Kyuquot Power Ltd.
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By Email

February 22, 2021

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

Kyuquot Power Ltd. ("KPL") – BC Utilities Commission
Order No. G-39-21 – Completion of Priority 1 Items

Please find attached KPL's report, approved by a professional engineer, demonstrating the completion or modification of priority 1 items except dual key access. This matter is further addressed in a separate filing of the same date in relation to KPL's response to intervener written submissions on KPL's compliance filings

The undersigned should be contacted directly, in respect of any questions or clarifications.

Yours truly,

Roshni Reddy
For Tanya L DeAngelis
KYUQUOT POWER LTD.

PRIMARY ENGINEERING & CONSTRUCTION

KPL - KYUQUOT POWER LIMITED

PRIORITY 1 - COMPLETION REPORT
REVISION 0

FEBRUARY 22, 2021

Greg Sunell
Kyuquot Power Limited
1444 Alberni St, Vancouver, BC V6G 2Z4
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Submitted by:
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PRIMARY
ENGINEERING AND CONSTRUCTION

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Priority 1 - Completion Report

Project ID:	HR-2847	**Project Name:**	KPL Line Maintenance Plan
Engineer:	Ben Lee, P. Eng.	**Site Inspection Date:**	February 17-19, 2021
Client:	Kyuquot Power Limited	**Inspectors:**	Shannon Mason & Mathew Cox

Description of existing infrastructure:	Kyuquot Power Ltd. (KPL) owns and operates a 14.4kV single phase distribution utility (44km overhead / 9km submarine cable) originating at Oclucje (near Zeballos) and extending to Fair Harbour, Chamiss Bay and then Houpsitas / Walters Island. KPL commenced operations in May 2006. The utility serves 43 customers, the largest of which is the First Nation at Kyuquot ("KCFN").
Scope of Review:	The purpose of this document is in response to BCUC Order G-39-21 *(dated February 5th, 2021)* action item (4). BCUC has ordered KPL to submit a report, approved by a professional engineer, demonstrating the completion of all priority 1 items *(from the Primary Engineering maintenance plan submitted November 30th, 2020)* by February 22nd.
Definitions	**High (1)** – Remedial actions required within 30 days of initial report. Primary Engineering have identified this item as a crucial safety hazard that does not meet current standards. Some items requiring design input have been assigned temporary risk-mitigation actions which once completed will lower the priority level to medium. The temporary risk mitigation items lower the risk of human interference with the infrastructure, however, does not eliminate the deficiency.
Completion Summary	Primary Engineering conducted a site inspection to inspect deficiency items completed for Priority 1 tasks. There was a total of 36 High Priorities, with 35 out of 36 completed to date. Remedial actions for pole hardware included (but not limited to) replacement of insulators, conductor ties, incorrect conductor splices and tensioning of guy wires. Upon further investigation by lines crews, and in conjunction with Primary Engineering, some of the assets were deemed to be in serviceable condition and as such were not replaced *(see items on structures 321 and 519)*. Potential ground clearance and phase to neutral clearance issues which were identified during initial site inspection have now had further investigation and can

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	move toward final design in the next three months. Signage has been installed at all of these locations, which due to the limited human accessibility to these areas, reduces the priority level to medium (2). Deficiency item on structure 488 is not complete. The GOLB switch (S3) locking mechanism is under review by BCUC, KPL and KCFN and as such is still an outstanding item on this report. Deficiency item on structure 521 has been re-classified. The large trees on Walter's Island form part of a crucial wind break which dissipates strong winds before hitting residential homes and KPL infrastructure on the inland side of the island. Further investigation on site by Primary Engineering has identified an alternative solution be developed, being an upgrade to Structure 521 to incorporate two alley-arm style cross-arms to ensure primary and neutral conductors have sufficient clearance to the tree. This work will be completed when the low clearance items are completed over the next few months. Signage has been installed on adjacent poles and priority level has been reduced to a medium (2).

Shannon Mason,
Sr. Tech. – Site Inspector

Ben Lee, P. Eng. –
Professional of Record

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Appendix A

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KPL Line Maintenance Plan				
Pole #	**Priority**	**Immediate Remedial Action**	**Addy Power Completion**	**Final Completion Inspection by Primary**
1	1	Install new lock and ensure it is not left unlocked.	Fixed locking mechanism & installed lock.	Accepted.
13	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
21	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
38	1	Replace neutral spool insulator.	Replaced neutral spool	Accepted.
130	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
141	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
154	1	Re-conductor as required with full-tension compression sleeves.	Replaced connections with proper sleeves	Accepted.
210	1	Re-label pole number. Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
254	1	Install new guy and anchor.	Installed new screw anchor & guy wire	Accepted.
270	1	Replace primary pin assembly.	Replaced bent angle pin	Accepted.
271	1	Remove tree branch. Re-label pole number. Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Removed branch from neutral. Signage installed.	Accepted.
321	1	Re-tension guy wire appropriately. Reconductor primary as required.	Tightened guy wire. Conductor not damaged as per note - old flagging on the conductor only. Repaired primary	Accepted. Conductor appears to be in tact.
353	1	Re-conductor primary as required with correct compression sleeves.	Installed proper tension sleeves	Accepted.
368	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
390	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
429	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
430	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
431	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
433	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
435	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Replaced broken neutral tie. Signage installed.	Accepted.
447	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
451	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
464	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
466	1	Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Signage installed.	Accepted.
488	1	KPL to add locks restricting to KPL personell only	Not completed.	Ongoing issue being dealt with between engineers, KPL, KCFN and BCUC.
505	1	Replace primary tie.	Replaced primary tie	Accepted.
509	1	Re-conductor as required with full-tension compression sleeves. Replace primary pin.	Installed proper tension sleeves	Accepted.
512	1	Re-conductor as required with full-tension compression sleeves. Re-label pole	Installed proper tension sleeves	Accepted. Note: New cutout installed along with new poly covered primary conductor and neutral conductor.
513	1	Re-conductor as required with full-tension compression sleeves. Re-label pole	Installed proper tension sleeves	Accepted.
514	1	Re-tie primary conductor to pin.	Install new primary ties;	Accepted.
515	1	Clean or replace primary pin. Reconductor neutral. Re-label pole.	Cleaned insulators; Repaired neutral	Accepted.
516	1	Re-conductor as required with full-tension compression sleeves.	Installed proper tension sleeves; relocated neutral clevis so neutral not on pole	Accepted.
517	1	Replace neutral tie. Re-conductor as required with full-tension compression sleeves. Replace primary pin assembly.	Installed proper tension sleeves; Replaced pole top angle pin	Accepted.
519	1	Replace primary pin assembly. Re-conductor as required with full-tension compression sleeves.	Repaired neutral; straightened pin only - pin okay.	Accepted.

KPL Line Maintenance Plan				
Pole #	**Priority**	**Immediate Remedial Action**	**Addy Power Completion**	**Final Completion Inspection by Primary**
521	1	Remove tree completely. Temporary signage to be installed on adjacent poles indicating low clearance. Ground clearance and potential remedial action to be determined.	Not completed due to possible wind break issues. Signage installed.	Upon further investigation, the large trees on Walter's Island are deemed to form part of a major wind break for residents on the island. Strong winds existed during site visit and the trees definitely provide a wind break. Removal of tree may cause more problems for residents and KPL's infrastructure. Design effort has been conducted on February 18th 2021 and proves the clearance issues could be mitigated by installation of alley arms on Structure 21. This can be completed as part of the future maintenance plan.
Lot 1607	1	Remove vine from pole. Remove secondary cables.	Removed vine. Removed secondary cables.	Accepted.

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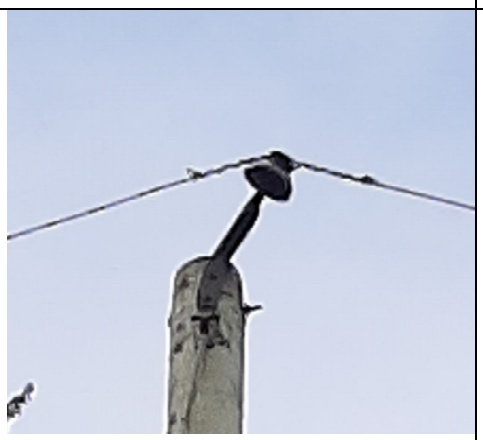
Appendix B
(examples of completed work)

Priority	Deficiency type	First inspection photo	Final inspection photo
1	Potential low ground clearance. Temporary solution – signage.		
1	Incorrect conductor connectors.		
1	Primary sky pin bent.		

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1	Primary conductor tie broken.		
1	Guy wire missing/broken.		