

This is the 1st affidavit of M. Potyok in this case and was made on March 13, 2018

No. S174308 Vancouver Registry

IN THE SUPREME COURT OF BRITISH COLUMBIA

BETWEEN:

INDUSTRIAL ALLIANCE INSURANCE AND FINANCIAL SERVICES INC.

PLAINTIFF

AND:

WEDGEMOUNT POWER LIMITED PARTNERSHIP
WEDGEMOUNT POWER (GP) INC.,
WEDGEMOUNT POWER INC.
THE EHRHARDT 2011 FAMILY TRUST
POINTS WEST HYDRO POWER LIMITED PARTNERSHIP
by its general partner POINTS WEST HYDRO (GP) INC.
CALAVIA HOLDINGS LTD.
SWAHEALY HOLDINGS LIMITED
BRENT ALLAN HARDY
DAVID JOHN EHRHARDT
28165 YUKON INC.
PARADISE INVESTMENT TRUST
SUNNY PARADISE INC.

DEFENDANTS

AFFIDAVIT

- 1. I, Michael Potyok, P.Eng, MBA, of Suite 828 1130 West Pender Street, Vancouver, BC V6E 4A4 SWEAR THAT:
- 2. I am a principal of Midgard Consulting Inc. ("Midgard"). Midgard has been engaged as an engineering consultant by Deloitte Restructuring Inc. ("Deloitte" or the "Receiver"), in its capacity as the court appointed Receiver of Wedgemount Power Limited Partnership ("Wedgemount LP"), Wedgemount Power (GP) Inc. ("Wedgemount GP"), and Wedgemount Power Inc. (collectively, the "Wedgemount Entities") and as such, I have personal knowledge of the facts and matters hereinafter deposed to, save and except where the same are stated to be based on information and belief, and where so stated I verily believe them to be true.

3. I have read the Affidavit of Bruce Chow made January 19, 2018 (the "Chow Affidavit"), the Affidavit of Melinda McKie (the "McKie Affidavit") and the Affidavit of Mr. Chambers (the "Chambers Affidavit") sworn in this matter. I have adopted the capitalized terms used in the McKie Affidavit, unless otherwise defined herein.

Background

- 4. The Wedgemount Entities are the owner and developer of a partly-constructed run-of-river hydro power facility located on Wedgemount Creek, near Whistler, British Columbia (the "**Project**").
- 5. The Project was developed with the intention that it would generate electricity which would then be sold to the British Columbia Hydro and Power Authority ("BCH"). BCH agreed to purchase electricity generated by the Project once it was completed and connected to the BCH electrical grid, a process known as "interconnection".
- 6. Over the course of my 20 year career as a Professional Engineer, I have worked on a number of ventures which were similar to the Project. Prior to the appointment of the Receiver, I was engaged as a sub-consultant of 1169417 Ontario Inc., operating under the trade name of True North Energy, by Industrial Alliance Insurance and Financial Services Inc. ("IA"), the major secured lender to the Project, to act as IA's independent engineer in connection with the Project.

System Impact Study

- 7. In November 2014, BCH issued a System Impact Study (the "SIS Report") which is a step in the process of producing electricity for sale to BCH. The SIS Report provides the interconnection customer, in this case the Wedgemount Entities, an estimate of both the expected costs and expected schedule for the completion of BCH system works required to accept connection between the project and the BCH system. Attached hereto as Exhibit "A" is a copy of the System Impact Study dated November 28, 2014.
- 8. In the SIS Report, the project cost estimate of network upgrades that would be required to interconnect the Project to the BCH system was \$2.8 million.

9. BCH, in the SIS Report, projected that the facility study report for the Project would cost \$374,000, and would be completed in June 2015.

Electricity Purchase Agreement

- 10. Wedgemount LP, by its general partner Wedgemount GP, and BCH entered into an Electricity Purchase Agreement dated March 6, 2015 (the "EPA"). A redacted copy of the EPA is attached as Exhibit "A" to the Chow Affidavit.
- 11. The EPA defines the "Commercial Operation Date" or "COD" as the date on which Wedgemount LP would have satisfied certain conditions necessary to begin selling electricity to BCH. Under the terms of the EPA, COD could occur anytime up to two years after the "Target COD" was set.
- 12. Commencing in September 2016, when little progress on the interconnection process was evident to the lender, I became involved in this interconnection aspect of the Project, initially as IA's independent engineer on the Project and then later as the consultant to the Receiver.
- 13. Throughout my time working on this Project I was aware that there were ongoing discussions about both the Target COD and the COD amongst various parties, including between the Wedgemount Entities and BCH. Essentially, the Wedgemount Entities were wanting written confirmation on the postponement of these dates given that the Target COD initially set out in the EPA was September 30, 2015 and COD could occur anytime up to two years after the "Target COD".
- 14. However, while I understood the desire for certainty about a new Target COD, I was always of the view that the EPA precluded BCH from cancelling the EPA for this Project unilaterally on the basis of expiration of time as it appears it is trying to do now. This view was based in part upon the fact that BCH controlled to a large extent whether or not the Project could meet any dates that were set for the Target COD and COD. In addition, I was aware of a number of issues the Wedgemount Entities had with BCH over the course of the Project which resulted in substantial increases in cost as well as delays to the completion of the Project.

15. On June 22, 2015, BCH provided a letter to IA (the "Comfort Letter") stating that the next report, the Facility Study Report, would be complete by February 2016. This represented an 8 month delay from the date the Facility Study Report was projected to be complete in the SIS Report. The Comfort Letter further stated that the parties would enter into a final interconnection agreement (called a DGIA) by March 2016. Attached hereto as Exhibit "B" is a copy of the Comfort Letter.

Draft Facility Study Report

- 16. The "draft" facilities study report for the Project came out on August 16, 2016 (the "**Draft Report**"). The Draft Report, prepared by the engineering company, Amec Foster Wheeler Americas Ltd. ("**Amec**") on behalf of BCH is attached as Exhibit C of the McKie Affidavit.
- 17. The Draft Report states that the "proposed COD" for the Project is September 29, 2017. The Draft Report further notes that the "proposed COD" could be impacted if construction of the Project is delayed. I took this to be a clear indication that BCH acknowledged that this date did not necessarily represent the "Estimated Interconnection Facilities Completion Date", as defined in the EPA and that therefore, the Target COD did not necessarily remain as September 30, 2015, as was initially set out in the EPA.
- 18. There were a number of issues that arose from the interconnection proposed by the Draft Report, including:
 - a) a missing right of way for existing poles along a section of Highway 99;
 - b) a new requirement that some existing lines be moved underground in what was known as section 2 of the interconnection route;
 - the proposed interconnection route was designed to pass through park land under the control of the Squamish Lillooet Regional District ("SLRD");
 - d) significant increase in costs for the Project;
 - e) doubling of the fees charged for the final version of the Draft Report; and
 - f) a number of delays.

19. Each of the above concerns with the Draft Report are addressed in more detail in the paragraphs that follow in my affidavit.

Missing Section 1 Right of Way

- 20. The Draft Report required the Project to replace all of the poles along a stretch of land adjacent to Highway 99. The Wedgemount Entities discovered, in the late fall of 2016, BCH did not have the legal right of way over land adjacent to the highway where their existing poles stood. This was an historical BCH problem and nothing to do with the Project, but this right of way was necessary to begin the first section of interconnection work (the "Section 1 Missing Right of Way"). It is my understanding that BCH builds distribution voltage (i.e. 25 kV or less) pole lines under the auspices of a permit from the B.C. Ministry of Transportation and Infrastructure ("MOTI") wherein MOTI grants access rights as an adjunct to its right of way. It turned out that in fact, Highway 99 was constructed without a right of way and hence there was no way for MOTI to assign an access right to BCH under a permit. The highway and pole line just existed.
- 21. On January 23, 2017, I attended a meeting at the regional office of the Ministry of Forests, Lands, Natural Resource Operations ("MFLNRO") in Squamish in which it was indicated that the requisite right of way for MOTI, and subsequent permit for Section 1 of the line, would be corrected at the MFLNRO level. In my experience, the resolution of the Section 1 Missing Right of Way necessary for the existing BCH poles and proposed re-build for Section 1, was remarkably quick.

Moving Lines Underground

22. The section which was often referred to as Section 2 is a narrow section of highway, pinned between competing elements including a right of way granted to CN Rail, the Green River, Highway 99 and a BCH high voltage transmission line overhead ("Section 2"). The existing distribution line through this section, which was designed and built by BCH to serve the Soo River power project approximately 20 years ago, was to be rebuilt to enable it to also carry the line for the project interconnection. As currently built, this system is mounted to the cliff side in a manner that does not comply with current BCH or MOTI standards. Through communication with MOTI, I was made aware that the line's placement precluded MOTI work crews from safely

maintaining the highway as scaling the cliff with the distribution line attached was unsafe. MOTI desired to have the transmission system moved away from the cliff.

- 23. The plans contained in the Draft Report required this pre-existing issue with the line installed on the cliff in Section 2 be resolved to current standards. The solution proposed by Amec was to move the lines (existing and new) underground (the "**Underground Relocation**"). Under the Draft Report, this relocation would be at the full cost to the Project.
- 24. In January 2017, Clean Energy Consulting Inc. ("Clean Energy") was engaged by the Wedgemount Entities, in part to design and propose an alternative solution to this Underground Relocation issue. Clean Energy was able to develop an alternative, overhead solution which was ultimately acceptable to both MOTI and BCH engineers, met all applicable safety standards, and cost significantly less than the Underground Relocation which had been proposed in the Draft Report. Attached hereto as **Exhibit "C"** is a copy of a drawing created by Clean Energy showing both the elevation of Section 2 and relocation of the transmission poles. The handwriting on Exhibit "C" is mine.
- 25. In addition to accepting the work around proposed for the Underground Relocation, BCH eventually allowed Clean Energy to assume design responsibility of this Section 2 of the line. I am unaware of another time that BCH granted design responsibility to a non-pre-authorized consultant who did not have access to BCH internal systems. In my view BCH allowed this to take place because it was aware of the delays and problems the Draft Report, including the proposed Underground Relocation, had caused the Project.

Park Lands in the SLRD

26. The Draft Report proposed a route through lands that were zoned for use as a regional park owned by the SLRD (the "SLRD Route"). It was my understanding that BCH could not be granted an exclusive right of way over the park land without a lengthy land application process to change that designation and ultimately BCH was not comfortable allowing this SLRD Route to proceed in any event. As such, the facilities design proposed in the Draft Report by AMEC on BCH's behalf was unachievable. Further solutions were required for BCH to design its system to receive interconnection from the Project and these contributed to delays in the Project.

Significant Increase in Cost

- 27. The Draft Report also included a revised BCH estimate for Network Upgrades required for the Project to connect to the BCH system. The new estimate prepared by AMEC for BCH was \$6.3 million which represented a 225% increase over the previous estimate from the SIS Report (the "BCH Budget Increase").
- 28. The BCH Budget Increase was quite problematic for the Wedgemount Entities. This increase lead to issues for the Wedgemount Entities in terms of the commercial viability of the Project and issues with their lender, IA, with respect to the advances being made on the Project. This contributed to further delays of the Project after the Draft Report was released.
- 29. In an effort to solve some of these BCH Budget Increase problems the Wedgemount Entities engaged two consultants, Clean Energy and DBS Energy Services Inc. ("DBS"), to provide two independent estimates for comparison with the BCH cost estimates. Both estimates were significantly less than the estimate presented in the Draft Report. These estimates were used to assist the Wedgemount Entities in discussions with BCH to identify an achievable path forward. BCH and the project continued to work through solutions to the various challenges presented as a result of the Draft Report. Cost effective technical solutions to these issues were ultimately arrived at with collaborative effort between BCH, Clean Energy and the Wedgemount Entities, but the issues arising from the Draft Report added expense and further delay. Attached hereto as Exhibit "D" are true copies of the estimates provided by Clean Energy and DBS.

Doubling of cost for Final Report

30. The cost to produce the final version of the Draft Report was also increased to \$850,000. This represents a 118% increase in the cost of that report from the estimate in the SIS Report. On January 31, 2017 I received an email (attached as **Exhibit "E"** to this affidavit) from Peter Zell, a consultant on the Project. This email outlines Amec's billing summary on the Project and appears to include 93 different engineers and staff of Amec billing 4397 cumulative hours on the Project. It is notable that at some point during the discussions between the Project, BCH and Amec, both the Amec Project Manager and the BCH Project Manager on this project were replaced by BCH. I interpreted this move to represent acknowledgement from BCH that the development of the Draft Report had not been as efficient as desired.

Delays

- 31. The SIS Report called for a final version of the Facility Study to be completed by June 2015 and the Comfort Letter stated that the final version of the Facility Study would be completed by February of 2016, however the Draft Report was finally issued in August of 2016. A final version of the Facility Study has never been completed.
- 32. The SIS Report called for a COD of March 2016 and the Comfort Letter called for an In Service Date of August 31, 2016, however the Draft Report sets the In Service Date as August 31, 2017, a full year later than the Comfort Letter.
- 33. It is my view that many of these delays are as a result of the complexities of the interconnection including the interaction between BCH, MOTI, MFLNRO, Amec and the Project. The Draft Report contained a level of detail, design and study commensurate with my expectations of a BCH Facilities Study. The delays, however, were exacerbated by the fact that this level of study had been completed much later than originally planned, and yet it still contained plans that were unpalatable to the interconnection customer and fatal flaws which were unacceptable to BCH itself, including the SLRD Route.

Meetings with BCH

- 34. On March 10, 2017, I attended a meeting at BCH offices in Burnaby on behalf of IA, along with Brett Robinson, David Ehrhardt, and Dave Delainey who attended on behalf of Wedgemount LP and Greg Reimer, Frank Lin and Ryan Hefflick who attended on behalf of BCH. The purpose of the March 10, 2017 meeting was to discuss the critical next steps in the construction of the Project. While there was also some discussion in this March 10, 2017 meeting and a request was made for written confirmation of the necessary change to the Target COD and COD in the EPA, my recollection is this issue was not addressed in detail at this meeting and was left more so to a follow-up meeting on March 29, 2017.
- 35. On March 29, 2017, I attended another meeting at the BCH offices in Burnaby. Mr. Robinson and Mr. Ehrhardt also attended for the Wedgemount Entities and Mr. Lin, Mr. Hefflick, Vic Rempel, Russell Dobie and Warren Chow all attended on behalf of BCH (the "March 29 Meeting").

- 36. Attached hereto as **Exhibit** "F" is a copy of an email dated August 24, 2017 from Vic Rempel of BCH to myself attaching the minutes of the March 29 Meeting **Minutes**").
- 37. In the March 29 Meeting I understood that BCH had agreed to fix its costs for Section 1 of interconnection of the Project. I further understood that BCH would agree to meet some fixed timelines for its work, but that there remained concerns about land use permits and the routing concerns raised above, including the SLRD park land problem.
- 38. The minutes of the March 29 Meeting also indicate that subsequent to the March 29 Meeting, on March 31, 2017, Mr. Lin of BCH updated on the "outstanding EPA termination date language change requested by WPLP on March 10, 2017" that he "has followed up with procurement with a commitment to work with WPLP and the lender in order to provide the form of written assurances that are required." I understood this to mean that a formal written extension respect to termination provision of the EPA was in the works and was not a concern. This written extension was not a focus of mine at that time for the reasons discussed in paragraph 14 above.

Events During the Receivership Proceedings

- 39. I did not attend any meetings with BCH between the March 29 Meeting and the start of the Receivership and my engagement as a consultant to the Receiver on May 17 2017. However, I was aware of some challenges still facing interconnection and I reached out to BCH on May 23, 2017 to advise of my appointment as consultant to the Receiver and to begin discussions on the progress of the Project and next steps to address these challenges. Attached hereto as **Exhibit "G"** is a copy of an email dated May 23, 2017 from myself to Ryan Hefflick of BCH.
- 40. On June 6, 2017, I attended with Paul Chambers and Melinda McKie at the BCH office in Burnaby to meet with BCH representatives Mr. Hefflick and Vic Rempel (the "June 6 Meeting") to discuss the Project.
- 41. On June 15, 2017, I attended a meeting (the "June 15 Meeting") to discuss the Project at the BCH offices in Burnaby. The June 15 Meeting was attended by the following individuals:

- a) Mr. Chambers and Ms. McKie on behalf of the Receiver;
- b) Rhonda Roland on behalf of CMJ Project Solutions Inc., retained by the Receiver to assist with permitting matters related to the Project;
- c) Matthew Obee on behalf of Clean Energy Consulting Inc., retained by the Receiver to assist with engineering design related to the Project's distribution line and point of interconnection, and
- d) Mr. Hefflick and Mr. Rempel on behalf of BCH.
- 42. Paragraphs 15-21 of the McKie Affidavit and paragraphs 8 and 9 of the Chambers Affidavit accurately reflect my recollection of what took place at the June 6 Meeting and the June 15 Meeting. However, while I do recall either Mr. Hefflick or Mr. Rempel acknowledging that the Facilities Study remained in draft form, was not finalized and as such changed the interpretation of Target COD as defined in the EPA, I do not specifically recall whether it was in the June 6 Meeting or the June 15 Meeting when this took place.
- 43. This acknowledgment from BCH made sense to me given that BCH controlled to a large extent whether or not the Project could meet any dates that were set for the Target COD and given the deficiencies in the Draft Report.
- 44. Attached hereto as **Exhibit "H"** is a copy of an email dated August 29, 2017 from myself to Vic Rempel attaching a memorandum I prepared detailing my understanding of the remaining steps necessary to complete the interconnection of the Project and achieve COD. In my email, I expressed to Mr. Rempel that I anticipated that once an acceptable interconnection route had been determined and the permitting necessary for the route obtained, that the rest of the process would follow in due course. I did not receive any response to this email or memorandum.

45. If the Project is abandoned, returning the lands to their natural state will require removing substantial concrete structures, removal of a buried penstock, regrading of the entire area, rerouting Wedgemount Creek back to its original path, and planting and seeding the area for regrowth. This work will cost millions of dollars to complete in my high-level estimation.

SWORN BEFORE ME at the City of Vancouver, in the Province of British Columbia, this 13 day of March, 2018.

A Commissioner for Affidavits in and for the Province of British Columbia

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System Impact Study
Wedgemount Power Project

November 28, 2014 File Reference: DGI-DSIS-13.07.01.R1

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This report was prepared by the British Columbia Hydro And Power Authority ("BCH") or, as the case may be, on behalf of BCH by persons or entities including, without limitation, persons or entities who are or were employees, agents, consultants, contractors, subcontractors, professional advisers or representatives of, or to, BCH (individually and collectively, "BCH Personnel").

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EXECUTIVE SUMMARY

Wedgemount Power Limited Partnership, the Interconnection Customer (IC), proposes to develop the Wedgemount Power project to deliver electric energy to BC Hydro (BCH) through the Standing Offer Program (SOP). This project consists of one generating station, located near Whistler in British Columbia.

This report documents the evaluation of the impact of interconnecting the proposed generating facilities to the BCH system and identifies the required system modifications to obtain acceptable performance. The project consists of one unit and is located approximately 1.1 km from BC Hydro's 25 kV feeder RBW 25F61 (the "Project"). The aggregate rating of the Project as specified in the Application is 5.5 MW. The proposed Commercial Operation Date (COD) is March 31, 2016.

To interconnect the Project and its facilities to the BCH Distribution System at the POI, this System Impact Study has identified the following conclusions:

- Distribution feeder upgrades at the Point of Interconnection (POI) are required to connect the Project. Upgrades include the extension of distribution line (approximately 5.5 km) and the addition of distribution cable (approximately 0.8 km), and a new 3 phase recloser.
- Removal of existing 4/0 cable to replace with distribution feeder cable.
- Feeder protection upgrades are required at the Rainbow Substation (RBW). Upgrades include the addition of a set of new 25 kV voltage transformers on the feeder side of the circuit breaker, upgrades of the protective relays and the addition of SCADA.
- Installation of VISTA switchgear, near the POI.
- There are several project specific requirements identified in Section 5 of this report.
- The planning level cost estimate for the Interconnection Network Upgrades required to interconnect the Project to the BCH Distribution System is \$ 2.8 million.
- The Facilities study estimate is \$374 k. No risk analysis has been done at the time of this estimate. There is a high degree of risk and uncertainty, particularly related to Geotechnical issues, Survey, Transmission engineering and extensive Aboriginal/Property costs.
- A full risk analysis will be done as part of the Facilities study and project plan. It should be noted that this distribution circuit is located along a complex section of Highway 99 with various potential complications. This would include traffic routing, design, structural, weather impacts, outage requirements and stakeholder considerations. Also, no allowance for ROW costs have been estimated or included here.
- Due to risk mitigation required for this project, the estimated time for completion for the Facilities study is June 2015.
- The Revenue Metering cost, to be paid separately by Wedgemount Power, is estimated at \$ 40,000.
- The estimated time to construct the Interconnection Facilities, following BC Hydro's receipt of an executed DGIA and the required security and funding, will be determined at the end of the detailed design for the project during the Facilities Study.



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1.0 INTRODUCTION

The project reviewed in this Distribution System Impact Study (DSIS) report is as described in Table 1 below.

Table 1: Summary Project Information

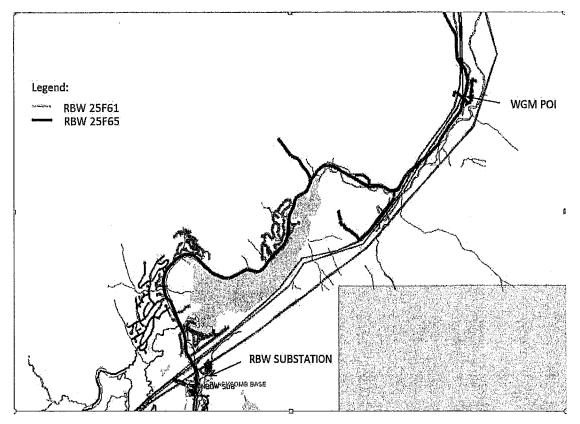
Project Name	Wedgemount Power Project (WGM)		
Interconnection Customer	Wedgemount Power Inc.		
Point of Interconnection Coordinates	Longitude	Latitude	
	50° 10' 55.20" N	122° 52' 31.0" W	
IC Proposed COD	March 31, 2016		
Maximum Power Injection (MVA)	5.5		
Number of Generator Units	1		
Plant Fuel	hydro		

Wedgemount Power Limited Partnership, the Interconnection Customer (IC), proposes to develop the Wedgemount Power project near Whistler, British Columbia to deliver electric energy to BC Hydro (BCH) through the Standing Offer Program. The Project is comprised of one unit within one generating station. The unit is rated at 6.1 MVA, 0.9/0.9 lagging/leading power factor. The units will be stepped-up by a 4.16 / 25 kV, 6.5 MVA transformer, and then connected to 25kV distribution feeder 25F61 approximately 0.3 km from the Project.

Figure 1 shows the connection of the Project to the BCH System. The single-line diagram with the Project can be found in Appendix A. Figure 1 shows the 25 kV circuit 25F61.



Feeder Layout: RBW 25F61 with Wedgemount Power Interconnected



FEEDERS RBW 25F61 and RBW 25F65

2.0 PURPOSE OF STUDY

The purpose of this DSIS is to assess the impact of the interconnection of the proposed project on the BCH System. This study will identify the constraints and Interconnection Facilities required for interconnecting in compliance with BC Hydro's "35 kV and Below Interconnection Requirements for Power Generators" ("DIR") dated May 2010.

3.0 TERMS OF REFERENCE

This study investigates and addresses the voltage and overloading issues of the distribution and transmission networks in the vicinity of Whistler as a result of the proposed interconnection. Topics studied may include equipment thermal loading and rating requirements, system transient stability and voltage stability, transient over-voltages, protection coordination, operating flexibility, and telecom requirements. BCH planning methodology and criteria are used in the studies.

The scope of this DSIS also includes Revenue Metering requirements. The latest version of the BC Hydro Requirements for Remotely Read Load Profile Revenue Metering can be found at bchydro.com (your account - electrical connections - forms & guides - revenue metering requirements).

4.0 ASSUMPTIONS

- a. BC Hydro will have no control over the WGM facilities.
- b. It will be determined at a later date if live line methods (and/or associated live line protection mode) will be required to carry out the work on RBW 25F61.
- c. The IPP Data Concentrator at ING DCP (Data Collection Point) has sufficient capacity to add WGM.
- d. This WGM project will preceed the project of Rainbow Substation PCM Upgrade with VVO Project Phase 6G.
- e. There will be no planned (intentional) islanding of WGM with BCH load.
- f. The WGM entrance transformer was assumed grounded via a grounding reactor ($Xg = 9.4 \Omega$ (1.0 p.u.)).

5.0 SYSTEM STUDIES AND RESULTS

Power flow, short circuit and other studies were carried out to evaluate the impact of the proposed interconnection. Studies were also performed to determine the protection, control and communication requirements and to evaluate possible over-voltage issues.



Project Specific Interconnection Requirements

5.1 General

- a. Voltage dips at the POI can exceed allowable limits when the WGM interconnecting transformer (tag
 # T1) is energized from the high voltage side. Therefore, the inrush current needs to be reduced by:
 - energizing the transformer T1 from the generator side, or
 - using point-on-wave closing of the WGM entrance breaker (25CB1) where the residual flux in the transformer core is accounted for.
- b. WGM shall provide a Power Parameter Information System (PPIS).

Fault levels on feeder RBW 25F61, at the POI with the WGM entrance transformer disconnected, are:

	3-phase (Amp)	Phase to Ground (Amp)
Present Stage	1767	1232
Ultimate Stage	Refer to Table 1 in BCH's "35 kV and Below Interconnection Requirements for Power	
	Generators"	

Geographical locations of the BCH substations referenced in telecommunication sections:

	Street Address	Latitude, Longitude
Ingledow (ING)	12430-88th Av., Surrey	N 49:09:30.8, W 122:52:27.9
Meridian (MDN)	1735 Eagle Mountain Drive, Coquitlam	N 49:18:34.9, W 122:48:23.3

5.2 Protection Requirements

- a. A neutral grounding reactor (NGR) is required to be installed in the High Voltage neutral of the WGM entrance transformer (tag #T1). The ohmic value could be 1.0 to 1.5 times the transformer zero-sequence reactance (1 times is recommended).
- b. Out-of-step protection is to be implemented by WGM since the swing centre is located within the WGM facility.

5.3 Control Planning

WGM will provide the required telemetry (plant MW, MVar, hourly MWh, kV) and status information via a DNP3 RTU for continuous SCADA data reporting to the control centre, in accordance with the "BC Hydro 35 kV and Below Interconnection Requirements for Power Generators" (Interconnection Requirements). The WGM's telemetry and status information will be available to the AREVA FEPs or the FVO satellite data concentrator at the nearest suitable BC Hydro site through a dedicated telephone leased line. WGM will need to ensure that the communications provided meet the performance objectives stated in the Interconnection Requirements.



5.4 Telecommunication Planning

WGM is to provide dial-up communication facilities for real-time continuous, SCADA circuit to a BC Hydro Data Collection Point (DCP) via dedicated telephone leased line to ING substation DCP. WGM will need to ensure that the communications provided meet the performance objectives stated in the Interconnections Requirements.

5.5 Revenue Metering

Revenue class meters approved and sealed by Measurement Canada (MC) shall be installed on the output of the generator. As per federal regulations, the meter should be periodically removed and reverified in a MC authorized laboratory. The CTs and VTs used on the metering scheme shall also be of a model/type approved by Measurement Canada. The IC's remote read load profile revenue metering should be in accordance with the BC Hydro Requirements for Remotely Read Load Profile Revenue Metering. The latest version of this document is published at BC Hydro webpage under Forms and Guides.

The revenue metering responsibilities and charges (IC and BCH) shall be in accordance with Section 10 (10.1 and 10.2). For details about the specific responsibilities, see table on pages.23-25.

Main and backup bi-directional load profile interval meters are required to measure the power received and the power delivered (by BCH to the IC) during each 30 minute time period. The meters will be programmed for 5 minutes interval and will be remotely read each day by BCH/ABSU Enhanced Billing Group using MV-90; the POM shall have a dedicated communications line (landline or wireless BCH approved IP alternative) available for revenue metering use only. If there is digital cell phone coverage for data, BCH will supply the wireless communications. In this case, there will be an incremental cost to to the IC.

The revenue class meters (main and backup) are Measurement Canada (MC) approved and will be supplied and maintained by BC Hydro. The main meter will be leased by BCH to the IC. The revenue class instrument transformers (CTs and VTs units) are supplied by the IC and should be Measurement Canada (MC) approved models.

A 3--element metering scheme with 3 CTs and 3 VTs connected L-N (L-Grd) shall be used. The point of metering (POM) should be located on the BC Hydro side of the power transformer.

Note 1: the tap for the station service transformer must be located on the IC side of the POM so, the revenue metering correctly registers both, the power received and the power delivered to the IC.

In order to power up the main meter auxiliary power supply and the communications equipment, a 15A-120V AC station service shall be provided by the IC to the BCH meter cabinet.

During the planning phase, BCH Revenue Metering department should be contacted to discuss the specifics of the project such as meter cabinet location, secondary cables length, need of JBs, etc. The IC should send drawings to BCH Revenue Metering Department showing the 1-line diagram (SLD) and informing the planned metering scheme, meter cabinet location, CTs and VTs model/maker, connections, location and MC Approval numbers, as well as any other related document.

If the impedance and losses between the POM and the PODR are significant, the meters will be programmed to account for the line and/or transformer losses between the POM and PODR. The PG or its consultant shall provide the line parameters data and the power transformer testing data signed and stamped by a professional engineer.



5.6 Unplanned Islanding

Unplanned Islanding is not approved for this project. Power quality protection will be required at the generating unit to detect abnormal system conditions such as under/over voltage and under/over frequency and subsequently trip the unit. The settings of these protective relays must conform to existing BCH practice for generating plants so that the generator will not trip for normal ranges of voltages and frequencies.

5.6 Other issues

None.

6.0 BC HYDRO SYSTEM UPGRADES

6.1 Upgrades

The proposed Wedgemount Power project is located in a congested area and its interconnection will exacerbate the existing thermal overload under single contingencies in the transmission network. The existing generation shedding remedial action scheme (RAS) in the Bridge River and Cheekye area (Operating Order 7T-14) will be relied on to address the concern.

In order to interconnect the Project to the BCH Distribution System at the POI, this DSIS has identified the following major upgrades and requirements:

6.1.1 Work on feeder RBW 25F61:

- A new overhead line is needed to connect the existing feeder RBW 25F61 to the WGM POI, along with a section of cable. The approximate length of the overhead line is 5.5 km, while that of the cable is 0.8 km. The new overhead line will be 336.4 ASC and will be built by double circuiting feeder RBW 25F65 from the end of the existing feeder RBW 25F61. From the end of the overhead line a cable section will be installed to the WGM POI.
- A new 3-phase recloser is needed to be installed at the point where the new overhead line meets the existing overhead line. The recloser shall have voltage sensing on both the line and the load side.
- Removal of existing 4/0 cable from the TP #4763 and replacement with feeder cable (750 kcm XLPE).
- Installation of a VISTA switchgear in the vicinity of the POI, between BCH and WGM.
- Installation of approximately 0.8 km of feeder cable form M/H #4763 to the VISTA switchgear.

6.1.2 At RBW substation:

 Add a set of new 25 kV voltage transformers (25VT61) on the feeder side of the RBW 25F61 feeder circuit breaker.

6.1.3 Protection Upgrades:

RBW substation:

o **2L1 Protection**

Modify 2L1 PN to include direct tripping of 25CB61 to avoid transient over-voltage, and 25CB61 BF initiation (internal to RBW 25F61 PN), when 2L1 is supplying RBW 25F61.

- o 2L2 Protection
 - Modify 2L2 PN to include direct tripping of 25CB61 to avoid transient over-voltage, and 25CB61 BF initiation (internal to RBW 25F61 PN).
- o T1 Protection

Modify T1 PN to include direct tripping of 25CB61 for anti-islanding, and 25CB61 BF initiation (internal to RBW 25F61 PN), when T1 is supplying RBW 25F61.

- o T2 Protection
 - Modify T2 PN to include direct tripping of 25CB61 for anti-islanding, and 25CB61 BF initiation (internal to RBW 25F61 PN).
- 25B1 Protection
 - Modify 2B1 PN to include direct tripping of 25CB61 to remove IC infeed, 25CB61 BF initiation (internal to RBW 25F61 PN), and blocking 25CB61 A/R, when 25B1 is supplying RBW 25F61.
- 25B2 Protection
 Modify 2B2 PN to include direct tripping of 25CB61 to remove IC infeed, 25CB61 BF initiation

RBW 25F61 feeder

o Remove the existing RBW 25F61 E/M relays

(internal to RBW 25F61 PN), and blocking 25CB61 A/R.

- o Install a new SEL-351S-6 for 25F61 PN
- Modify RBW 25F61 AC connections to include 25VT61 as a 3-phase source and a single phase source from 25kV VT change-over scheme
- Modify RBW 25F61 PN settings to IC standard
- Include all 25CB61 controlled closing to ensure the IC is not closed onto out of synchronism with the BCH system

6.1.4 Control (SCADA) Upgrades:

RBW 25F61:

Currently RBW reports to MDN DCP via RTU285 and S299-T190.

- Provide 25CB61 local/remote Auto-reclose on-off.
- o Provide three-phase kV, Amps, MW, MVar telemetry from RBW 25F61 SEL-351S relay via DTA.
- o Connect new alarms to the station alarm system.
- o Provide remote data access for the new relay via the existing SEL communication processor.

Control Centre:



The IC's telemetry and status will be routed to the ING DCP site. Re-configure the AREVA FEPs or FVO satellite data concentrator, and update the existing database and displays at FVO/SIO to accommodate the new IC. Update the network model to show the new generator.

In association with the Rainbow station work, update the existing database and displays at FVO and SIO to add the new points.

6.1.5 Telecom Requirements

None Required.

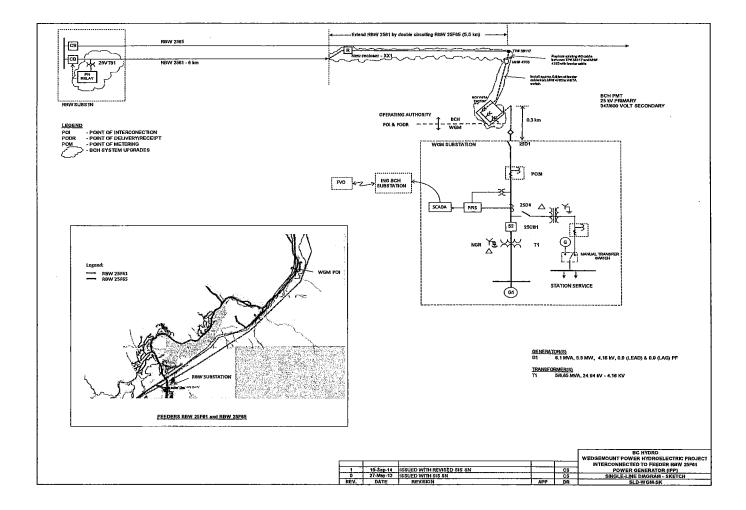
6.2 Cost Estimate and Schedule

The planning level cost estimate for the Interconnection Network Upgrades required to interconnect the proposed project, WGM, to the BC Hydro Distribution System is \$ 2.8 million.

The estimated time In-Service Date of the Interconnection Facilities will be provided after the detailed design for the project is completed during the Facilities Study. A more detailed construction timeline will be provided in the DGIA.



Appendix 1: Single Line Diagram, WGM Project Interconnected to Feeder 25F61



THIS IS EXHIBIT "B" REFERRED TO IN THE AFFIDAVIT OF MICHAEL POTYOK, SWORN BEFORE ME AT VANCOUVER, BG THIS 13 DAY OF March 2018.

A Commissioner for taking Affidavits in British Columbia

COLIN BROUSSON

GOWLING WLG (CANADA) LLP

BARRISTER & SOLICITOR

550 BURRARD STREET - SUITE 2300

BENTALL 5 - VANCOUVER, B.C. V6C 2B5

TELEPHONE: (604) 683-6498

BChydro

BC HYDRO Generator interconnections Edmonds BO3 – 6911 Southpoint Drive Burnaby, BC V3N 4X8

Industrial Alliance Insurance and Financial Services Inc., as lender 1080 Grande Allée Ouest C.P. 1907, Succursale Terminus Québec (Québec) G1K 7M3

Travelers Capital Corporation, as agent Suite 501 – 4180 Lougheed Hwy. Burnaby, British Columbia V5C 6A7

June 22, 2015

Dear Sirs/Mesdames:

Re: Wedgemount Creek 5.4 MW Capacity Run-Of-River hydroelectric facility located near Whistler, British Columbia - Latitude 50 06'36" North and 122 57'00" West (the "Project"): Confirmation of status of Distribution Generator Interconnection Agreement ("DGIA") to be entered into between British Columbia Hydro And Power Authority ("BCH") and Wedgemount Power Limited Partnership ("WPLP")

BCH has been approached by WPLP with respect to the development of the Project and BCH and WPLP have entered into an electricity purchase agreement (standing offer program) ("EPA") made as of March 6, 2015.

We are advised by WPLP that you are considering providing the construction and term financing for the Project.

As part of the interconnection of the Project to enable the flow of electric power from WPLP's Plant (as defined in the EPA) to the Distribution System or Transmission System (as defined in the EPA), BCH prepared a Distribution System Impact Study for the Project on November 28, 2014 (the "Project DIS"). BCH confirms that it is currently conducting a facilities study of the Project (the "Facilities Study").

Subject to implementation of the recommendations put forth in the Project DIS, BCH does not anticipate any concerns or risks to arise in connection with the Facilities Study. The Facilities Study is expected to be available for WPLP to review by the end of February 2016.

Upon completion of the Facilities Study, BCH and WPLP will enter into a DGIA. BCH anticipates the DGIA to be fully executed by BCH and WPLP by the end of March 2016.

BCH understands that it may be beneficial to WPLP for some of the load interconnection steps to be conducted in parallel to the Facilities Study. BCH will commit to discuss this possibility and the Early

BChydro W

Engineering and Procurement Agreement with WPLP as soon as the opportunity arises. In any event, BCH expects that the implementation phase should be finalized for an August 31, 2016 in-service date.

Yours truly,

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

Per:

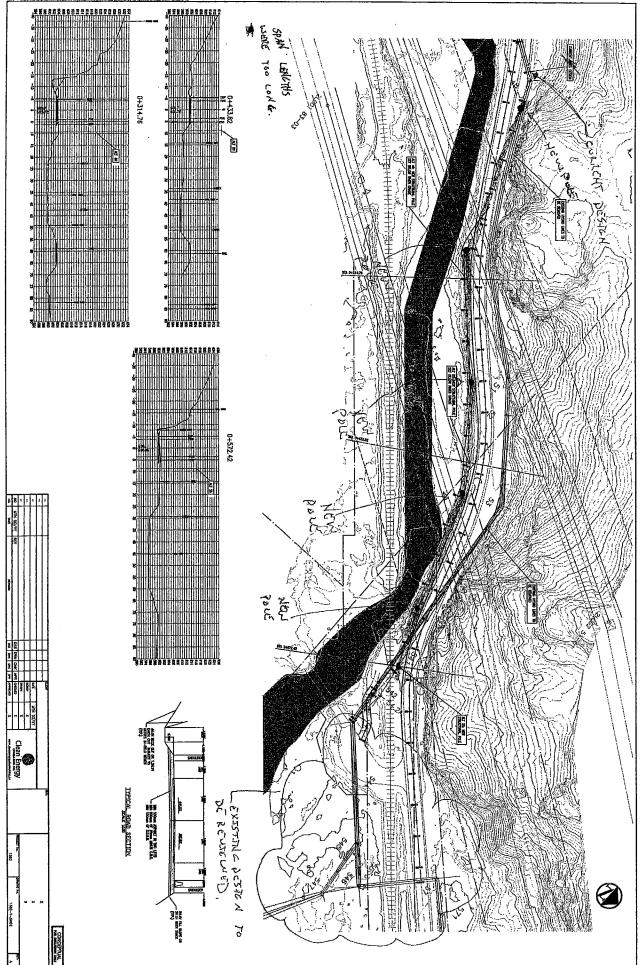
Ryan Hefflick

Manager, Generator Interconnections

THIS IS EXHIBIT "____" REFERRED TO IN THE AFFIDAVIT OF MICHAEL POTYOK, SWORN BEFORE ME AT VANCOUVER, BC THIS 13 DAY OF _______, 2018.

COLIN BROUSSON

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PROJECT No:

1383

DATE:

December-20-16

DOCUMENT No.:

1383-T-9000

REVISION No:

Λ

TO:

David Ehrhardt

FROM:

Matthew Obee, P.Eng

COMPANY:

Col Mac Capital Inc.

EMAIL:

matthew.obee@cleanenergyconsulting.ca

EMAIL:

dehrhardt@telus.net

PROJECT:

Wedgemount Power Project

RE:

WGM Interconnection High Level Cost Estimate/Cost Review

2016-12-20

1 PROJECT BACKGROUND

The Wedgemount Power Project (WGM) is located within the Wedgewoods Subdivision, approximately 15 km north of Whistler, British Columbia on the east side of the Sea to Sky Highway (HWY 99) and is owned by the Wedgemount Power Limited Partnership. The project consists of a 5.35 MW run of river hydro power generation project. The horizontal axis pelton turbine and 5.9 MVA generator unit are installed along with all supporting infrastructure, including intake, penstock, powerhouse, and primary electrical systems. WPLP estimates approximately 2 months of final clean-up and commissioning work is required for the plant to be operational.

The project cannot reach its Commercial Operation Date (COD) until BC Hydro completes the interconnection work for the project. The Interconnection Facilities Study and Project Plan (FS) issued on August 16, 2016 suggests a delay in the completion of this work until August 2017 and provides an updated project cost estimate that has more than doubled from the estimate provided in the System Impact Study (SIS).

2 SCOPE OF WORK

Clean Energy Consulting (CEC) was retained to provide an independent, high level estimate of the interconnection work, as outlined in the draft Feasibility Study and to provide comment on potential areas of improvement or alternatives to current design prepared by BCH and their Service Provider. A particular focus has been placed on the distribution scope of work as this encompasses the vast majority of the costs and complexity of the interconnection scope.

A summary of the interconnection requirements as provided in the draft Facility Study are:

- A new 4.2 km overhead line needs to be built to the existing 25F61 feeder to the WGM POI, along with a section of 1.2 km underground cable.
- At Rainbow substation, one set of voltage transformers will need to be installed. Protection and control equipment for the feeder will need to be upgraded.
- Configurations and programming of associated line, transformer, and bus protection relays will need to be adjusted to accommodate WGM.

 The BC Hydro Fraser Valley Operation Centre will need to reconfigure the existing equipment to accommodate WGM, update network models to include WGM, and add new control, telemetry, and alarm points. A Distribution Operating Order (DOO) will need to be prepared for this project.

CEC completed a high level review of the design of the distribution scope of work as it currently stands and estimated costs for implementation based on continuing with the same basic design as is currently proposed. Areas for further design review and potential alternatives are suggested for further consideration.

Construction costs are based on recent costs from similar installations and high level pricing provided by BC Hydro approved contractors (ROC contractors) familiar with BC Hydro requirements and construction standards. Detailed contractor estimates should be pursued as a next step to firming up actual pricing.

No plus or minus level of accuracy is associated with this cost estimate. It is a good faith estimate based on experience with this type of installation. Further work and design definition are required to provide confidence intervals in accordance with AACE guidelines or those used by BC Hydro.

3 BASIS OF ESTIMATE

3.1 Distribution Scope of Work

A new overhead line is needed to connect the existing feeder 25F61 RBW to the WGM POI, along with a section of underground cable. The approximate length of the overhead line is 4.2 km, while the total underground cable length is 1.2 km over 2 separate cable runs. The new overhead line will be 336.4 ASC and will be built by double circuiting feeder 25F65 RBW and extending 25F61 RBW. From the overhead line, an underground cable is to be installed up to the WGM POI in newly built duct banks inside the Wedgewood Subdivision.

The scope as defined in the facility study:

• Section 1

- Installation of an upgraded overhead line for 3.4 km along Highway 99. Current design has 47 new/replaced structures and 2 decommissioned poles for service feeders.
- Installation of a new 3-phase recloser on a new pole structure north of existing pole #2083072 (existing pole #2083072 is also to be replaced and relocated and transformer added for recloser). The recloser shall have voltage sensing on both sides of the line.

• Section 2

- Installation/replacement of 4 structures along existing alignment for second circuit underbuild and undergrounding.
- Installation of new 230 m duct bank and a new manhole for both circuits 25F65 and 25F61 RB along shoulder of Highway 99 between structures 49/50 to 50/51.
- 350 m of new alignment (current configuration has approximately 150 m double circuit,
 200 m single circuit). New alignment includes a highway crossing, CN rail crossing,
 Green River crossing and approximately 1 ha of clearing and right of way preparation.

• Section 3

Installation of 1 km of 25 kV cable within Wedgewoods Subdivison to POI. For half of
this length, the cable duct is already installed. The other 500 m of cable duct is to be
installed by the subdivision developer and costs shared evenly between the subdivision
development and the IPP project as it will be a joint use duct bank. Costs for this duct





installation are outside of this estimate. Pulling and commissioning cable for the full 1 km is a part of this estimate. Design of duct bank is being undertaken by BC Hydro Squamish field office to maintain consistency as they have done this for remainder of the subdivision development. Those design costs are born by the subdivision developer.

 Supply and install of new Vista Switch which is to act as the new POI. This is located within Wedgewood's Subdivision approximately 400 m south of the IPP step-up transformer.

Revenue Metering

- CT's and VT's are supplied separately by IPP but shall satisfy model/type approved by BCH.
- Revenue meter costs are paid separately from the interconnection costs but are included in the estimate.

3.2 Substation/Transmission Scope of Work

To integrate this IPP into the BCH system, one set of voltage transformers 25VT61 is required to be added on 25F61 feeder at RBW substation.

Protection and control equipment for 25F61 will be upgraded. Configurations and programming of associated line, transformer, and bus protection relays need to be adjusted for changes required for the new generator.

3.3 Electrical/Structural Scope of Work

- Add a set of new 25 kV voltage transformers (25VT61) on the feeder side of 25F61 RBW circuit breaker. This is MMBU Cat ID 3633011 and installation is in accordance with ES44-T0205-01.
 Cables run through existing ducts.
- Structural design scope includes mounting of 25VT61 onto existing bus support using BCH standard steel. The existing concrete footing will be enlarged to support the increased loading.

3.4 Protection, Control, and Telecommunication Scope of Work

- Modify 2L1 ON to include tripping of 25CB61 to avoid transient over-voltage, and 25CB61 BF initiation (internal to 25F61 PN), when 2L1 is supplying 25F61.
- Modify 2L2 PN to include direct tripping of 25CB61 to avoid transient over-voltage, and 25CB61 BF initiation (internal to 25F61 PN).
- Modify T1 PN to include direct tripping of 25CB61 for anti-islanding, and 25CB61 BF initiation (internal to 25F61 PN), when T1 is supplying 25F61.
- Modify T2 PN to include direct tripping of 25CB61 for anti-islanding, and 25CB61 BF initiation (internal to 25F61 PN).
- Modify 25B1 PN to include direct tripping of 25CB61 to remove IPP infeed, 25CB61 BF initiation (internal to 25F61 PN), and blocking 25CB61 A/R, when 25B1 is supplying 25F61.
- Modify 25B2 PN to include direct tripping of 25CB61 to remove IPP infeed, 25CB61 BF initiation (internal to 25F61 PN), and blocking 25CB61 A/R, when 25B1 is supplying 25F61.
- Remove the existing DTAs plus associated transducers for 25F52 and 25F64.
- Provide 25CB61 local/remote auto-reclose on/off, three phase voltage, current, active, and
 reactive power telemetry from the newly installed 25f61 relay. Metering to be digital via
 existing 3332 and GE lbox RTU 285. Integrate new alarms to station alarm system and connect
 the new relay to the station data concentrator for remote access.





- Revise the existing RTU point assignment to reflect the changes to metering, alarm, and control points and to coordinate with Fraser Valley operations (FVO) / South Interior Operations (SIO) to revise their database and displays.
- Re-configure the AREVA FEPs or FVO satellite data concentrator and update the database and displays at FO and SIO to accommodate the new IPP.
- Update the network model to show the new generator.
- Update existing database and displays at FVO and SIO to add the new points added in RBW.

3.5 Commissioning Scope of Work:

- Field verification of both BCH and WGM facilities
- Commissioning of PPIS and update of ION server
- Installation and commissioning of Revenue Metering equipment

4 ESTIMATE FOR INTERCONNECTION SCOPE

CEC's estimate to complete the interconnection works is Two Million Seven Hundred Eighty-Five Thousand Dollars (\$2,785,000 CAD), excluding taxes. This price does not include costs for work already completed by BCH or their service provider to date. No contingency has been added. CEC believes this estimate is conservative based on our experience and understanding of the scope of work as described in the SIS, FS and corresponding design documentation.

ltem :	Estimated Cost	Comments
Distribution Materials and Construction Costs		
Overhead Line Material	\$350,000	Major items priced. Minor items and coincidental material estimated. All material to be sourced from MMBU. Assume existing x-arms, insulators, conductors etc. are reused; nuts and bolts replaced. Existing plant looks good by observation. Class 2 poles used in estimate rather than H1/H2 as indicated in current design.
Overhead Line Construction	\$1,000,000	ROC Contractor Consulted. Suggest \$200,000 km 9-10 week duration. Could crash to 6-7 weeks with additional crew. Assume live line conditions. This should be a high side estimate. Potential to reduce by as much as \$250,000.
Section 2 Clearing and Access	\$30,000	(1 ha)
Section 2 Cable Civil	\$207,000	(\$900/m for 230 m)
Section 2 Cable Electrical	\$80,500	(\$350/m for 230 m)
Section 3 Cable Civil (Approx. 500 m remaining)	\$175,000	(50% of estimate to complete from Coast Mountain Ex)
Section 3 Cable Elec. (Approx. 1 km)	\$95,000	(50% of estimate from BCH Squamish Field Office)
Vista Switch Supply and Install	\$42,000	(\$24,000 Install, \$18,000 Vista Cost)
Material Salvage	\$50,000	(Estimate)
Engineering Costs		
Section 1 and 2	\$80,000	Assumes new engineering consultant used to finish
Station Works	\$80,000	Assumes new engineering consultant used to finish
Section 3 (BCH Squamish Field Office)	\$25,000	Estimate from other design work undertaken in Wedgewood Subdivision





ltem	Estimated Cost	Comments
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Station materials and Construction		
Station materials and Construction	\$27,000	
Station construction/system upgrades	\$200,000	BCHCS recommended to undertake work at Rainbow Station.
Metering Costs		
Revenue Metering	\$45,000	As per F.S.
PPIS Metering	\$12,000	As Per F.S.
Commissioning	\$36,500	As per F.S.
Environmental Monitor	\$50,000	10 weeks
3rd Party Service Coordination	\$20,000	MOTI, CN Rail, SLRD, FN, Telus, Transport Canada
BCH PM/CM (7% of Total)	\$180,000	
Total Estimated Cost of Interconnection	\$2,785,000	

5 DESIGN AND IMPLEMENTATION CONSIDERATIONS WHICH SHOULD BE FURTHER INVESTIGATED

- 1) Review current design use of very heavy poles, primarily H1 and H2 poles. Class 2 should suffice, is typical for installations of this nature, and is currently used in the existing section of 25F65/61 double circuit which is being extended.
- 2) Investigate options to eliminate the underground section between structures 49/50 to 51/52. Two options should be further investigated
 - a) Use of a single, self supporting steel pole on the opposite side of the highway.
 - b) An adaptation of the existing arrangement which is supported directly from the rock face could be repeated.

A site meeting with MoTI is recommended to review and discuss these options.

- 3) Optimize the proposed design installation where the new overhead line departs the existing alignment as it is very congested and busy. Some background might add clarity to why it has been designed as shown; however, on the surface it appears that some design optimization could lead to greatly simplified layout and provide cost savings.
- 4) Assess the option to leave 25F65 on existing plant on north side of highway from structure P054 onward and only have circuit 25F61 cross and over along new alignment. If structures are not modified or changed in anyway then IPP/BCH should not be required to change or revise existing pole locations. Further discussion with MoTI is required.

6 DISCUSSION

The interconnection cost estimate prepared by CEC herein does not align with the estimate provided by BCH in the draft Facility Study report. There is a disparity of roughly \$3,500,000-\$4,000,000, depending on which numbers in the draft FS are used. On the distribution scope of work, the engineering fees, material cost, and construction costs presented in the Facility Study are significantly higher than what we would



expect to see. The overhead line work, in particular, appears very straight forward so it is unclear why the costs are so high. Further discussion should be pursued to better understand how these costs have been arrived at.

The transmission/station scope of work is significantly smaller than the distribution scope. Our internal estimate of the costs associated with this scope are roughly half of that which is included in the draft Facility Study. It is unclear what benefit all of the additional costs are expected to bring to either BCH or the IPP as the installation is straightforward. We expect there are opportunities to further reduce these costs from the amounts carried in the internal estimate with a well specified scope of work and active management.

CEC understands that brown field work of this nature is difficult to estimate and that costs often exceed that of green field projects; however, the estimated costs appear very high in this instance and should be reviewed. In addition, there are design alternatives which should be considered and may improve the overall design, reduce costs, and potentially improve reliability based on our high-level review of the drawings and trip to site.

CEC recommends further refinement of the scope of work and estimate including further review of the current design and inputs, preparing detailed material take-offs, soliciting BC Hydro approved contractors to provide construction cost estimates based on design drawings available, and having discussion with 3rd party service providers and stakeholders to fully understand limitations, options, and risks. Recognizing that the design prepared by BCH's service provider is not finalized, we believe this refinement should be undertaken before work proceeds.



Engineering Report

To: Peter Zell, Eco Flow Energy Corp.

From: Norm Geisheimer, Dennis Schlender; DBS Energy

CC: Michael Potyok, George Steeves, Luc Fournier

Date: 2017-02-24

WEDGEMOUNT POWER PROJECT SECTION ONE ESTIMATE REPORT

INTRODUCTION

Re:

This estimate report is for Section One of the Wedgemount Power Project (WGM) overhead line extending BCHydro (BCH) 25kV line 25F61 to the WGM point of interconnection (POI), and establishing reconnection to the existing BCH 25kV line just north of the turn to Wedgemount Lake. The attached map T15-PP-P1737-001 shows the general layout of the line.

OVERVIEW OF THE LINE

The extension of BCH line 25F61 will be created by double circuiting feeder BCH 25F65 from the end of the existing feeder BCH 25F61 located near Emerald Park/ Green Lake Park, to near the WGM POI. At this point, BCH 25F65 will continue as a single circuit reconnecting to the existing BCH 25kV line on Highway 99.

The length of Section One being considered for this estimate is approximately 4.2kms in length. 3.5kms follows the existing BCH alignment along BC Highway 99. The remaining 0.7kms of the line will be built at a new alignment to avoid a major rock outcrop along Highway 99 approximately 300M south of the turnoff to Wedgemount Lake connecting to the WGM POI then extending to make the reconnection to the existing BCH 25kV line. When complete, .52kms of existing line along Highway 97 will be removed.

ESTIMATE DETAILS

Assumptions:

- Existing conductor is 336.4 ASC. New installed conductor will be same.
- New construction will be built to BCH distribution standards with CSA C22.3 No 1-15 Overhead Systems Heavy Loading weather conditions.
- The proposed alignment has land rights for the powerlines, communication lines, and associated anchors
- Estimate is based on information provided by Midgard, namely AMEC drawing 409-D08-01003 REV1 for structures P000-P046, AMEC drawings 409-D08-01007 REV1 for structures P047 / P048, and a new alignment drawing named Wedgemount Centerline2.dwg
- The work is estimated to be done with live line methods with some outages required to transfer customers and reconnection to the mainline.
- The estimate does not include any environmental study costs, substation work, or POI connection costs.
- The estimate is based on regular work hours, with the ability to traffic control Highway 99 to one lane as required.

ESTIMATE FOR SECTION ONE

ltem :	Estimated Cost	Comments
Material:	\$362,188	All new material other than one transformer at structure
Material Loading 10%	\$36,219	P029 which will be transferred to the new pole. Includes
		5% of minor items for spares/extras
Total New Material	\$398,407	
Custom:	4	
Excavation	\$71,200	Pole and earth set anchors. Assumes 10% of pole holes will require blasting. See note 2.
Rock anchors	\$222,500	Assumes rock anchors 50-50 split 1.0M and 2.4M depth
Traffic Control	\$40,375	Assumes 2 person for duration of project
Survey	\$20,000	
Backfill material	\$12,200	BCH requirement for pole sets
Brushing	\$6,000	Major brushing for .5km new alignment (\$3500) + minor brushing on existing alignment (\$2500)
Total Custom	\$372,275	
Construction Labor:	4270 400	n l i i i i i i i i i i i i i i i i i i
Unit costs Install	\$279,480	Based on typical BCH ROC contractor rate
Unit costs Salvage	\$57,010	See note 3
BCH onsite construction assistant	\$33,649	Typically, BCH assigns a representative to oversee projec
Total Labor Cost	\$336,490	
Design and Engineering	\$231,434	20% of project costs above (Includes BCH engineering
223,811 4114 21-8114 21113	Ψ202, 13 T	costs, 2 RR crossings design /permitting, and any costs
		spent to date)
Contingency	\$200,791	15% of project costs above
Contingency	\$200,731	15% of project costs above
Project Management	\$80,316	6% of project costs excluding contingency
(owner)	, - ,	
PST	\$27,888	7% on materials only
Total with PST	\$1,647,602	
TELUS Transfer costs and New Installs	\$102,953	\$101,404 + \$1,549 PST on materials. See note 4
Grand Total	\$1,750,555	



Notes:

- 1. This estimate should be considered as a Class 3 estimate. Accuracy level of +/- 15%
- 2. It is assumed that the cost to excavate the existing poles to be taken out will be done by TELUS forces as they are the last off the pole and joint owners of the pole. This amount is included in the TELUS cost. (Note 4)
- 3. Includes removal of existing BCH plant and cut poles to TELUS level, return equipment and pole top to BCH yard. Does not include removal of poles with TELUS contacts.
- 4. TELUS transfers are assumed for the existing messenger/cable P000 to P048. New installation is needed for messenger/cable along the new alignment from P048 to P057, splicing of cables at 3 locations, materials, labor, traffic control and salvage costs to remove BCH poles where TELUS is last off the structure. Please note, the cost shown is very high level since TELUS was not available to answer any questions regarding their plant. The costs shown do not include any funding payable to BCH for pole ownership. The full pole replacement (capital) cost is included under the BCH line estimate above.
- No capitalized overhead and loadings has been provided for BCH or TELUS. This can be considerable, and could amount to be 25% of the project cost.
- 6. Activities such as engineering and survey may have been completed already. This completed work costs is showing as a fully rolled up item (i.e. contains past spent and future expected work)

ITEMS FOR CONSIDERATION

- The section of line from P000 to P046 has been designed with no containment/deadend structures.
 Deadend along the line should be considered not only for containment purposes but to also facilitate reconductoring.
- 2. There is a considerable safety risk to electrical crews attempting to relocate the existing 25kV to the new higher upper circuit position on the BCH heavy angle corners in live state. It should be a consideration to instead install the new circuit on the upper circuit. Then energize the top circuit to service the existing customers (4) along the line and beyond WGM. Lastly cut temporary openers in the lower circuit to deenergize the circuit and allow the electrical crews to relocate the lower circuit to the new structures in a de-energized state. This method will not only be considerably safer, but slightly less expensive. To facilitate this alternative method, the height of the new structures should be reviewed to ensure adequate safe clearances can be maintained between the upper circuit and the existing energized lower circuit during the stringing operation.
- 3. Due to the very narrow roadway, and lack of adequate shoulder room along the highway, lane closures will be required. At risk is a possibility of MOTI limiting lane closures along Highway 99, or restricting the hours of lane closures which could seriously affect the labor estimate if the work needs to be done at night.
- 4. Considerable BCH capital improvements are being completed with the proposed design. There should be a possibility of cost sharing between the customer and BCH that needs to be discussed.

THIS IS EXHIBIT "L" REFERRED TO IN THE AFFIDAVIT OF MICHAEL POTYOK, SWORN BEFORE ME AT VANGOUVER, BC THIS 13 DAY OF 2018.

A Commissioned for taking Affidavits in British Columbia

COLIN BROUSSON

GOWLING WLG (CANADA) LLP
BARRISTER & SOLICITOR
550 BURRARD STREET - SUITE 2300
BENTALL 5 - VANCOUVER, B.C. V6C 2B5
TELEPHONE: (604) 683-6498



From: "Peter Zell" pzell@ecoflowenergy.com>

Subject: Wedgemount Hour Summary 170131 pivot table count issue to MP.xlsx

Date: January 31, 2017 at 10:54:12 AM PST

To: "Michael Potyok" < mpotyok@midgard-consulting.com>

Mike, Per our call. Numerous pivot tables already built for analysis. Not a good story.

2	150	19/07/2013	Brolly Richard	Sr Archaeologist	Environmental	
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	150	23/07/2013	Frewing Faith	Sr Clerical Administration	Environmental	E.O.
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	150	19/07/2013	Little Greg	Sr Environmental Mgmt	Environmental	
97 290	150	19/07/2013	Seed Liam	Int Environmental Mgmt	Environmental	4.2
290	150	19/07/2013	Stryd Zoe	Jr Clerical Administration	Environmental	1.1
290	4822	10/07/2015	Burns Stephanie	Cost Controller - Int	Environmental	0.3
290	4822	17/07/2015	Burns Stephanie	Cost Controller - Int	Environmental	0.3
290	4822	10/07/2015	Harron David	Env Professional - Spc	Environmental	0.5
290	4822	10/07/2015	Lofgren Raymond	Surveyor (Topo Survey) - Spc	Environmental	4
290	150	19/07/2013	Seed Liam	Sr Environmental Mgmt	Environmental	0.1
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290	4822	03/07/2015	Seed Liam	Env Professional - Int	Environmental	0.5
. 290	4822	10/07/2015	Seed Liam	Env Professional - Int	Environmental	5.2
290	4828	17/07/2015	Brolly Richard	Archaeologist - Spc	Environmental	0.5
290	4822	26/07/2013	Frewing Faith	Sr Clerical Administration	Environmental	0.3
290	4822	17/07/2015	Seed Liams	Env Professional - Int	Environmental	6.1
290	4822	31/07/2015	Seed Liam	Env Professional - Int	Environmental	0.5
290	4822	07/08/2015	Seed Liam	Env Professional - Int	Environmental	4.6
290	4828	17/07/2015	Fox Michael	Archaeologist - Jnr	Environmental	
290	150	19/07/2013	Brolly Richard	Sr Archaeologist	Environmental	0.7
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290	150	19/07/2013	Little Greg	Sr Environmental Mgmt	Environmental	
290	150	19/07/2013	Penner Michelle	Sr Environmental Mgmt	Environmental	0.7
290	4822	14/08/2015	Seed Liam	Env Professional - Int	Environmental	13.3
290	4822	28/08/2015	Seed Liam	Env Professional - Int	Environmental	5.3
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290	4822	04/09/2015	Bell Geoffrey	Contam Professional - Int	· Environmental	2.3
290	4822	25/09/2015	Drinkwater Theodore	Env Professional - Int	Environmental	3
290	4822	25/09/2015	Horne Brad	Env Professional - Spc	Environmental	1.5
290	4822	04/09/2015	Houwers Claudia	Env Professional - Snr	Environmental	0.8
290	4822	04/09/2015	Kwon Paul	Env Professional - Int	Environmental	0.5
290	4822	04/09/2015	Laxdal John	Geotechnical Engineer - Spc	Environmental	0.5
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290	4822	25/09/2015	Seed Liam	Env Professional - Int	Environmental	6.8
290	4822	04/09/2015	Smedley Rosalyn	Env Professional - Int	Environmental	
290	4822	11/09/2015	Smedley Rosalyn	Env Professional - Int	Environmental	1.2
290	4822	25/09/2015	Smedley Rosalyn	Env Professional - Int	Environmental	2.5
290	4822	25/09/2015	Steeger Christopher	Env Professional - Snr	Environmental	8
290	4828	25/09/2015	Brolly Richard	Archaeologist - Spc	Environmental	0.2
290	4828	04/09/2015	Brolly Richard	Archaeologist - Spc	Environmental	0,4
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290	4828	11/09/2015	Kwon Paul	Env Professional - Int	Environmental	0.5
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290	4828	25/09/2015	Seed Liam	Env Professional - Int	Environmental	0.5
290	4828	18/09/2015	Wiederick Brock	Archaeologist - Jnr	Environmental	0.5
290	4828	11/09/2015	Wiederick Brock	Archaeologist - Jnr	Environmental	12.1
290	4822	16/10/2015	Bell Geoffrey	Contam Professional - Int	Environmental	0.3
290	4822	23/10/2015	Bell Geoffrey	Contam Professional - Int	Environmental	3.5
290	4822	02/10/2015	Bell Geoffrey	Contam Professional - Int	Environmental	6.2
290	4822	09/10/2015	Clements Lesley	Env Professional - Snr	Environmental	0.5
290	4822	02/10/2015	Drinkwater Theodore	Env Professional - Int	Environmental	0.5
290	4822	30/10/2015	Harron David	Env Professional - Spc	Environmental	1
290	4822	23/10/2015	Hildrebrand Arthur	Contam Professional - Spc	Environmental	2.5
290	4822	16/10/2015	Hildrebrand Arthur	Contam Professional - Spc	Environmental	3.5
290	4822	02/10/2015	Seed Liam	Env Professional – Int	Environmental	9.0
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21	290	4828	23/10/2015	Brolly Richard	Archaeologist - Spc	Environmental	0.3
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21	290	2002	27/11/2015	Hawkes Darryl	Geotechnical Engineer - Spc	Environmental	10
21	290	4822	30/10/2015	Burns Stephanie	Cost Controller - Int	Environmental	0.3
21	290	4822	06/11/2015	Burns Stephanie	Cost Controller - Int	Environmental	1
21	290	4822	23/10/2015	Burns Stephanie	Cost Controller - Int	Environmental	1.5
21	290	4822	30/10/2015	Clements Lesley	Env Professional - Snr	Environmental	0.3
21	290	4822	30/10/2015	Collier Elvera	Administration Clerical - Snr	Environmental	0.3
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21	290	4822	11/12/2015	Taylor Mike	Env Professional - Int	Environmental	3.4
21	290	4822	04/12/2015	Taylor Mike	Env Professional - Int	Environmental	11.5
21	290	4822	25/12/2015	Burns Stephanie	Cost Controller - Int	Environmental	0.3
21	290	4822	08/01/2016	Burns Stephanie	Cost Controller - Int	Environmental	0.3
21	290	4822	29/01/2016	Harron Donald	Env Professional - Spc	Environmental	0.5
21	290	4822	15/01/2016	Seed Liam	Env Professional - Int	Environmental	7.3
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21	290	4822	29/01/2016	Seed Liam	Env. Professional - Int	Environmental	4.6
21	290	4822	22/01/2016	Smedley Rosalyn	Env Professional - Int	Environmental	0.5
21	290	4822	15/01/2016	Steeger Christopher	Env Professional - Snr	Environmental	0.7
21	290	4822	22/01/2016	Steeger Christopher	Env Professional - Snr	Environmental	0.7
21	290	4822	25/12/2015	Taylor Mike	Env Professional - Int	Environmental	1.5
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21	290	2002	19/02/2016	Dal Santa Enzo	Geotechnical Tech/Dsgn - Int	Environmental	1.5
21	290	2002	19/02/2016	Forsyth Bob	Geotechnical Engineer - Snr	Environmentai	1.5
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21	290	2002	19/02/2016	Laxdal John	Geotechnical Engineer - Spc	Environmental	1
21	290	4822	05/02/2016	Brolly Richard	Archaeologist - Spc	Environmental	
21	290	4822	05/02/2016	Burns Stephanie	Cost Controller - Int	Environmental	0.3
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21	290	4828	22/04/2016	Wiederick Brock	Archaeologist - Jnr	Environmental 4
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THIS IS EXHIBIT "__ " REFERRED TO IN THE AFFIDAVIT OF MICHAEL POTYOK, SWORN BEFORE ME AT VANCOUVER, BC THIS _ DAY OF _______, 2018.

A Commissioner for taking Affidavits in British Columbia

COLIN BROUSSON

GOWLING WLG (CANADA) LLP
BARRISTER & SOLICITOR
550 BURRARD STREET - SUITE 2300
BENTALL 5 - VANCOUVER, B.C. V6C 2B5
TELEPHONE: (604) 683-6498

From: "Rempel, Vic" < Vic.Rempel@bchydro.com>

Subject: FW: Wedgemount: Draft Minutes of March 29

Date: August 24, 2017 at 3:31:01 PM PDT

To: "Michael Potyok (mpotyok@midgard-consulting.com)" <mpotyok@midgard-

consulting.com>

Hi Mike. As requested, please see attached Minutes of March 29 2017. Regards

Victor Rempel | Manager, Distribution Generator Interconnections

BC Hydro

P 604 528 2623

E vic.rempel@bchydro.com

From: Brett Robinson [mailto:brxlr8@qmail.com]

Sent: 2017, April 09 3:44 PM

To: Lin, Frank; Hefflick, Ryan; Russell.Dobie@bchydro.co; Rempel, Vic; Chow, Warren

Cc: David Ehrhardt; Peter Zell

Subject: Wedgmont: Draft Minutes of March 29

Please find attached draft minutes from March 29.

Let me know if there is any errors or omissions.

Thanks,

Brett

This email and its attachments are intended solely for the personal use of the individual or entity named above. Any use of this communication by an unintended recipient is strictly prohibited. If you have received this email in error, any publication, use, reproduction, disclosure or dissemination of its contents is strictly prohibited. Please immediately delete this message and its attachments from your computer and servers. We would also appreciate if you would contact us by a collect call or return email to notify us of this error. Thank you for your cooperation.



Dr	aftMeeting Summary (March 29, 2017)
Date:	2017/04/02
Subject:	Wedgemount Creek Power Interconnection
Prepared By:	Brett Robinson, Eco Flow Energy
Prepared For:	BC Hydro, Industrial Alliance and Wedgemount Power Limited Partnership (WPLP)
Attendees:	BCH: Frank Lin, Ryan Hefflick, Vic Rempel, Russell Dobie, Warren Chow
	EFE: Brett Robinson, on behalf of Peter Zell
	Industrial Alliance: Michael Potyok, Independent Engineer
	WPLP: David Ehrhardt

Minutes of discussion held during meeting of March 29 2017. Black text represents draft agenda with Blue bolded discussion points summarized below each item.

Agenda:

- 1. Update by WPLP on Applications for Section 1b & 1C
 - Hydro Engineer we understand that Om in emails of March 27th and 28th has now provided approvals for submission of drawing to:
 - o MoTi Poles 49 53 and Poles 56 -57
 - o CN Poles 53 54
 - Clean Energy still looking for confirmation of routing of poles on SLRD lands and POI details

David provided an overview of permitting application efforts to date. This included BC Hyrdo engineers site visit, review of drawings and feedback to Clean Energy required prior to submissions. Discussions continued relating to all in attendance interest in progress to date and current status. Effort ongoing under the leadership of David, WPLP with support from EcoFlow and BC Hydro project champions. See item 4 related recommendations.

2. Update requested by WPLP on design for Section 3. It is understood by WPL that there is currently acceptance by Hydro of a "variance" for the portion of Section 3 already constructed. WPLP still looking for a response on the treatment of the remaining ~500m of this section

BCH provided an overview of their required approach. Existing installation would be grandfathered with several details to be done by WPLP while the new installations will be required to follow BCH current standards. Vic gave a comprehensive overview of the list of items that would need to be done to satisfy the variance and followed up the next day with a concise set of documents outlining all the items that were discussed. (Please see Vic's email of March 30th for further clarity) In addition, the grandfathered section is under review by BCH



legal department which may require WPLP to sign off on certain maintenance practices and working relationship. The WPLP team members thanked all parties for their efforts to drive efficiencies for the whole installation and acknowledged the positive efficiencies that would be gained with the partial variance through grandfathering.

3. WPLP looking for update from BC Hydro on pricing by Rokstad for Section 1 works.

Russell took the lead on the contractor feedback regarding section 1. The contractors had completed their detailed review and committed to a fixed schedule of 3 months and 2 days requiring on award of contract in time for an April 2nd start with an early July completion. As permitting approvals are still outstanding, there is a low probability of this being met so they have cautioned that if work slides into the summer season additional traffic may impact schedule or cost.

The fixed price estimate is \$1.6 Million based on AMEC's IFC drawings but only general layout drawings form CEC. Once the CEC IFC drawings are forwarded, BCH assured the team that they would be able to confirm the \$1.6 Million price as a not to exceed price subject to no changes in the design or material requirements. In addition, BCH requested all CEC drawings in original format such that they may convert and post them to their system. WPLP agreed and will communicate requirements to CEC.

4. Discussion on critical path

Brett referenced the team's discussion at previous meeting related to permitting as the most significant critical path item weighing on everyone's minds. WPLP/EcoFlow upon reflection suggested that key stakeholders and team members working on the various aspects of permitting, get together the week of April 3rd. The goal is to carry out a comprehensive review of permitting requirements and action plans with full transparency across all parties to ensure nothing has been missed with the added potential to find further efficiencies with the depth of knowledge and experience across the team. EcoFlow committed to take the lead.

New Items

A. Permitting: Last Friday, March 17th, WPLP was informed by the SLRD that there was a potential constraint between the SLRD and BC Hydro requirements as to the form of document that would permit the installation of Poles 54 – 56 on the SLRD lands. The term of tenure Hydro and WPLP are looking for is in conflict with the tenure constraints with the Community Charter that SLRD is required to manage within. SLRD staff understand and are working in conjunction with WPLP to find a solution.

Options

- SLRD has suggested they would co-operate in a friendly expropriation to get around this impasse. Is this a viable alternative? Least desirable option for BCH as this requires Minister's direction.
- There may be an alternate route that would allow us to bypass the SLRD lands. Incremental
 costs to WPLP and permitting issue under investigation. Discussion ensued with several
 additional ideas and general agreement that WPLP make this top priority in the short



term. David outlined several meetings and discussions he has already set up over the next week and thanked the team for the input and offers of support from BCH.

B. Any new business?

Frank raised the station work requirements and outlined schedule constraints that had been identified. While the permanent solution would have taken to December, the BCH team had identified an interim solution with a seamless transition to ensure the target schedule was maintained. EcoFlow and WPLP thanked the BCH team member for their creative solution and proactive efforts.

Brett recognized the combined experience in the room and challenged the team to put themselves into the future three months, asking "what other things will we wish we were focused on today?" A great discussion ensued with the following items noted.

- -Is PPIS Meter purchased and received? David confirmed for WPLP.
- -Do we have or will there be any constraints with power house communications? David confirmed this was not expected to be an issue.
- -What about intake communications? David acknowledged this was on their list of outstanding items and a key task to complete.
- -Material for completion of work? BCH confirmed stores quantities meet material requirements.
- -Michael asked a few probing questions but all were identified to be well in hand.

Some general discussions ensued before the meeting was brought to a close. Brett thanked the team for their support while he covered Peter who would be returning from vacation next week and went on to recognize the value of this meeting, previously suggested by Frank.

Subsequent to the meeting

Friday March 31st David updated that all Crown Land's applications have been submitted.

Friday, March 31st Frank updated on the outstanding EPA termination date language change requested by WPLP on March 10th. He has followed up with procurement with a commitment to work with WPLP and the lender in order to provide the form of assurances that are required. Left with Dave Delainey to follow up with Peter and then Frank.

Friday, March 31st WPLP has incorporated all the above progress into a fullsome Recapitalization Proposal to the lender and will advance discussions with regular progress updates to be provided to BCH by Peter.

Tuesday, April 4th Peter Zell back to Canada and onto the project for EcoFlow.

THIS IS EXHIBIT "_____" REFERRED TO IN THE AFFIDAVIT OF MICHAEL POTYOK, SWORN BEFORE ME AT VANCOUVER, BC THIS _____ DAY OF _______, 2018.

COLIN BROUSSON

GOWLING WLG (CANADA) LLP
BARRISTER & SOLICITOR
550 BURRARD STREET - SUITE 2300
BENTALL 5 - VANCOUVER, B.C. V6C 2B5
TELEPHONE: (604) 683-6498

From: Michael Potyok <mpotyok@midgard-consulting.com>

Subject: Wedgemount - Interconnection Date: May 23, 2017 at 7:54:58 PM PDT

To: Ryan Hefflick < ryan.hefflick@bchydro.com>

Hi Ryan;

Thanks for chatting earlier today. I understand that you are unavailable all day tomorrow (with the exception potentially of an early morning call). But, to the extent there are some queries we had with respect to the project, you would be willing to ask your team to take a look and perhaps be able to respond.

As discussed, we have been engaged by Deloitte to assist with the Wedgemount project.

Because of my past role in which I attended some but not all meetings, I have only partial information as it pertains to the current interconnection process.

The last meeting I attended was March 29 during which Russell had indicated an ability for Hydro to complete their required works with a fixed timeline and a fixed cost. This was contingent on timely project commitments and cost recovery. However, there was an issue potentially with the SLRD land use permit for that portion of line passing through SLRD lands.

Although it was suggested that BCH would potentially accept a short term permit (as would be acceptable to the lender) it appears that since that time, the concept has shifted to using an alternate route to a similar POI that would avoid that route.

I am seeking clarification on how that decision arose and if this concept was locked down or if further work is done.

From the perspective of the project, it will be necessary to ensure that land applications contemplate any revised route.

Also, in general, it would be beneficial in general to have a discussion with you and/or your team to fully flesh out:

- 1) any remaining issues that require resolution;
- 2) role and responsibility assignment for any required study / work toward their resolution;
- 3) immediate next steps and process in generation to finalize planning and move toward execution;
- 3) status of discussions on a DGIA or other agreements that are required to finalize project planning.

That is a big list - our motivation is to ramp fully up to speed on all of these issues quickly in order to resolve any matters from the project side as soon as practical.

I am available to discuss further in the morning if needed or perhaps will follow up with Vic after lunch time.

Best regards,

Michael

Michael Potyok P.Eng. Principal

Midgard Consulting Inc. 828-1130 West Pender St. Vancouver, BC, V6E 4A4

cell: 1.604.315.3840

From: Michael Potyok <mpotyok@midgard-consulting.com>

Subject: Wedgemount Interconnection Process

Date: August 29, 2017 at 2:22:56 PM MST

To: "Rempel, Vic" < Vic.Rempel@bchydro.com >

Hi Vic;

Thanks again for the meeting last week. As discussed, we have tried to flesh out our understanding of the remaining process between now and COD for the project interconnection.

What I am trying to do is confirm to parties interested in the project that it is following a standing interconnection agreement process now and that, once an acceptable route is achieved and tenure obtained, the balance of the process should unfold in due course.

Can I ask you to take a look at this process and confirm that we have not missed any material steps or hold points?

Thanks and regards,

Michael

Michael Potyok P.Eng. MBA Principal

Midgard Consulting Inc. Suite 828, 1130 West Pender St. Vancouver, BC V6E 4A4 (c) 604-315-3840



Midgard Consulting Inc +1 (604) 298 4997 midgard-consulting.com 828 – 1130 West Pender St. Vancouver BC, Canada V6E 4A4

MEMORANDUM

To:

Vic Rempel, BC Hydro

From:

Michael Potyok, Midgard

Date:

August 29, 2017

Subject:

Wedgemount – BC Hydro Process – Remaining Interconnection Steps to Operation

Vic;

Pursuant to our discussion, this memo contains a listing of our understanding of the steps in the BC Hydro Interconnection Process that the Wedgemount Hydro project will need to pass through prior to COD. It does not include supporting activities that need to be completed but are not strictly part of the interconnection process (e.g. CN crossing permits, etc.), which are expected but not strictly part of the BC Hydro process.

Will you please review and confirm that we have not overlooked any key steps and further confirm that the project, once a route is determined and tenure obtained, that the project will follow a standard BC Hydro interconnection process?

Best Regards,

Michael





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Table 1 – Remaining Interconnection Steps to Operation

Ref No.	Step	Who	Description
1	Outstanding drawings	*Project *- *:	BCH has indicated that drawings are still required:
	submitted to BCH to complete 35% design:		showing POI to powerhouse (electrical and physical). Drawings are:
	review - 1 + 1 + 1 + 1 + 1		(1) Site Plan and Single Line Diagram (POI to Powerhouse)
			2) i Sübdivision Civil Works Drawings: Civil
			drawings including cross-sections demonstrating adherence to BC Hydro
			underground clearance requirements
			between BCH ductwork and generator ductwork in the subdivision.
			3) 6 Modifications to 35% design drawings
2	Drawings submitted	Project	Based on feedback from 35% design review, the 65% design review is not necessary.
	for 95% design review		design review is not necessary.
3	Review and	BCH 🚞 🍧	Expect Owner's Engineer comments will require some
	acceptance of 95% design package		minor modifications of design packages
4	Update Cost Estimate	BCH	Forms the basis for the amount of security and
	for Interconnection	(AMEC/ROC	deposit required from the customer.
		Contractor)	
5.	: Prepare Project Plan	BCH :	Establishes the schedule and ability to deliver the
	for Interconnection	(AMEC)	system modifications required for the projects
6	Assemble Facility	ВСН	Package the required components of the cost
	Study for Internal		estimate and project plan into the Facility Study,
	Approval, Secure		secure internal approval to issue to client.
	Approval and Issue		
	for Client Review		
7	Review & Accept Facilities Study	Project	Customer reviews and confirms they are ready to proceed to DGIA execution.
8	Assemble DGIA	BCH	Prepare the project-specific appendices to the DGIA
	appendices		(e.g. schedule, security amount, project
			· -





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Ref No.	Step	Who	Description
9	Provide DGIA security	Project ***	: Customer directs their bank to provide a letter of
	10 10 10 10 10 10 10 10 10 10 10 10 10 1		credit for security, and funds for directly funded items
10	Sign & Tender DGIA	ВСН	DGIA provided to customer.
11	Execute DGIA	Project	Customer executes DGIA.
12	Kick-Off Execution	ВСН	BCH initiates next phase of their internal project
	Phase		delivery process.
13	Construction (BCH	BCH procures necessary services and material to
	Procurement	-(AMEC)	perform system upgrades/modifications:
14	Interconnection	ВСН	Physical work completed.
	Construction	(AMEC)	·
15	Commissioning),BCH,/	BCH and the customer are coordinated through the
		= (AMEC), = =	commissioning process outlined in System Operating
		Project	Order 1T-28 to certify that the interconnection is
			Tromplete and safe to be operated as planned,
			designed and constructed

No. S174308 Vancouver Registry

IN THE SUPREME COURT OF BRITISH COLUMBIA

BETWEEN:

INDUSTRIAL ALLIANCE INSURANCE AND FINANCIAL SERVICES INC.

PLAINTIFF

AND:

WEDGEMOUNT POWER LIMITED PARTNERSHIP
WEDGEMOUNT POWER (GP) INC.
WEDGEMOUNT POWER INC.
THE EHRHARDT 2011 FAMILY TRUST
POINTS WEST HYDRO POWER LIMITED PARTNERSHIP
by its general partner POINTS WEST HYDRO (GP) INC.
CALAVIA HOLDINGS LTD.
SWAHEALY HOLDING LIMITED
BRENT ALLAN HARDY
DAVID JOHN EHRHARDT
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