system and supplies customers, including KCFN, the Village of Houpsitas and others on the outer coast of Kyuquot Sound on northern Vancouver Island, with electricity. The KPL System is owned and operated by Kyuquot Power Ltd., a whollyowned subsidiary of Synex International.

The Panel identified four areas of concern: vegetation management of the KPL System, maintenance of the KPL System, KPL's use of KCFN facilities and the fly-over line and KPL's system capacity and load management. The term fly-over line refers to a 1.5 km portion of KPL line that runs over poles owned and maintained by KCFN and these poles are on a Crown right of way through KCFN treaty territory.

On October 19, 2020, by Order G-261-20, the BCUC determined that critical items remained incomplete, including urgent vegetation and maintenance work identified in KPL's System Stabilization Plan. In this order, the BCUC directed KPL to:

- Provide a vegetation management plan approved by a qualified utility arborist identifying urgent work on the KPL System (Vegetation Plan). The Vegetation Plan was to include an action plan and schedule to complete all priority items and urgent vegetation work identified in the KPL System.
- Provide a plan identifying all outstanding maintenance work on the KPL System, approved by a qualified professional engineer (Maintenance Plan). The Maintenance Plan was to include an action plan and schedule to complete all priority items and outstanding maintenance work on the KPL System.
- Provide reports demonstrating the completion of actions items identified in both the Vegetation Plan and Maintenance Plan, to be approved by a qualified utility arborist and qualified professional engineer, respectively.
- Provide a detailed scope and timeframe to complete KPL's full safety and condition assessment report (Assessment Report), which was included in KPL's March 30, 2020 System Stabilization Plan within 21 days of the issuance of this Order.
- Conduct a review of its maintenance and safety management procedures under the guidance of a
  qualified professional engineer and to provide a report to the BCUC outlining the findings of the review
  and plans to implement any recommended changes to its maintenance and safety management
  procedures.

On December 9, 2020, KPL filed its Vegetation Management Plan prepared by Asplundh Canada ULC (Asplundh). On November 8, 2021, KPL provided evidence that all Hot Spotting and Hazard Tree Removals recommended in the Vegetation Plan had been completed. KPL has acknowledged that prior to this proceeding it did not retain a certified utility arborist.

Vegetation management of the KPL System remains a contentious issue, and the Panel finds that annual patrols by a certified utility arborist are required for the reliability and safety of the KPL System. Therefore, the Panel directs KPL to retain a certified utility arborist to annually patrol the KPL System. The Panel further directs KPL to provide, as part of its annual report, a summary of vegetation management work that was completed in the previous fiscal year signed off by a Certified Utility Arborist.

Several other maintenance issues on the KPL System were identified. The Panel directed assessments and reviews, including a Condition Assessment Report and a Safety Management Plan, all completed by, or under the guidance of, a qualified professional engineer. In this decision, KPL is directed to provide to the BCUC, and to KCFN, results of system inspections on an annual basis, reviewed by a qualified professional. Completed remediation work should be reviewed and signed off by a qualified professional and any remaining outstanding deficiencies should be prioritized for completion as necessary. The Panel also directs KPL to ensure that its professional engineer monitors the condition of the submarine cable and include updated assessments in KPL's Annual Report to the BCUC. KPL is directed to provide evidence that a professional engineer is currently engaged in monitoring the KPL system within 30 days of the issuance of this decision.

KPL currently uses KCFN infrastructure to transmit electricity without a joint use agreement in place. The Panel directed KPL to develop a joint use agreement regarding use of KCFN facilities within the Crown Corridor and on KCFN owned structures or within KCFN lands to provide assurances to both parties with respect to the use, operations and maintenance of KPL's infrastructure. In the event that KPL is unable to negotiate an agreement, the Panel directs KPL to provide a plan setting out how KPL intends to access lands and KPL equipment as necessary to perform maintenance activities and ensure the ongoing safe and reliable operation of its system no later than January 31, 2023.

With respect to KCFN's concerns regarding the fly-over line, the Panel finds that KPL's engineering consultant, Primary Engineering, did not identify any deficiencies aside from those respecting the low tension guy wires on some of the poles. The Panel finds that BC Hydro's engineering standards are not applicable to KPL's System. Further, the Panel states it is up to KCFN to correct issues related to the poles. The Panel therefore encourages KCFN to engage in negotiations with KPL with respect to the joint use agreement.

KPL's peak demand is approaching capacity with its electric service agreement with BC Hydro. KCFN has outlined plans for community expansion and future growth. During the proceeding KPL filed an agreement with BC Hydro to increase KPL's maximum demand from 350 to 500kVA. However, KPL's current maximum demand is already close to exceeding this new maximum level. Therefore, within one year, KPL is directed to file, pursuant to s. 44.1 of the UCA, a long term resource plan including a 10 year load forecast and plan setting out how KPL will meet the forecasted load that supports KCFN's community aspirations. KPL is further directed to provide an update on the status of the recommendations made in the April 2021 Condition Assessment Report no later than January 31, 2023. In order to facilitate planning, KPL is encouraged to work with BC Hydro to understand the feasibility of further increasing KPL's allowable maximum demand and include the outcome of such discussions in its 10 year load forecast and plan.

The Panel acknowledges KCFN for raising the issues related to the safety and reliability of the KPL System. KCFN's complaint has resulted in KPL improving its vegetation and maintenance practices by undertaking inspections, identifying priorities and implementing an overall plan for ongoing system maintenance. Recognizing the challenges of servicing a remote community situated in challenging terrain, and the need to balance overall safety and reliability with rate payer impacts, the Panel finds that KPL has addressed the deficiencies identified, and subject to the Panel's directions, the complaint is closed. The BCUC will continue to monitor the safety and reliability of the KPL System through regular compliance filings.

#### 1.0 Introduction

By email dated February 13, 2020, the Ka:'yu:'k't'h' / Che:k'tles7et'h' First Nations (KCFN) filed a complaint with the British Columbia Utilities Commission (BCUC) concerning, amongst other things, a safety matter regarding Kyuquot Power Ltd. (KPL) (Complaint). The KPL power distribution system (KPL System) is interconnected to the British Columbia Hydro and Power Authority (BC Hydro) electric system and supplies customers, including KCFN, the Village of Houpsitas and others on the outer coast of Kyuquot Sound, with electricity.

On May 15, 2020, by Order G-115-20, the BCUC established a regulatory timetable to review the safety and reliability of the KPL System.

### 2.0 Background

KPL holds a Certificate of Public Convenience and Necessity (CPCN) to operate a 14.4 kV single phase distribution line with a Point of Interconnection (POI) with the British Columbia Hydro and Power Authority (BC Hydro) electrical grid at Oclucje and a POI with KCFN's high voltage system near the village of Houpsitas. Since 2006, KPL has supplied electrical power to customers in and around Kyuquot, Fair Harbour and Chamiss Bay. KPL's distribution line carries on downstream past the village of Houpsitas to serve customers on Walters Island and seven private islands. The distribution line also feeds Fair Harbour marina before it transitions to a submarine cable. Through the village of Houpsitas, the distribution line is mounted on pole-top extensions above KCFN structures.

The KPL System is owned and operated by Kyuquot Power Ltd., a wholly owned subsidiary of Synex International Inc.<sup>4</sup>

KCFN is a self-governing Nation and a signatory to the *Maa-Nulth First Nations Final Agreement* between KCFN, Canada and British Columbia, a tri-partite comprehensive land claim agreement within the meaning of s. 35 of the *Constitution Act, 1982*<sup>5</sup>, which became effective in 2011 (MFA).<sup>6</sup> The village of Houpsitas is on lands included in the MFA, KCFN Treaty Lands.<sup>7</sup> The KPL System is located, in part, on KCFN Treaty Lands, and includes KPL wires located on structures owned by KCFN.

By email dated February 13, 2020, KCFN filed a complaint with the BCUC concerning, amongst other things, a safety matter regarding KPL (Complaint).<sup>8</sup> In the Complaint, KCFN stated concerns regarding the reliability, service and maintenance of the KPL System. The Complaint identified areas of immediate safety concern and KCFN stated that the powerline has a history of experiencing long outages during adverse weather conditions. On February 14, 2020, the BCUC contacted KPL regarding the Complaint and requested KPL to provide a written response to the Complaint. On February 21, 2020, KPL responded, indicating that all but one item that had been identified in the Complaint have been corrected and that the remaining item would be corrected within 30 days as permitted by Technical Safety British Columbia.

<sup>&</sup>lt;sup>1</sup> Order C-18-01.

<sup>&</sup>lt;sup>2</sup> Exhibit A2-6, pdf p. 6.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> Exhibit D-3, IR 5.2, p. 19.

<sup>&</sup>lt;sup>5</sup> Constitution Act, 1982, being Schedule B to the Canada Act 1982 (UK), 1982, c. 11.

<sup>&</sup>lt;sup>6</sup> Exhibit C2-9, p. 2.

<sup>&</sup>lt;sup>7</sup> Exhibit C2-14, p. 1.

<sup>&</sup>lt;sup>8</sup> Exhibit A2-1.

On March 8, 10, 11 and 12, 2020, KCFN contacted the BCUC regarding ongoing power outages of the KPL System. On March 5, 2020, BCUC Staff issued Information Request (IR) No. 1 to KPL, with respect to the safety and maintenance concerns raised by KCFN in the Complaint.

On March 15, 2020, the BCUC issued Order G-50-20, which among other things directed KPL to provide the BCUC with daily updates for 15 days starting from March 16, 2020 on the status of the KPL System, including its operational status, work performed, work planned and a KPL System Stabilization Plan, which included a high-level technical assessment of the KPL System by a qualified professional engineer. On March 30, 2020, KPL submitted a System Stabilization Plan<sup>9</sup>, which included action items for KPL to undertake to maintain system stability.

The System Stabilization Plan included, among other things, the following:

- A high-level technical assessment of the current KPL System, including identification of areas where maintenance on the line is required;<sup>10</sup>
- Identification of areas where vegetation management is required;<sup>11</sup>
- Recommendation that KPL submit a primary service upgrade request to BC Hydro to alleviate short-term load issues;<sup>12</sup>
- Recommendation that KPL develop a working group with impacted ratepayers;<sup>13</sup> and
- Recommendation that KPL undertake a full safety and condition assessment of the KPL System.<sup>14</sup>

On May 15, 2020, the BCUC issued letter L-27-20, adjourning the Complaint pending the outcome of a new proceeding to investigate the safety and reliability of the KPL System.

## 3.0 Regulatory Process

On May 15, 2020, the BCUC issued Order G-115-20, initiating an investigation into the Safety and Reliability of the KPL System pursuant to section 83 of the *Utilities Commission Act* (UCA) and directed KPL to provide a copy of Order G-115-20 to its customers (KPL Safety and Reliability Proceeding or Proceeding). Order G-115-20 also established a regulatory timetable, intervener registration, public written submissions and one round of BCUC and intervener IRs.

KCFN and the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and Tenants Resource and Advisory Centre (BCOAPO) registered as interveners in this Proceeding. The BCUC received 5 letters of comment.

<sup>&</sup>lt;sup>9</sup> Exhibit A2-6, KPL's System Stabilization Plan.

<sup>&</sup>lt;sup>10</sup> Ibid., pp. 4-6.

<sup>&</sup>lt;sup>11</sup> Ibid., p. 7.

<sup>&</sup>lt;sup>12</sup> Ibid., p.8.

<sup>&</sup>lt;sup>13</sup> Ibid., p. 9.

<sup>&</sup>lt;sup>14</sup> Ibid., pp. 9-10.

On October 19, 2020, by Order G-261-20, the BCUC determined that critical items remained incomplete, including urgent vegetation and maintenance work identified in KPL's System Stabilization Plan. <sup>15</sup> In this order, the BCUC directed KPL to:

- Provide a vegetation management plan approved by a qualified utility arborist identifying urgent work on the KPL System (Vegetation Plan). The Vegetation Plan was to include an action plan and schedule to complete all priority items and urgent vegetation work identified in the KPL System.<sup>16</sup>
- Provide a plan identifying all outstanding maintenance work on the KPL System, approved by a qualified professional engineer (Maintenance Plan). The Maintenance Plan was to include an action plan and schedule to complete all priority items and outstanding maintenance work on the KPL System. <sup>17</sup>
- Provide reports demonstrating the completion of actions items identified in both the Vegetation Plan and Maintenance Plan, to be approved by a qualified utility arborist and qualified professional engineer, respectively. <sup>18</sup>
- Provide a detailed scope and timeframe to complete KPL's full safety and condition assessment report (Assessment Report), which was included in KPL's March 30, 2020 System Stabilization Plan within 21 days of the issuance of this Order. <sup>19</sup>
- Conduct a review of its maintenance and safety management procedures under the guidance of a qualified professional engineer and to provide a report to the BCUC outlining the findings of the review and plans to implement any recommended changes to its maintenance and safety management procedures.<sup>20</sup>

On November 13, 2020, KPL filed a letter requesting an extension to complete the compliance directives identified in Order G-261-20. After considering submissions from KPL and KCFN, the BCUC issued Order G-309-20 granting KPL's extension request. In addition, Order G-309-20 directed KPL to continue to provide the BCUC with weekly progress reports outlining the work undertaken. On December 9, 2020, and December 29, 2020, KPL submitted compliance filings to the BCUC that described the vegetation and maintenance work completed pursuant to Order G-309-20, along with the Vegetation Plan and the Maintenance Plan.

On January 27, 2021, the BCUC issued Order G-29-21, which among other things, directed KPL to coordinate with KCFN to ensure the remaining priority 1 item identified in the Maintenance Plan was completed. On February 8, 2021, KCFN filed a submission with the BCUC stating that it has concerns with KPL completing the remaining priority 1 item as described by KPL's Maintenance Plan. KCFN identified that the remaining priority 1 item was to add locks to the gang operated load switch S3 (GOLB S3) restricting access to KPL personnel only.

Following submissions from KPL and KCFN regarding the locking mechanism for the GOLB S3, the BCUC determined that a dispute had arisen and on March 8, 2021, the BCUC issued Order G-65-21, which directed KPL to request the dispute regarding the locking arrangement and terms of a joint operating order governing GOLB S3 be referred to mediation, pursuant to Section 11 of the existing Right of Way (ROW) Agreement between KCFN and KPL. Directive 3 of Order G-65-21 states that until the dispute is resolved, the BCUC requests KCFN, as soon as reasonably possible, but no later than March 12, 2021, to provide KPL a copy of the key for GOLB S3. Directive

<sup>&</sup>lt;sup>15</sup> Order G-261-20.

<sup>&</sup>lt;sup>16</sup> Ibid., directive 1.

<sup>&</sup>lt;sup>17</sup> Ibid., directive 3.

<sup>&</sup>lt;sup>18</sup> Ibid., directive 2.4.

<sup>&</sup>lt;sup>19</sup> Ibid., directive 5.

<sup>&</sup>lt;sup>20</sup> Ibid., directive 6.

4 states that until the dispute is resolved, KCFN and KPL are to notify each other prior to any operation of the GOLB S3, although permission of the other party is not required.

## Reconsideration and Variance of Order G-65-21

On March 12, 2021, KCFN submitted an application with the BCUC for reconsideration and variance of Directives 3 and 4 of Order G-65-21 (Reconsideration Application of Order G-65-21). The Reconsideration Application of Order G-65-21 requested that Directives 3 and 4 of Order G-65-21 be amended to require that KPL obtain the permission of KCFN prior to accessing GOLB S3 and that only qualified personnel be permitted to access GOLB S3.<sup>21</sup> The BCUC established a regulatory timetable seeking submissions from parties on the Reconsideration Application of Order G-65-21.<sup>22</sup> On March 22, 2021, KPL submitted its response,<sup>23</sup> and on April 6, 2021 KCFN submitted its reply submission.<sup>24</sup>

On April 21, 2021, the BCUC held an oral hearing to receive further submissions from KCFN and KPL and invited submissions on the underlying assumption of Order G-65-21 and whether the ROW Agreement between KCFN and KPL applies to the lands upon which GOLB S3 is located (Oral Hearing).<sup>25</sup>

At the Oral Hearing, KCFN submitted that the executed ROW Agreement grants KPL different types of access over two types of areas and neither of these areas included the "Excluded Crown Corridor". Excluded Crown Corridor is land owned by the Province of British Columbia. KCFN further submitted that due to the imprecise sketches of the ROW Agreement, the initial impression was that KCFN had granted KPL a right of way over the lands on which GOLB S3 resides and upon further review, KCFN became aware that the GOLB S3 is located within the Excluded Crown Corridor.

KCFN submitted that the definition of a Crown Corridor is included in Chapter 7 of the Maa-nulth First Nations Final Agreement and includes lands owned by the Province of British Columbia.

KCFN submitted that given the GOLB S3 is located on a section of KCFN-constructed and KCFN-owned power line, which is within the excluded Crown Corridor, and because the ROW agreement between KCFN and KPL does not apply to land within the Crown Corridors, the mediation provisions of the ROW agreement do not apply to the dispute regarding GOLB S3.

After considering the evidence submitted by KCFN and KPL, the Panel determined that the GOLB S3 is on land that is within the Crown Corridor, on infrastructure owned by KCFN, and within the lands identified by the KCFN ROW Agreement with the Province of BC and therefore not subject to the ROW Agreement between KCFN and KPL. As the directives of Order G-65-21 were all premised on the assumption that the switch GOLB S3 is located on land subject to the ROW Agreement between KCFN and KPL, the Panel, through Order G-126-21 dated April 28, 2021, rescinded Order G-65-21 in its entirety.

<sup>&</sup>lt;sup>21</sup> Exhibit C2-7, pp. 1–3.

<sup>&</sup>lt;sup>22</sup> Order G-79-21.

<sup>&</sup>lt;sup>23</sup> Exhibit D-30.

<sup>&</sup>lt;sup>24</sup> Exhibit C2-9.

<sup>&</sup>lt;sup>25</sup> Transcript Volume 1, April 21, 2021.

On April 28, 2021, the BCUC issued Order G-129-21 and established a regulatory timetable seeking submissions from parties on:

- a. The need for access to GOLB S3;
- b. With respect to the portion of the line on the Crown Corridor, whether KCFN meets the definition of a public utility and, if so, whether it is appropriate that the BCUC recommend an exemption for KCFN from all or portions of Part 3 of the UCA, pursuant to section 88(3) of the UCA; and
- c. Submissions on the applicability of Section 27 of the UCA on shared KCFN infrastructure.

On June 2, 2021, KCFN submitted a letter to KPL and raised a number of safety, legal and jurisdictional issues. KCFN submitted that it will require KPL to enter into a formal legal agreement with KCFN with respect to KPL's infrastructure, including KPL's 'fly-over line' (fly-over line) through the village of Houpsitas and clear terms respecting liability and communication. KCFN also submitted that it remains concerned about the safety of KPL's fly-over line through Houpsitas and expects KPL to bring its fly-over line to a safety standard acceptable to KCFN's Engineer of Record. KCFN also submitted that KPL is currently distributing power across KCFN's power infrastructure on the Crown Corridor without a legal agreement with KCFN or a legal tenure from the Province of BC and that it expects KPL to develop a plan to install its own conductor to transmit power through the Crown Corridor to downstream customers.<sup>26</sup>

On July 9, 2021, the BCUC issued Order G-212-21 and established a further regulatory timetable seeking further submissions on:

- 1. Whether the BCUC has jurisdiction on treaty land, with respect to the fly-over line through Houpsitas on shared KCFN/KPL poles and KPL-owned poles; and
- 2. Who is currently responsible for the maintenance of the fly-over line through Houpsitas on shared KCFN/KPL poles and KPL-owned poles respectively.

By Order G-368-21 and accompanying reasons for decision dated December 10, 2021, the BCUC determined that KCFN is a public utility as defined in Section 1(1) of the UCA and directed KCFN and KPL to negotiate an agreement concerning the joint use of facilities within three months of issuance of the order. In making this finding, the Panel was persuaded by the evidence submitted by KCFN that its utility customers were charged a flat fee.

#### Reconsideration of Order G-368-21

On January 14, 2022, pursuant to section 99 of the UCA, KCFN made an application to reconsider Directives 1 and 2 of Order G-368-21 (Reconsideration Application of Order G-368-21) on the grounds that the BCUC erred in law in finding that the flat administrative fee collected by KCFN constitutes compensation for an electrical service provided to the public by KCFN. On February 10, 2022, by Order G-27-22, the BCUC established a hearing to review KCFN's Reconsideration Application of Order G-368-21 (KCFN Reconsideration of Order G-368-21) and on February 11, 2022, by Order G-30-22, the BCUC adjourned the KPL Safety and Reliability Proceeding, pending the outcome of the Reconsideration Application of Order G-368-21.

<sup>&</sup>lt;sup>26</sup> Exhibit C2-13, p. 2.

In the hearing into Reconsideration Application of Order G-368-21, KCFN clarified that as a modern Treaty Nation, KCFN only has citizens living on Treaty Settlement Lands (TSL) and the land is owned by KCFN. Further, approximately 85% of the homes in the village of Houpsitas have explicit rental agreements with KCFN for their residences leaving 15% of the homes without a formal tenancy agreement. KCFN submit that in both these cases, the land title remains with KCFN and therefore, residents, including KCFN citizens, are akin to tenants of KCFN and there are no leases of more than five years in the village of Houpsitas.<sup>27</sup>

KCFN also clarified that there are no agreements between KCFN and residents respecting electricity services, and that the tenancy agreements between KCFN and residents provide clarity regarding terms of rentals and utilities, including payments that defray some of the KCFN's electrical costs, with residents paying a flat energy fee of \$100 per month, or \$60 per month if they have a wood stove for heat.<sup>28</sup>

As part of the Reconsideration Application of Order G-368-21, KCFN also submitted that KPL is currently making unauthorized use of one of KCFN's three-phase conductors, which KCFN's engineering team does not see a feasible means of continuing to accommodate without jeopardizing service to its own citizens.<sup>29</sup> KCFN also submitted that it is incumbent on KPL to design and implement an alternative method of transmitting its power through to downstream customers. <sup>30</sup>KCFN previously submitted that it receives no compensation for KPL's use of the KCFN-owned line which transmits power to KPL's downstream customers.<sup>31</sup>

After considering the new evidence submitted by KCFN and submissions from both KCFN and KPL, the Panel found that KCFN does not operate as a public utility pursuant to section 1(1) of the UCA. The Panel found that the parties from which KCFN collects an administrative fee reside entirely on land owned by KCFN and do not include lessees for a term of more than 5 years, and therefore satisfy the definition of tenant in section 1(1) of the UCA. The Panel found that KCFN is therefore excluded from the definition of a public utility in section 1(1) of the UCA. Therefore, by Order G-157-22 dated June 10, 2022, the Panel rescinded directives 1, 2 and 4 of Order G-368-21.

## Remainder of process for the KPL Safety and Reliability Proceeding

On June 29, 2022, the BCUC issued Order G-177-22, establishing the remainder of the regulatory timetable for the KPL Safety and Reliability Proceeding and directed KPL to negotiate an agreement with KCFN regarding the use of KCFN facilities within six months of the date of the order. If KPL is unable to negotiate such an agreement with KCFN, the BCUC directed KPL to submit a plan to the BCUC explaining how KPL intends to access land and equipment as necessary to perform maintenance activities and ensure the ongoing safety and reliable operation of its system.

On July 14, 2022, KPL submitted its Final Argument Submission and on July 28, 2022, KCFN submitted its Final Argument Submission (KCFN Final Submission). The KCFN Final Submission included new evidence concerning the following items that was not previously part of the evidentiary record in this Proceeding:

Photographs taken July 17 & 18, 2022;

<sup>&</sup>lt;sup>27</sup> KCFN Reconsideration of Order G-368-21 proceeding, Exhibit B-4, p. 1.

<sup>&</sup>lt;sup>28</sup> Ibid., Exhibit B-4, p. 2.

<sup>&</sup>lt;sup>29</sup> Ibid., Exhibit B-1, p. 5.

<sup>30</sup> Ibid.

<sup>&</sup>lt;sup>31</sup> Exhibit C2-11, p.4.

- A BC Hydro Report titled "Cost Estimate for the Upgrade, Operation and Maintenance of the Kyuquot Line" dated March 25, 2008; and
- A letter to KCFN from SBR Consulting regarding the Long-Term Sustainability of KPL Power Supply to Houpsitas, dated June 21, 2022.

By Order G-220-22, the BCUC adjourned the Proceeding pending review of the new evidence submitted by KCFN.

On August 25, 2022, KPL submitted that KCFN has filed new evidence without applying to the BCUC to reopen the evidentiary record and that KCFN Final Submission goes beyond the bounds of the BCUC's Rules of Practice and Procedure.

By Order G-251-22 and accompanying reasons for decision dated September 12, 2022, the BCUC determined that the new evidence contained in KCFN's Final Submission is excluded from the evidentiary record in this Proceeding and resumed the Proceeding for the following reasons:

- The Panel was not persuaded that the new photographs submitted by KCFN provides any new compelling evidence, beyond that already submitted as evidence in this proceeding.
- The Panel was not persuaded that the 2008 report, which analyzes the costs for BC Hydro taking over the KPL line, has any bearing on this Panel's determinations in this proceeding on the safety and reliability of the current KPL System. Further, KCFN have not provided any compelling reason how this report relates within the current context of the BCUC's Investigation of the safety and reliability of the KPL System.
- The Panel was not persuaded that the letter from SBR Consulting includes any new evidence, beyond that previously submitted.

## 4.0 Legislative Framework

The BCUC established the KPL Safety and Reliability Proceeding pursuant to section 83 of the UCA, which states:<sup>32</sup>

If a complaint is made to the commission, the commission has powers to determine whether a hearing or inquiry is to be had, and generally whether any action on its part is or is not to be taken.

Sections 23, 24, 25 and 38 of the UCA state:

23 (1)The commission has general supervision of all public utilities and may make orders about

(a)equipment,

(b)appliances,

(c)safety devices,

(d)extension of works or systems,

(e)filing of rate schedules,

(f)reporting, and

<sup>&</sup>lt;sup>32</sup> Utilities Commission Act, s 83.

- (g)other matters it considers necessary or advisable for
- (i) the safety, convenience or service of the public, or
- (ii) the proper carrying out of this Act or of a contract, charter or franchise involving use of public property or rights.
- (2)Subject to this Act, the commission may make regulations requiring a public utility to conduct its operations in a way that does not unnecessarily interfere with, or cause unnecessary damage or inconvenience to, the public
- **24** In its supervision of public utilities, the commission must make examinations and conduct inquiries necessary to keep itself informed about
- (a) the conduct of public utility business,
- (b) compliance by public utilities with this Act, regulations or any other law, and
- (c) any other matter in the commission's jurisdiction.
- **25** If the commission, after a hearing held on its own motion or on complaint, finds that the service of a public utility is unreasonable, unsafe, inadequate or unreasonably discriminatory, the commission must
  - (a)determine what is reasonable, safe, adequate and fair service, and
  - (b)order the utility to provide it.
- 38 A public utility must
  - (a)provide, and
  - (b) maintain its property and equipment in a condition to enable it to provide,

a service to the public that the commission considers is in all respects adequate, safe, efficient, just and reasonable.

#### BC Electrical Safety Regulation

As a public utility, the Electrical Safety Regulation under the *Safety Standards Act*<sup>33</sup> does not apply to KPL with respect to the generation, transmission and distribution of electrical energy.

Technical Safety BC (TSBC) had previously issued operating permits and performed routine inspections of the KPL System.<sup>34</sup> On August 6, 2020, TSBC explained that it had previously been issuing operating permits to KPL as it had not been previously advised that KPL was subject to the *Utilities Commission Act*.<sup>35</sup> TSBC confirmed that it will no longer be requiring or issuing operating permits to KPL as KPL is exempt from the *Safety Standards Act* and therefore exempt from TSBC's oversight.<sup>36</sup>

<sup>&</sup>lt;sup>33</sup> Safety Standards Act [SBC 2003], c.39, Electrical Safety Regulation, BC Reg 100/2004 at section 3 https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/12 100 2004.

<sup>&</sup>lt;sup>34</sup> Exhibit D-3, BCUC IR 1.5, p. 8; Exhibit D-5-1, pdf p.5.

<sup>&</sup>lt;sup>35</sup> Exhibit D-5-1, pdf p. 5.

<sup>&</sup>lt;sup>36</sup> Ibid., pdf p. 5.

## 5.0 Key Issues Identified

The Panel notes that the evidence provided by KPL and KCFN during the Proceeding identified four distinct areas of concern relating to the KPL System, which are as follows:

- Vegetation management of the KPL System;
- Maintenance of the KPL System;
- KPL's Fly-over line and KPL's use of KCFN facilities within the Crown Corridor or otherwise on KCFN-owned structures or land; and
- KPL's system capacity and load management.

The Panel makes findings on the adequacy of KPL's current vegetation management and maintenance of the KPL System and identifies areas where further measures are required.

## 5.1 Vegetation Management of the KPL System

In this Proceeding, KCFN has submitted numerous photos and videos expressing safety concerns regarding vegetation related issues on the KPL distribution line.<sup>37</sup> KCFN has also provided photos, which it states show burnt branch tips caused as a result of contact with the distribution line as well as trees coming into contact with KPL's line.<sup>38</sup>

Prior to this Proceeding, the BCUC ordered KPL to submit a System Stabilization Plan, which included action items for KPL to undertake.<sup>39</sup> The System Stabilization Plan included, among other things, recommendations and actions items with respect to vegetation management on the KPL System. The System Stabilization Plan also recommended that KPL retain a Certified Utility Arborist to help identify critical areas where urgent vegetation remediation was required.<sup>40</sup>

KPL acknowledges that prior to this Proceeding, it did not employ a Certified Utility Arborist for vegetation management activities of the KPL System and that it would only consider using a Certified Utility Arborist in circumstances where the removal of danger trees in close proximity to an energized powerline would be required.<sup>41</sup> KPL submits that vegetation management activities have typically been completed by KCFN members hired by KPL.<sup>42</sup>

As described in Section 3.0 of this Decision above, the Panel directed KPL to develop a Vegetation Plan approved by a qualified utility arborist including, among other things: identifying urgent work on the KPL System, an action plan and schedule to complete all priority items and urgent vegetation work, and a report approved by a qualified utility arborist demonstrating the completion of action items identified in the Vegetation Plan.<sup>43</sup>

<sup>&</sup>lt;sup>37</sup> Exhibit A2-13; Exhibit C2-4; Exhibit C2-4-1.

<sup>&</sup>lt;sup>38</sup> Exhibit C2-15.

<sup>&</sup>lt;sup>39</sup> Order G-50-20.

<sup>&</sup>lt;sup>40</sup> Exhibit A2-6, KPL System Stabilization Plan, p. 8.

<sup>&</sup>lt;sup>41</sup> Exhibit D-5, BCUC IR 11.6, p. 4.

<sup>&</sup>lt;sup>42</sup> KPL Final Argument, March 1, 2021, pdf p.12.

<sup>&</sup>lt;sup>43</sup> Order G-261-20.

On December 9, 2020, pursuant to Order G-261-20, KPL provided a Vegetation Plan, prepared by Asplundh Canada ULC (Asplundh), a certified utility arborist.<sup>44</sup> The Vegetation Plan prepared by Asplundh recommends the following work<sup>45</sup>:

- a) Part one Routine vegetation maintenance: Asplundh recommends that vegetation maintenance of the KPL System is completed on a 4-year cycle, with ¼ of the line maintained annually. Asplundh also recommends the KPL System be patrolled annually by a Certified Utility Arborist prior to the maintenance work being completed to identify and prioritize other urgent work.
- b) Part two Hot Spotting and Hazard Tree Removals: Asplundh recommends that Hot Spotting is done on sites where the clearances of hazard trees are currently within 0.5 meters of the primary KPL line and are expected to fall within Limits of Approach for a Certified Utility Arborist. Asplundh further highlighted sites where Hot Spotting is recommended within the next 6-month period. Further, Asplundh identified Hazard Trees to be removed for line security in accordance with the same 4-year cycle for routine vegetation maintenance. Asplundh also highlighted Hazard trees to be removed within the next 6-month period.

KPL noted that Asplundh did not identify any work as "urgent" or "priority", other than the Hot Spotting and Hazard Tree Removal to be completed within the next 6 months. 46

On November 8, 2021, KPL provided evidence that all Hot Spotting and Hazard Tree Removals recommended in the Vegetation Plan have been completed.<sup>47</sup> Pursuant to Order 212-21, KPL also attached a Vegetation Plan Completion Report, completed by Asplundh.<sup>48</sup>

#### KCFN Position

KCFN's Final Argument, dated March 8, 2021, referenced the System Stabilization Plan<sup>49</sup> which identified several spans of the KPL conductor where remedial vegetation clearance is required. KCFN therefore submits that it disagrees that no urgent or priority vegetation management is required, as characterized by KPL.<sup>50</sup>

KCFN submits that there are multiple spans across the entire length of the line where burnt branch tips are evidenced but acknowledge that it is not aware of any requirements or regulations which states burnt tips are not allowed. The KCFN remains concerned that KPL appear to be using power outages as the only metric to measure adequate vegetation management and point to other issues such as power quality, nuisance recloser trips and potential forest fire dangers as issues that can be caused by poor vegetation management.

KCFN remains concerned that KPL appears to be ignoring recommendations that only Certified Utility Arborists are used for the purpose of physical vegetation management. KCFN submits that much of the line now requires trimming of tree branches at or above the height of the line, rather than simply brushing and felling of smaller

<sup>&</sup>lt;sup>44</sup> Exhibit D-16, Appendix 3A.

<sup>&</sup>lt;sup>45</sup> Ibid.

<sup>&</sup>lt;sup>46</sup> Exhibit D-16, p. 1.

<sup>&</sup>lt;sup>47</sup> Exhibit D-43-1.

<sup>&</sup>lt;sup>48</sup> Exhibit D-43-1, pdf pp.4-8.

<sup>&</sup>lt;sup>49</sup> Exhibit A2-6.

<sup>&</sup>lt;sup>50</sup> KCFN Final Argument dated March 8, 2021, pdf. p.14

<sup>&</sup>lt;sup>51</sup> Ibid.

<sup>52</sup> Ibid.

trees under the line.<sup>53</sup> KCFN recommends that the only efficient way to trim the branches growing at or above the height of the line is by using an insulated bucket truck.<sup>54</sup> KCFN also submits that using a Certified Utility Arborist would mitigate the issue of branches and felled trees being left under the power lines. KCFN further submits that if these felled branches and trees are not cleared, an issue may be raised with the Ministry of Forests, Lands, Natural Resource Operations and Rural Development.<sup>55</sup>

#### **KPL** Position

KPL submits that the KPL System traverses through a densely forested area and vegetation can cause damage to electrical infrastructure and subsequent outages.<sup>56</sup> KPL acknowledge that while vegetation contacting an energized line is a potential safety hazard, it has no record of any person being injured by this type of incident.<sup>57</sup> KPL submits that in order to reduce safety hazards and the number of outages, its vegetation maintenance consists of clearing approximately ¼ of the overland portion of the KPL System every year, on a cyclical basis.<sup>58</sup>

KPL submits that its current vegetation maintenance aligns with the four-year cycle recommended by Asplundh. KPL also agrees with Asplundh's recommendation that the line should be patrolled annually by a Certified Utility Arborist prior to vegetation work being completed to identify and prioritize any other remediation work in areas not designated for vegetation work in that year.<sup>59</sup>

KPL submits that the System Stabilization Plan, explained in Section 2.0 of this Decision above, and the Maintenance Plan, explained in Section 5.2 of this Decision, also included additional recommendations with respect to vegetation management of the KPL System.<sup>60</sup> KPL submits that unless directed by the BCUC, KPL will continue to only follow vegetation management recommendations from a Qualified Utility Arborist, and in particular, those recommendations contained in Asplundh's Vegetation Plan.<sup>61</sup>

KPL also questions the increased costs of vegetation management, the expected levels of reliability KPL is required to provide and the customer's ability to pay for this service. EPL points to submissions made by KCFN regarding extensive vegetation management activities completed by BC Hydro close to KPL's service area without the need for planned outages. KPL submits that BC Hydro's increased vegetation management activities may not have resulted in increased reliability during the winter storm season and that the reliability of the KPL System and BC Hydro's distribution line are similar. EPL submits that KCFN have not provided an estimate of costs for BC Hydro's vegetation management activities.

<sup>&</sup>lt;sup>53</sup> KCFN Final Argument dated March 8, 2021, pdf. p.15

<sup>&</sup>lt;sup>54</sup> Ibid.

<sup>55</sup> Ibid.

<sup>&</sup>lt;sup>56</sup> KPL Final Argument, March 1, 2021, pdf p.12

<sup>57</sup> Ihid

<sup>&</sup>lt;sup>58</sup> KPL Final Argument, March 1, 2021, pdf p.12

<sup>&</sup>lt;sup>59</sup> KPL Final Argument dated March 1, 2021, pdf p.13.

<sup>60</sup> Ibid.

<sup>61</sup> Ibid.

<sup>&</sup>lt;sup>62</sup> Ibid.

<sup>&</sup>lt;sup>63</sup> Exhibit C2-4, p. 2.

<sup>&</sup>lt;sup>64</sup> KPL Final Argument dated March 1, 2021, pdf p.13.

<sup>65</sup> Ibid., pdf p.14.

<sup>&</sup>lt;sup>66</sup> KPL Final Argument dated March 1, 2021, pdf p.13.

KPL submits that KCFN has not provided any evidence that increased vegetation management will result in a reduction in outages, except that bucket trucks could be used for clearing vegetation without the need for deenergizing the KPL System.<sup>67</sup> KPL notes that KCFN has not provided an estimate of costs for this approach to vegetation management.<sup>68</sup>

#### Panel Determination

While KPL has taken steps to implement its Maintenance Plan, the issue of vegetation management continues to be contentious and KCFN continues to voice concerns that KPL's vegetation management is deficient. KPL agrees that a Certified Utility Arborist should patrol the line annually and prioritize any urgent work prior to KPL undertaking vegetation management work.

The Panel finds that annual patrols by a certified arborist are required for reliability and safety. **Therefore, we** direct KPL to retain a utility arborist to patrol the line annually to identify and remediate urgent vegetation work.

The Panel further directs KPL to provide as part of its annual report, a summary of vegetation management work that was completed in the previous fiscal year signed off by a Certified Utility Arborist.

## 5.2 Maintenance of the KPL System

As discussed in Section 2.0 of this Decision, numerous maintenance issues on the KPL system were identified in submissions by KCFN and KPL in the Complaint and this Proceeding. In response to BCUC directives prior to this Proceeding, KPL submitted its System Stabilization Plan, which included a technical assessment of the KPL system, identification of risks to the safe and stable operation of KPL's system, action items to address identified risks, and a time frame to complete a full safety and condition assessment report of the KPL system overseen by a qualified engineer.<sup>69</sup>

As stated in Section 3.0 of this Decision above, by Order G-261-20 dated October 19, 2020, KPL was directed to provide, among other things:

- 1. a Maintenance Plan identifying all outstanding maintenance work on the KPL system, and a completion report for priority 1 action items identified in the Maintenance Plan;<sup>70</sup>
- 2. a detailed scope and timeframe for a full safety and condition assessment report (Condition Assessment Report); 71 and
- 3. a review of its maintenance and safety management procedures, conducted under the guidance of a qualified professional engineer (Safety Management Plan).<sup>72</sup>

## Maintenance Plan

<sup>&</sup>lt;sup>67</sup> Ibid.

<sup>&</sup>lt;sup>68</sup> KPL Final Argument dated March 1, 2021, pdf pp.13-14.

<sup>&</sup>lt;sup>69</sup> Exhibit A2-6, pp.4—10.

<sup>&</sup>lt;sup>70</sup> BCUC Order G-261-20 directives 3, 4, as amended by Order G-309-20 directives 3, 4.

<sup>&</sup>lt;sup>71</sup> BCUC Order G-261-20 directive 5, as amended by Order G-309-20 directive 5.

<sup>&</sup>lt;sup>72</sup> BCUC Order G-261-20 directive 6, as amended by Order G-309-20 directive 6.

KPL provided its Maintenance Plan prepared by Primary Engineering and Construction (Primary Engineering) on December 9, 2020, based on visual inspection of the KPL System. The Maintenance Plan identified 111 outstanding deficiencies on the KPL System but concluded that the line is in satisfactory condition given that it is remotely located and serving a few customers.<sup>73</sup> Submarine cables were visually inspected where possible and no deficiencies were found, as all exposed submarine cables were determined to be armoured.<sup>74</sup> Primary Engineering recommended that maintenance work be prioritized based on high (priority 1), medium (priority 2), or low (priority 3), with remedial actions recommended within 30 days, 6 months, and 12 months, respectively. Recommended remedial actions included replacement of insulators, conductor ties, incorrect conductor splices and tensioning of guy wires, and mitigation of identified ground clearance and phase to neutral clearance issues.<sup>75</sup>

KPL provided a completion report by Primary Engineering dated February 22, 2021, which verified that 35 out of 36 deficiencies identified as priority 1 items in the Maintenance Plan had been remediated and inspected for completion under the supervision of a qualified Professional Engineer. The outstanding deficiency pertained to the GOLB switch S3 as discussed in Section 5.3 of this decision.

By Order G-212-21 dated July 9, 2021, the BCUC directed KPL to provide a report, approved by a professional engineer, demonstrating the completion of priority 2 and 3 items identified in the maintenance.<sup>77</sup> On October 1, 2021, KPL submitted a report prepared by Primary Engineering, demonstrating that remediation of 75 of 80 identified priority 2 items and 7 of 13 priority 3 items from the Maintenance Plan had been completed and reviewed by a qualified professional engineer.<sup>78</sup> KPL submits that all of the remaining priority 2 and 3 items were completed as of November 8, 2021, with the exception of 4 guy wires on the KCFN system which are under the maintenance of KCFN and not KPL.<sup>79</sup>

#### **Condition Assessment Report**

On April 1, 2021, KPL submitted its Condition Assessment Report, pursuant to directive 5 of BCUC Order G-309-20. The report, prepared by Greg Sunell Consulting, reviewed risks to system operation including the overhead powerline and submarine cable. No recommendations were made for further system maintenance work or changes to KPL's maintenance procedures. The report noted that KPL had engaged Primary Engineering to provide oversight to its powerline maintenance, and that KPL continues to address all maintenance deficiencies in a timely manner. The report further recommended that KPL prepare a conceptual cost of supply and installation for redundant submarine cables between Fair Harbour and Chamiss Bay, noting the total cost is believed to exceed \$700,000.

#### Safety Management Plan

<sup>&</sup>lt;sup>73</sup> Exhibit D-16, Appendix 3B, pp.1—2.

<sup>&</sup>lt;sup>74</sup> Exhibit D-48, KPL Response to BCUC Panel IR No. 1 1.1.1.

<sup>&</sup>lt;sup>75</sup> Exhibit D-16, Appendix 3B, pp.1—2.

<sup>&</sup>lt;sup>76</sup> Exhibit D-27, p.2—3.

<sup>&</sup>lt;sup>77</sup> BCUC Order G-212-21 directive 3.

<sup>&</sup>lt;sup>78</sup> Exhibit D-43, p.3.

<sup>&</sup>lt;sup>79</sup> Exhibit D-43-1, p.2.

<sup>&</sup>lt;sup>80</sup> Exhibit D-32, p.16.

<sup>&</sup>lt;sup>81</sup> Ibid., pp.13,17.

KPL submitted a report containing a review of its safety management procedures under the guidance of a professional engineer, Greg Sunell. In the review, it was noted that Greg Sunell would provide ongoing operational management functions for the KPL System. KPL determined that the continuation of its current electrical contractors for maintenance work was appropriate and cost effective. In the absence of TSBC oversight, KPL has engaged Primary Engineering to inspect the KPL System and intends for Primary Engineering to be on-site in Kyuquot for maintenance activities at least once every 12 months. 82

#### KCFN Position

KCFN submits that KPL's Condition Assessment Report did not adequately address issues identified in the System Stabilization Plan. In KCFN's view, the KPL System still presents unreasonable safety risks to the public and contractors working on the system,<sup>83</sup> and KPL has identified ongoing safety concerns which persist, including with submarine cables and ground clearances between poles.<sup>84</sup>

The report by T E Burns, submitted by KCFN, states: "As can be seen in the attached pictures the submarine cable in the foreshore of Walters Cove on the Houpsitas Village side is exposed. This presents a public safety hazard as well as a network security situation in that the cable is accessible to the public and exposed to potential damage from logs or boats".

The report goes on to state:

At minimum the foreshore portion of the cable should be armoured with bags of ready mix cement. There is also a concern that there is not a submarine ROW for where the cable traverses Walters Cove between Houpsitas and Walters Island, (See attached iMapBC for Walters Cove). If the iMapBC information is in error, KPL should have a record of this ROW available for the BCUC to review. 85

KCFN believes that this wasn't fully addressed because there was no specific discussion on submarine cables in KPL's Condition Assessment Report. KCFN states that KPL must be required to demonstrate it has fully remedied issues that qualified engineers have identified, including an independent review of overhead powerline clearances<sup>86</sup>, and that any issues not fully remediated should be reviewed and addressed directly by a qualified professional.<sup>87</sup>

In KCFN's submission, the BCUC should require KPL to engage qualified professional engineers to provide oversight, address outstanding issues, plan for required system changes, and ensure the safety of the KPL System. KCFN requests that KPL be required to engage independent professionals, and regularly submit maintenance reports from qualified professionals, under seal where appropriate. <sup>88</sup> In KCFN's submission compliance criteria and expert evidence should not be left to the regulated entity to interpret, and KCFN and the BCUC must have the ability to review information directly from the relevant professionals in order to rely on that professional's opinion. <sup>89</sup>

<sup>&</sup>lt;sup>82</sup> Exhibit D-20, p.3-4.

<sup>83</sup> KCFN Final Argument dated July 28, 2022, p.4.

<sup>&</sup>lt;sup>84</sup> Ibid., p.1.

<sup>85</sup> Exhibit C2-24, p. 4.

<sup>&</sup>lt;sup>86</sup> KCFN Final Argument dated July 28, 2022, pp.2—3

<sup>87</sup> Ibid., p.3

<sup>&</sup>lt;sup>88</sup> Ibid., 2022, p.2

<sup>&</sup>lt;sup>89</sup> Ibid., p.3

KCFN further notes that KPL has not provided evidence that a professional engineer is engaged in monitoring the system at this time, as the party previously indicated to be providing safety oversight has not maintained a professional license and is inactive as of June 2022. 6 KCFN submits that KPL must retain qualified professionals to liaise with KCFN, as KPL has indicated it would benefit from improved information sharing with KCFN.

#### **KPL** Position

KPL submits that it has complied with all maintenance directives during the course of the Proceeding and continues to provide safe and reliable electrical service. Work on the KPL system is performed by TSBC-approved field service representatives, with system maintenance inspections completed at regular intervals, including prior to re-energization after an outage. KPL submits that its electrical system was designed to meet the Canadian Electrical Code and CSA standards, where applicable, and that the system was inspected and approved by TSBC prior to energization.

Regarding the submarine cable, KPL states "There were locations with exposed submarine cables, however, these were not deemed to be an issue per the Canadian Electrical Code due to the armored construction of the cables."95

KPL submits that all low clearance spans identified in the Condition Assessment Report had been remedied by raising the neutral conductor or primary and neutral conductors where needed, and that clearance mitigation was completed in compliance with the Canadian Electrical Code.<sup>96</sup>

KPL notes that it may be possible to further improve the reliability of the KPL System but given its location in a remote and rugged area, improvements are costly and may not significantly improve reliability. Further, KPL is sensitive to the need to keep the rates of electricity as low as possible to avoid causing economic hardship to its customers and avoid losing ratepayers.<sup>97</sup>

KPL also submits that subject to the recommendations that will emanate from the BCUC Inquiry into the Regulation of Safety it is not clear who the "day to day" safety regulator of the KPL System is going to be and has requested guidance from the BCUC on this point.<sup>98</sup>

#### Panel Determination

The Panel is satisfied with the Condition Assessment Report and the work done by KPL to date. However, in order to ensure ongoing compliance, KPL is directed to provide to the BCUC, and to KCFN, results of system inspection, on an annual basis, reviewed by a qualified professional. Completed remediation work should be reviewed and signed off by a qualified professional, and any remaining outstanding deficiencies should be prioritized for completion as necessary to ensure the safe and reliable operation of the KPL system. A maintenance plan with planned inspection or maintenance intervals should be prepared for any assets not

<sup>&</sup>lt;sup>90</sup> Ibid., p.3

<sup>&</sup>lt;sup>91</sup> Ibid., p.4

<sup>92</sup> KPL Final Argument dated March 1, 2021, p.1-2

<sup>&</sup>lt;sup>93</sup> Ibid., p.4

<sup>94</sup> Exhibit D-48, BCUC Panel IR No. 1.10.2

<sup>95</sup> Ibid., BCUC Panel IR No. 1.1.1

<sup>&</sup>lt;sup>96</sup> Exhibit D-48, BCUC Panel IR No. 1.8, 1.9.1.

<sup>&</sup>lt;sup>97</sup> KPL Final Argument dated March 1, 2021, p.17.

<sup>&</sup>lt;sup>98</sup> Ibid., p.5.

**annually inspected.** (Per KPL's review of safety management procedures, ex D-20, p.3,4, TSBC customarily provided annual inspections, now KPL intends to have Primary Engineering on-site annually.)

Although KCFN is not satisfied that submarine cables are not a safety hazard, KPL has submitted that these have been reviewed. We are satisfied that KPL engineers have reviewed this issue and KPL is responsible for safety of its infrastructure. The Panel is also satisfied with KPL's assessment of the exposed submarine cable as not being in contravention of the Canadian Electrical Code. However, we direct KPL to ensure that its Professional Engineer(s) monitor the condition of the cable and include updated assessments in their Annual Report to the BCUC.

We remind KPL that while public utilities are exempt from the BC Electrical Safety Regulation and TSBC oversight they are responsible to manage their own safety procedures to the satisfaction of the BCUC, as obligated by section 38 of UCA. This includes, as KCFN suggests, "providing evidence that a professional engineer is engaged in monitoring the system at this time." **KPL is directed to provide this evidence within 30 days of the issuance of this Decision.** 

## 5.3 KPL's Fly-over line and KPL's jointly used infrastructure

There are two locations on the KPL System where KCFN and KPL jointly use infrastructure: an approximately 1.5 km section of line within the Crown Corridor where KPL transmits electricity on a KCFN owned conductor; and a section of line referred to as the "fly over line" within Houpsitas where KPL conductors are attached to KCFN owned pole structures, typically by a pole top extension. Several issues arose during the Proceeding regarding these areas of shared infrastructure, including the lack of a joint use agreement and safety issues on the "fly over" line.

#### Joint use agreements

On January 27, 2021, the BCUC directed KPL to complete the remaining priority 1 item identified in its Maintenance Plan, a deficiency related to the GOLB S3 as described above. 99 Subsequently, KCFN filed a submission with the BCUC stating that it had concerns with this directive, which would result in KPL adding locks to GOLB S3 and restrict access to KPL personnel only. In its submission, KCFN highlighted that GOLB S3 is installed on a KCFN owned structure and connected to KCFN owned conductors and that locks restricting access to KPL personnel only should not be applied. KCFN recommended creating the joint operating order and that once signed by both parties, personnel from both KPL and KCFN could be issued keys to GOLB S3. 100

KPL provided its support for development of a joint operating order for GOLB S3, however stated that operation should be limited by way of a "two-key interlock" device requiring both parties to operate the device. 101 KPL noted that when GOLB S3 is opened, the KPL System downstream of GOLB S3 is de-energized. 102 KCFN responded that a two key system would not be acceptable to KCFN. 103

Ultimately, KPL submitted that while it does not agree with KCFN's position with respect to the dual key system, KPL is choosing not to pursue this option and would therefore not require a joint operating order for GOLB S3. KPL also identified that a practical solution would appear to be for KPL and KCFN to enter into a wheeling

<sup>&</sup>lt;sup>99</sup> Exhibit A-15, Order G-29-21, dated January 21, 2021, Directive 2.

<sup>&</sup>lt;sup>100</sup> Exhibit C2-5.

<sup>&</sup>lt;sup>101</sup> Exhibit D-26, p. 2.

<sup>&</sup>lt;sup>102</sup> Ibid.

<sup>&</sup>lt;sup>103</sup> Exhibit C2-6, PDF p. 8.

agreement for the movement of KPL electricity in Crown Corridor over KCFN's infrastructure in this corridor, a distance of approximately 1.5 kilometers. <sup>104</sup>

In a May 2021 submission, KCFN stated that while it does own equipment located on the Crown Corridor for transmitting electricity, it does not receive any compensation from KPL for KPL's transmission over KCFN's conductor equipment.<sup>105</sup>

In June 2021, KCFN submitted a letter to KPL and raised several safety, legal and jurisdictional issues relating to the shared infrastructure. KCFN submitted that it will require KPL to enter into a formal legal agreement with KCFN with respect to KPL's infrastructure, including KPL's 'fly-over line' through the village of Houpsitas and clear terms respecting liability and communication. KCFN stated that it remains concerned about the safety of KPL's fly-over line through Houpsitas and expects KPL to bring its fly-over line to a safety standard acceptable to KCFN's Engineer of Record. KCFN also submitted that KPL is currently distributing power across KCFN's power infrastructure on the Crown Corridor without a legal agreement with KCFN or a legal tenure from the Province of BC and that it expects KPL to develop a plan to install its own conductor to transmit power through the Crown Corridor to downstream customers.<sup>106</sup>

In response to this filing, KPL stated that given KCFN's long-term plans and the certainty KPL requires for long term operation of the KPL System, KPL believes the optimal solution is the separation of the two systems. KPL stated that it expects to file an application with the BCUC for a certificate of public convenience and necessity for the work required to affect this separation (e.g. the placement of KPL poles and lines in the Crown Corridor and a power-line/submarine cable extension that would replace the flyover on KCFN Treaty Lands). KPL stated that this extension would not be on Treaty Lands and that in the interim, KPL would seek to negotiate a limited term agreement with KCFN for the continued movement of electricity in the Crown Corridor and Treaty Lands in the vicinity of Houpsitas. KPL stated that as an alternative to the significant capital investment required to separate the two electrical systems, KPL is prepared to sell the KPL System to KCFN.<sup>107</sup>

Following submissions from KPL and KCFN on whether the BCUC has jurisdiction on Treaty Land, the Panel found that the UCA applies on Maa-Nulth First Nation Lands within the area covered by the MFA. At that time, the Panel also found that KCFN met the definition of a public utility as defined in Section 1(1) of the UCA, 109 and directed KPL and KCFN to negotiate an agreement concerning the joint use of the facilities within the Crown Corridor. However, after receiving further evidence, the BCUC subsequently found that KCFN does not operate as a public utility and rescinded this directive. The BCUC emphasized the importance of a joint-use agreement to ensure safe and reliable operation of shared infrastructure, but indicated that given that KCFN is not a public utility under the UCA, the BCUC does not have jurisdiction to direct KCFN to negotiate such an agreement. The BCUC stated that regardless of whether KPL negotiates a joint-use agreement with KCFN, it is

<sup>&</sup>lt;sup>104</sup> Exhibit D-36, p. 2.

<sup>&</sup>lt;sup>105</sup> Exhibit C2-11, p. 2

<sup>&</sup>lt;sup>106</sup> Exhibit C2-13, p. 2

<sup>&</sup>lt;sup>107</sup> Exhibit D-38, pp. 3-4

<sup>&</sup>lt;sup>108</sup> Exhibit A-24, Reasons for Decision accompanying G-368-21, p. 7.

<sup>&</sup>lt;sup>109</sup> Exhibit A-24, Reasons for Decision accompanying G-368-21, p. 8, directive 1.

<sup>&</sup>lt;sup>110</sup> Exhibit A-24, Reasons for Decision accompanying G-368-21, p. 11, directive 2.

<sup>&</sup>lt;sup>111</sup> Reasons for Decision accompanying Order G-157-22, p. 5.

<sup>&</sup>lt;sup>112</sup> Ibid.

incumbent on KPL to ensure the safety and reliability of its system for all users of that system including KCFN and its residents. 113

By Order G-177-22, dated June 29, 2022, the Panel directed KPL to negotiate an agreement with KCFN regarding the use of KCFN facilities within the Crown Corridor or otherwise on KCFN-owned structures or land, and to file the agreement with the BCUC within 6 months. If KPL is unable to negotiate an agreement, the Panel directed KPL to submit a plan to the BCUC explaining how KPL intends to access land and KPL equipment to perform necessary maintenance activities and ensure the ongoing safe and reliable operation of its system.<sup>114</sup>

#### KPL's fly-over line

As noted above, KCFN also raised safety issues with respect to KPL's fly-over line.

KCFN states that the fly-over line runs across nine KCFN pole structures within Houpsitas. KCFN states that the fly-over line was constructed using standard 7' cross arms and pole top pin insulators, however, states that this application of cross-arms for pole top extensions is used in the utility industry for emergency storm repair situations and is not intended for permanent installations. With respect to clearances between conductors, KCFN states that although these structures exceed the minimum requirement of 0.4 m, the current configuration does not allow for safe operational clearances. KCFN references that BC Hydro engineering standard ES 43 requires a minimum of 2.0 meters vertical distance between different circuits on the same structure to allow for safe working clearances. KCFN states that the lack of adequate vertical clearance is an impediment to KCFN line crews working on the structures with the KPL circuit energized overhead and that the crews either need to coordinate an outage with KPL or pursue other options to get the work completed. KCFN also states its concerns with respect to high bending moments on certain poles and the condition of the pole tops. <sup>115</sup>

KCFN and KPL agree that KPL is responsible for the maintenance of the fly-over line. 116

KPL stated that its engineering consultant, Primary Engineering, inspected the fly-over line in Houpsitas when preparing the Maintenance Plan and found no deficiencies except for some guy wires with low tension on the poles supporting the fly-over line. KPL stated that based on advice from KPL that KCFN was responsible for the maintenance of the guy wires, Primary Engineering did not include any deficiencies for the fly-over line and cable termination pole in the list contained in the System Maintenance Plan. 117

#### KCFN Position

In its March 8, 2021 final argument, KCFN submitted that there remain significant jurisdictional issues yet to be addressed regarding KPL using KCFN powerlines for the purpose of transmitting electricity through to downstream customers.<sup>118</sup>

In its July 28, 2021 final argument, KCFN submits that ongoing safety concerns persist with the fly-over line in Houpsitas. 119

<sup>113</sup> Ibid.

<sup>&</sup>lt;sup>114</sup> Order G-177-22, dated June 29, 2022.

<sup>&</sup>lt;sup>115</sup> Exhibit C2-14, PDF pp. 5-6.

<sup>&</sup>lt;sup>116</sup> Ibid., p. 2. Exhibit D-42, p. 1.

<sup>&</sup>lt;sup>117</sup> Exhibit D-48, Response to Panel IR 1.1.1.

<sup>&</sup>lt;sup>118</sup> KCFN Final Argument, Dated March 8, 2021, PDF p. 20.

<sup>&</sup>lt;sup>119</sup> Ibid., Dated July 28, 2022, p. 1.

#### **KPL** Position

In its March 1, 2021 Final Argument, KPL acknowledged that there is a need to formalize a joint pole use agreement with KCFN and indicated its willingness to do this. 120

#### Panel Determination

The Panel has addressed the issue of facilities on KCFN lands and the need for cooperation between the parties earlier in the Proceeding. As per Order G-177-22, the Panel directed a Joint Use Agreement regarding use of KCFN facilities within the Crown Corridor and on KCFN owned structures or within KCFN lands to provide assurances to both parties with respect to the use, operations and maintenance of KPL's infrastructure. Further to Order G-177-22, in the event that KPL is unable to negotiate an agreement, the Panel directs KPL to provide a plan setting out how KPL intends to access lands and KPL equipment as necessary to perform maintenance activities and ensure the ongoing safe and reliable operation of its system no later than January 31, 2023.

With respect to KCFN's concerns regarding the fly-over line, the Panel finds that KPL's engineering consultant, Primary Engineering, did not identify any deficiencies aside from those respecting the low-tension guy wires on some of the poles. The Panel finds that BC Hydro's engineering standards are not applicable to KPL's system. Issues related to the poles would be best addressed in a Joint Use Agreement. The Panel therefore encourages KCFN to engage in negotiations with KPL in this regard.

#### 5.4 KPL's System Capacity and Load Management

#### KPL's system capacity and current constraints

Prior to the establishment of this Proceeding, KPL identified in its March 30, 2020 System Stabilization Plan that the peak demand of the KPL System had reached 489 kW, which exceeded the maximum demand of 350 kW as allowed by KPL's Electrical Service Agreement with BC Hydro at that time. During the Proceeding, on October 21, 2021, KPL filed a new Electrical Service Agreement with BC Hydro, which increased the maximum allowable demand to 500kVA.

In its Condition Assessment Report filed in April 2021, KPL identified three potential constraints regarding the provision of peak demand: 123

- a) the maximum peak demand that BC Hydro can deliver at the point of interconnection to the KPL System;
- b) the capacity of the KPL System (i.e.: the capacity of KPL's electrical conductors and cables); and
- c) the capacity of the individual transformers and service connections from the KPL System to its customers.

KPL notes that the capacity of the KPL electrical conductors and cables exceeds 1000kW and that the capacity of the individual KPL transformers and service connections exceeds current needs and can be increased incrementally as required. Therefore, KPL concludes that the current limitation for the KPL System is the

<sup>&</sup>lt;sup>120</sup> Ibid., dated March 1 2021, p. 13.

<sup>121</sup> Exhibit A2-6, p. 6; Exhibit D-3-1, Appendix E.

<sup>&</sup>lt;sup>122</sup> Exhibit D-43, PDF p. 11-12.

<sup>&</sup>lt;sup>123</sup> Exhibit D-32, p. 3.

maximum peak demand that BC Hydro can provide at the point of interconnection, which, as noted above, is 500 kVA.124

## KPL's System Peak Demand and Energy Consumption

In its April 2021 Condition Assessment Report, KPL provided its historical monthly peak demand, as measured by a BC Hydro demand meter at the point of interconnection:

rable in the internal of the i													
Fiscal	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Annual
Year													
11/12	276	276	276	272	297	295	314	297	265	262	244	265	314
12/13	253	253	215	265	287	287	269	292	278	272	272	252	292
13/14	225	246	252	244	292	292	292	269	262	288	239	222	292
14/15	219	222	292	295	259	343	342	330	356	289	212	260	356
15/16	272	238	280	291	331	331	279	279	279	279	241	285	331
16/17	233	259	262	279	279	328	279	325	309	280	241	273	328
17/18	255	237	237	315	328	412	420	324	320	281	241	273	420
18/19	315	266	237	266	349	447	379	379	310	327	317	285	447
19/20	301	269	318	334	423	489	475						489
20/21		303	303	357	375	367	388	399					399

Table 1: KPL Monthly Peak Demand in kW by Fiscal Year. 125

KPL provided its total historical energy consumption for the winter months (November through February) by fiscal year as follows:

Table 2: KPL Energy Consumption (MWh) for Winter Months by Fiscal Year. 126

Fiscal Year	Houpsitas	School	Residential/ Commercial	Total	Peak Ratio	MWh/yr Change	
11/12	429.6	71.8	70.6	571.9	1.67		П
12/13	405.6	71.7	52.4	529.7	1.68	(42.2)	П
13/14	388.2	74.1	67.7	530.0	1.67	0.3	П
14/15	478.8	72.4	76.7	627.9	1.72	97.9	П
15/16	414.6	78.4	56.8	549.8	1.83	(78.1)	П
16/17	418.8	71.4	72.2	562.5	1.77	12.7	П
17/18	496.2	71.0	76.9	644.1	1.98	81.6	П
18/19	456.6	77.5	77.8	611.8	2.22	(32.3)	П
19/20	516.6	70.0	92.9	679.5	2.19	67.7	П
20/21	522.6	71.9	102.9	697.3	1.69	17.8	

Notes

The data for the Fair Harbour account in 19/20 has been adjusted to reconcile metering errors

## **Future Peak Demand**

a) No data is included for Feb 2020 to July 2020 inclusive due to the failure of the BC Hydro meter

b) BC Hydro billing period is approximately from the 15th day of one month to the 15th day of the following month. The month in the table is the start month, e.g. the Jul 15 - Aug 15 period is tabulated under the month of July

<sup>&</sup>lt;sup>124</sup> Ibid., pp. 3, 5.

<sup>&</sup>lt;sup>125</sup> Ibid., p. 4.

<sup>&</sup>lt;sup>126</sup> Exhibit D-32, p. 5.

KPL states that the peak demand could reach the capacity of the KPL System within the foreseeable future. <sup>127</sup> At the time of filing its 2021 Condition Assessment Report, KPL had assumed the maximum peak demand that BC Hydro could deliver at the point of interconnection was 561 kW, however, noted that its application to BC Hydro regarding its new Electrical Service Agreement was pending. <sup>128</sup> Using this assumption, KPL forecasted that the annual peak demand would reach 561 kW within about four years from fiscal 20/21 assuming an annual growth factor of 4% and a onetime increase of 50 kW. <sup>129</sup> As previously noted, subsequent to the April 2021 Condition Assessment Report, KPL filed a new Electrical Service Agreement with BC Hydro, which specified the maximum allowable demand of the KPL System of 500 kVA. <sup>130</sup>

KPL expects that a significant payment to BC Hydro would be required to enable BC Hydro to provide increased peak demand capacity to the KPL System beyond the current 500 kVA limit. KPL states that any payments to BC Hydro and associated upgrade costs of KPL would be funded by KPL ratepayers through increased electricity rates. However, KPL states that given its electricity rates are already much higher than other utilities in British Columbia, particularly for accounts other than the Houpsitas account, the following must be considered prior to KPL committing to the increased investments:<sup>131</sup>

- a) Potential decreases in peak demand due to electricity rate increases. KPL, however, considers that this strategy is likely ineffective for KPL.<sup>132</sup>
- b) Potential for customers to control peak demands and/or the use of new and escalating rates for demand capacity. KPL states, however, that there is very limited potential for it to manage its peak loads by restricting peak demands of customer accounts or through a new tariff structure incorporating new and escalating demand charges. <sup>133</sup>
- c) Potential for utilizing customer generation during the hours of peak demand. KPL identifies that there is potential for KPL to co-ordinate with KCFN regarding use of the KCFN standby generation during periods of expected peak demand. <sup>134</sup>

KPL states that it has a number of feasible alternatives to resolve the supply capacity issue, which may include: 135

- a) Increasing the supply capacity from BC Hydro;
- b) Increasing the self-generation by customers during winter peak demand periods; and
- c) Decreasing the customer winter peak demand loads.

The April 2021 Condition Assessment Report recommends: 136

<sup>&</sup>lt;sup>127</sup> Ibid., p. 8.

<sup>&</sup>lt;sup>128</sup> Ibid., p. 3.

<sup>&</sup>lt;sup>129</sup> Ibid., p. 7.

<sup>&</sup>lt;sup>130</sup> Exhibit D-43, PDF p. 11-12.

<sup>&</sup>lt;sup>131</sup> Exhibit D-32, p. 8.

<sup>&</sup>lt;sup>132</sup> Ibid., p. 8.

<sup>&</sup>lt;sup>133</sup> Exhibit D-32, p. 8.

<sup>&</sup>lt;sup>134</sup> Ibid, p. 9.

<sup>&</sup>lt;sup>135</sup> Ibid, pp. 16-17.

<sup>&</sup>lt;sup>136</sup> Ibid, p. 17.

- KPL should proceed to install enhanced metering at the Houpsitas point of interconnection in order to acquire peak demand data for Houpsitas.
- KPL should endeavour to engage KCFN to provide any available information regarding the new facilities, construction activities and increases in electrical consumption within Houpsitas during the winter months of 2018/2019 and 2019/2020. The information needs to be summarized and collated in order to provide potential reasons for the marked increase in peak demand during these historical periods.
- KPL should endeavour to engage KCFN to provide any available information regarding planned new
  housing and community facilities as well as plans with regard to new conversions to electric heating
  within Houpsitas.
- KPL should endeavour to engage KCFN regarding any planning for new self-generation within Houpsitas and to investigate the opportunity and financial viability of KCFN operating its standby diesel generation, if necessary, to limit the peak electrical demand on the KPL System.
- KPL should conduct enquiries to determine a conceptual cost of BC Hydro providing additional peak capacity at the KPL point of interconnection. These enquiries should commence promptly after BC Hydro confirms the existing capacity at the KPL point of interconnection.

#### KCFN Position

KCFN has identified in this Proceeding that it is developing long-term plans for community expansion and development on its Treaty Lands.<sup>137</sup> KCFN has concerns about upcoming load exceedances on the KPL System, which may lead to service disruptions and other problems.<sup>138</sup> KCFN urgently requests that the BCUC take an active role in working with KCFN, and all other KPL customers, to develop a means of monitoring and managing load growth on the KPL System. This includes requiring KPL to retain a qualified professional engineer to jointly review information with qualified professional engineers representing KCFN and BC Hydro and could also potentially extend to information sharing with representatives from School District 84 and the Strathcona Regional District.<sup>139</sup>

## **KPL Position**

In its March 2021 final and reply arguments, KPL reiterated the need to install a peak demand meter at the point of interconnection between the KPL and KCFN systems. <sup>140</sup>

## **Panel Determination**

It is apparent that KPL's peak demand is very close to its maximum allowable demand limit set out in its electric service agreement with BC Hydro. The winter load has grown from 571.9 MWh in 2012 to 697.3 MWh in 2022, while the monthly peak load since 2017/18 ranges from 399 kW to 489 kW. While during the Proceeding, KPL filed an agreement with BC Hydro to increase the maximum demand from 350 to 500kVA, this is already close to exceeding the maximum allowed by BC Hydro,

Within one year from the date of the issuance of this order, KPL is directed to file, pursuant to s. 44.1 of the *UCA*, a long term resource plan including a 10 year load forecast and plan setting out how it will meet the forecasted load that supports KCFN's community aspirations.

<sup>&</sup>lt;sup>137</sup> Exhibit C2-13, p. 2.

<sup>&</sup>lt;sup>138</sup> KCFN Final Argument, dated July 28, 2022, p. 2.

<sup>&</sup>lt;sup>139</sup> KCFN Final Argument, dated July 28, 2022, p. 4.

<sup>&</sup>lt;sup>140</sup> KPL Final Argument, dated March 1, 2021, p. 9; KPL Reply Argument, dated March 15, 2021, p. 3.

KPL is further directed to provide an update on the status of the recommendations made in the April 2021 Condition Assessment Report no later than January 31, 2023.

In order to facilitate planning, KPL is encouraged to work with BC Hydro to understand the feasibility of increasing the allowable demand, and include the outcome of such discussions in its 10 year load forecast and plan.

## 6.0 Overall Panel Determination

KCFN's Complaint has resulted in KPL improving its vegetation and maintenance practices by undertaking inspections, identifying priorities and implementing an overall plan for ongoing system maintenance. Recognizing the challenges of servicing a remote community situated in challenging terrain, and the need to balance overall safety and reliability with rate payer impacts, the Panel finds that KPL has addressed the deficiencies identified, and subject to the Panel's directions set out earlier in the Decision and throughout the Proceeding, the Complaint is closed.

The BCUC will continue to monitor the safety and reliability of the KPL System through KPL's regular compliance filings.