BC Hydro
Power smart

6911 Southpoint Drive (B03)
Burnaby, BC
V3N 4X8

July 30, 2024

[redacted]

[redacted]

[redacted]

RE: CEAP IR 19 - Hixon Wind Power Project - Interconnection Feasibility Study Report

Enclosed is the Interconnection Feasibility study report for the proposed Hixon Wind Power Project submitted under Attachment M-2: Transmission Service and Interconnection Service Procedures for Competitive Electricity Acquisition Process (CEAP) of the Open Access Transmission Tariff (OATT). This letter provides a non-binding good faith estimate of the cost and time to construct the facilities required to interconnect your project to BC Hydro's Transmission System, being the Network Upgrades, based on the findings of the Interconnection Feasibility study.

Open Access Transmission Tariff

The OATT defines Network Upgrades as additions, modifications, and upgrades to BC Hydro's Transmission System required at or beyond the Point of Interconnection to accommodate the interconnection of the Generating Facility to the BC Hydro's Transmission System. Pursuant to the OATT, BC Hydro will design, procure, construct, install, and own the Network Upgrades. While BC Hydro will pay the costs for the Network Upgrades, the Interconnection Customer provides security for such costs.

Cost Estimate

Based on the Interconnection Feasibility study, the non-binding good faith estimated cost (typical accuracy range of +150%/-50%) for Network Upgrades required to interconnect your project is $87.9 M.

Major Scope of Work Identified:

- Acquire adequate property for a new switching station close to the existing transmission line 2L96
- Construct a new outdoor 230kV, 3- circuit breaker ring bus switching station.
- Construct a new control building and other required switching station facilities and infrastructures
- Supply and install microwave tower, waveguides, antennas, and other required telecommunications equipment
- Supply and install protection relays and other required protection equipment

Exclusions:

- GST
- Right-of-ways
- Permits

Key Assumptions:

- Construction will be done by contractor
- 3 years of construction
- No expansion of existing station or control building to accommodate new equipment
- Early Engineering and Procurement
- No piles or ground improvements will be required
- No contaminated soil will be encountered during construction

Key Risks:

- Additional Right of Way or acquisition of more property may be required
- Transmission routing may be different than assumed, including number of disconnect switches and structure types may change
- No defined supply chain strategy, construction costs may increase depending on delivery method
- Cost of construction may increase based on geotechnical condition of the actual project site
- Project schedule may be longer than expected, leading to increase costs
- Cost of materials and major equipment may be affected by market conditions and escalation

Please note that the Revenue Metering requirements and associated costs required to interconnect your project have not been determined at this stage and, therefore, not included in the above estimate. Revenue Metering costs that are attributable to the Interconnection Customer are to be paid in cash. For more details on Revenue Metering requirements and responsibilities, please refer to:

https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/distribution/standards/ds-rmr-complex-revenue-metering.pdf.

Schedule

Based on the Interconnection Feasibility study, the non-binding good faith estimated in-service date for your project's Network Upgrades is Quarter 3 2031 (calendar year). To achieve this timeline, we may need to expedite certain activities, including engineering design and procurement of long-lead equipment.

Timely actions required from you to minimize risks to the schedule:

- Submission of additional technical data required for the System Impact Study and Facilities Study
- Submission of any required information or document such as demonstration of Site Control
- Execution of Combined Study Agreement and Standard Generator Interconnection Agreement
- Financial commitments and securities

Please note that changes to your interconnection request, delays in data submission, or financial commitments may also impact the target in-service date.

Next Steps

In September 2024, we will issue a final invoice for the Feasibility Study costs. This invoice will reflect the total amount due, taking into account the $15,000 Feasibility Study deposit you have already paid and any remaining amount on the non-refundable $15,000 Interconnection request deposit that we did not spend in reviewing and validating your interconnection request.

If you have any questions, please contact the BC Hydro CEAP Team at ceap2024@bchydro.com.

Sincerely,

Senior Manager, Transmission Interconnections

BC Hydro

Encl.: CEAP2024_IR_19_Hixon Wind Power_FeS_Report_final.pdf

[redacted]

Hixon Wind Power Project

Interconnection Feasibility Study

BC Hydro EGBC Permit to Practice No: 1002449

2024 CEAP IR # 19

Prepared for: [redacted]

[redacted]

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[redacted]

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Revision	Date	Description
0	2024 Jul	Initial release

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Executive Summary

[redacted] the interconnection customer (IC), requests to interconnect its Hixon Wind Power Project (2024 CEAP IR #19) to the BC Hydro system. Hixon Wind Power has 18 [redacted] wind turbines, adding a total capacity of 140.4 MW into the BC Hydro system. The Point of Interconnection (POI) is at a new BC Hydro's 230 kV switching station looping in existing transmission line 2L96, approximately 43 km from Barlow (BLW) substation. The Hixon Wind Power is interconnected at the POI with a new customer-built 230 kV line, approximately 25 km. The IC's proposed commercial operation date (COD) is Oct 1, 2029.

To interconnect the Hixon Wind Power Project (referred to as P19) and its facilities to the BCH Transmission System at the proposed POI, this Feasibility Study has identified the following conclusions and requirements:

1. A new 230 kV switching station (referred to as "P19T") on 2L96 is required as the proposed POI for interconnecting the IC's generating project to the BCH system. With the new switching station P19T, the existing line 2L96 will be segregated into two new lines, temporarily referred to as: 2L96_A (WSN to P19T) and 2L96_B (P19T-BLW). The proposed customer-built line (P19T-P19) is designated as 2L96_C.

2. The connection of Hixon Wind Power Project does not cause any performance violation (i.e. thermal overload, voltage performance violation or voltage stability concern) under system normal and single contingency conditions.

3. An Anti-islanding Transfer Trip scheme to P19T is required to isolate the wind farm when it is islanded with local loads during various operation conditions or under system contingencies (such as loss of both 2L95&2L96_A, or loss of both 2L354&2L96_A). In addition to entrance protection and line protection of 2L96_C, the IC is required to install anti-islanding protection within their facility to disconnect the IC's wind farm from the grid when an inadvertent island with the local load forms.

4. IC shall build a new 230-kV line (whose length is approximately 25 km) for interconnecting the Hixon Wind farm to the POI. The new line 2L96_C will

become IC's BES and the IC will be responsible for the compliance with applicable MRS requirements.

5. According to BC Hydro's TIR, the IC's project must have sufficient reactive power capability over full MW operating range including at the zero MW output level. The Hixon wind farm as submitted does not meet the reactive capability requirement at full MW output level, which requires additional reactive power compensation. Furthermore, the proposed wind farm does not meet this requirement at near zero MW output.

6. BC Hydro will provide line protections for 2L96_A, 2L96_B and 2L96_C (BC Hydro end only) protections. As part of the line protection replacements for each of the three lines, telecommunication facilities will be required to accommodate the new protection schemes. The IC shall provide required relays, telecom facility and associated equipment at its facilities to accommodate the new protection schemes.

The above conclusions are made based on the IC's input data and study assumptions listed in Section 4, which represent the best available information on May 22, 2024.

A non-binding good faith estimated cost and time to construct the Network Upgrades required to interconnect the proposed project will be provided in a separate letter to the IC.

Contents

Appendices

Acronyms

The following are acronyms used in this report.

BCH	BC Hydro
CEAP	Competitive Electricity Acquisition Process
COD	Commercial Operation Date
DTT	Direct Transfer Trip
ERIS	Energy Resource Interconnection Service
FeS	Feasibility Study
IBR	Inverter-Based Resources
IC	Interconnection Customer
LAPS	Local Area Protection Schemes
MPO	Maximum Power Output
NERC	North American Electric Reliability Corporation
NRIS	Network Resource Interconnection Service
OATT	Open Access Transmission Tariff
P19	Project #19 – Hixon Wind Power Project
POI	Point of Interconnection
RAS	Remedial Action Scheme
TIR	BC Hydro “60 KV to 500 kV Technical Interconnection Requirements for Power Generators”
WECC	Western Electricity Coordinating Council
WTG	Wind Turbine Generator

1 Introduction

Table 1-1 below summarizes the project reviewed in this Feasibility Study.

Table 1-1 Summary of Project Information

Project Name	Hixon Wind Power Project	
Proponent Name	[redacted]	
Point of Interconnection	230 kV bus of a new switching station on 2L96, 43 km from Barlow substation	
Applicant Proposed COD	1st October 2028	
Type of Interconnection Service	NRIS ☒	ERIS ☐
Maximum Power Injection (MW)	140.4 (Summer)	140.4 (Winter)
Number of Generator Units	18 x 7.8 MW	
Plant Fuel	Wind	

[redacted], the interconnection customer (IC), requests to interconnect its Hixon Wind Power Project (2024 CEAP IR #19) to the BC Hydro system. Hixon Wind Power Project has 18 [redacted] wind turbines, adding a total capacity of 140.4 MW into the BC Hydro system. The Point of Interconnection (POI) is at a new BC Hydro's 230 kV switching station looping in existing transmission line 2L96, approximately 43 km from Barlow (BLW) substation. The proposed commercial operation date (COD) is Oct 1, 2029.

Figure 1-1 shows the Central Interior Regional transmission system diagram. A new 230 kV switching station (referred to as "P19T") sectionalize 2L96 between Williston Substation (WSN) and Barlow substation (BLW).

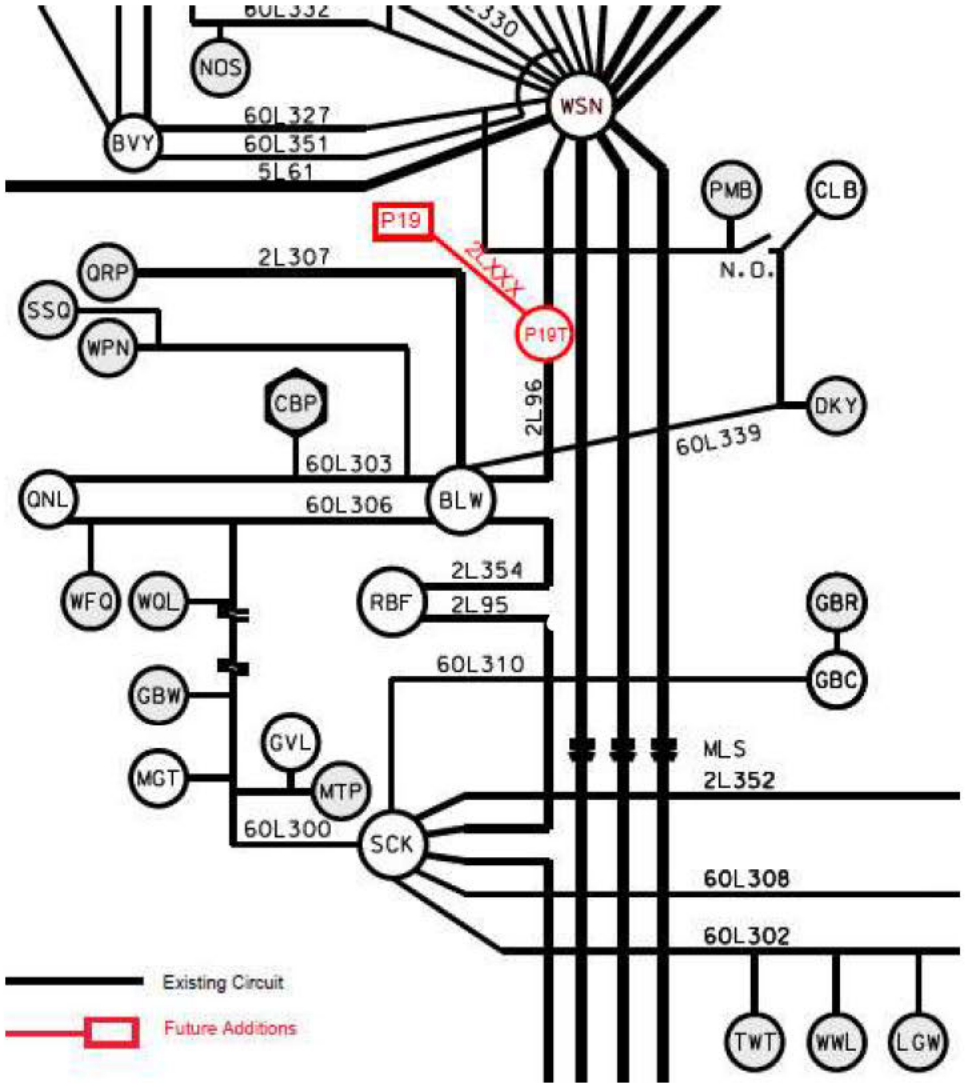

Figure 1-1: Central Interior Regional Transmission System Diagram with the Proposed Hixon Wind Power Project Interconnection

2 Purpose and Scopes of Study

This Feasibility Study is a preliminary evaluation of the system impact of interconnecting the proposed project to the BC Hydro system based on power flow and short circuit analysis in accordance with BCH's Open Access Transmission Tariff (OATT). A non-binding good faith estimated cost of required Network Upgrades and estimate to construct will be provided.

Per OATT, the Feasibility Study is performed individually for each of the participating projects in the CEAP and focuses specifically on the BC Hydro regional transmission system where the proposed generating project is proposed to be constructed. An assessment of the incremental effect on the 500kV bulk transmission system is beyond this study scope.

This is a "limited scope" study which is restricted to power flow studies of P0, P1 and P2 planning events as defined in TPL-001-4 and short circuit analysis. The study does not address other technical aspects such as transient stability and switching transients and impact of multiple contingencies. These subjects would be addressed in subsequent System Impact Study if the project is a Successful Participant of the CEAP.

In case impact to the adjacent external systems to BC Hydro is observed, such impact would be addressed in subsequent detailed and coordinated studies with the relevant adjacent entities if the proposed interconnection proceeds further.

3 Standard and Criteria

The Feasibility Study is performed in compliance with the North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) reliability standards, and the BCH interconnection requirements in the TIR, and upon the ratings of the existing BCH transmission facilities described in Operating Orders, specifically:

- NERC standards: TPL-001-4 and FAC-002-3 relevant to the scope of this Feasibility Study.
- WECC criteria TPL-001-WECC-CRT-4 Transmission System Planning Performance, July 1, 2023.
- BC Hydro's 60 kV to 500 kV Technical Interconnection Requirements for Power Generators.
- BC Hydro Operating Order 5T-10, Ratings for All Transmission Circuits 60 kV or Higher, April 16, 2024.
- BC Hydro Operating Order 5T-14, Ratings for All Transmission and Distribution Transformer, November 8, 2022.
- BC Hydro System Operating Order 7T-22 System Voltage Control, September 19, 2023.

4 Assumptions and Conditions

This Feasibility Study is performed based on the IC's submitted data and information available to BC Hydro on May 22, 2024 for the study purpose. Appendix A shows the plant single line diagram for the IC's project used in the study model. Certain assumptions were made, as set out below, made to the extent required.

The power flow study cases used in this Feasibility Study are established based upon the BC Hydro's base resource plan and load forecasts available at the time of performing the study, which includes existing and future generations, transmission facilities, and loads in addition to the subject interconnection project in this study. Applicable seasonal conditions and the appropriate study years for the study planning horizon are also incorporated.

Additional assumptions are listed as follows.

1) The regional generation are dispatched to the patterns that stress the transmission system in the study area. In these patterns, the regional generations are typically set to their Maximum Power Outputs (MPO) unless otherwise specified.

5 System Studies and Results

Based upon the IC's submitted information and the area system conditions, a new switching station (referred to as "P19T") at the proposed POI on 2L96 is required to interconnect the IC's generating project to the BCH system. There are multiple terminals and multiple sources on the existing line 2L96. The addition of the new switching station would help to maintain reliability and adequate protection performance to serve the existing customers and the new addition.

With the new switching station P19T, the existing line 2L96 will be segregated into two new lines, temporarily referred to as: 2L96_A (WSN to P19T) and 2L96_B (P19T-BLW). The proposed customer-built 230 kV transmission line from P19T to P19 is designated as 2L96_C. The temporary line designations will be replaced by permanent designations at a later stage of interconnection study.

The existing line 2L96 is a BCH Bulk Electric System (BES) element. The new line 2L96_C will become IC's BES and the IC will be responsible for the compliance with applicable MRS requirements.

5.1 Power Flow Study Results

Power flow studies were performed to evaluate whether the IC's generating project would cause any unacceptable system performance (e.g. equipment overloads, steady-state voltage violation and voltage instability) and to determine the reinforcement requirement based on steady state performance analysis.

Steady-state power flow studies have been conducted with the focus on the 2028 heavy winter (28HW), 2029 light summer (29LS), 2029 heavy summer (29HS), 2031 heavy winter (31HW), 2032 light summer (32LS) and 2032 heavy summer (32HS) system conditions, taking into considerations of factors such as load conditions, seasonal variation in ambient temperatures, and generation patterns that stress the transmission system to capture any performance violations. Study results are summarized below.

5.1.1 Branch Loading Analysis

Table 5-1 shows a summary of branch loading analysis under system normal (P0) and single contingencies (P1, P2) for various load conditions.

The study finds no transformer or line overload under system normal conditions and single contingency conditions for all the studied load conditions.

Table 5-1: Summary of Branch Loading Study Results

Case	IC's Plant Output	Contingency Identified		Branch Loading			
				2L96_A	2L96_B	2L354	2L95
		Cat.	Description	WSN-P19T	BLW-P19T	BLW-RBF	RBF-SCK
Winter Rating (Amp)				1093	1093	950	944
28HW	MAX	P0	System Normal	8.1 %	38.2 %	38.2 %	28.6 %
	MAX	P1	2L96.1 (WSN-SS)	-	31.3 %	28.2 %	18.3 %
	MAX	P1	2L96.2 (BLW - SS)	32.5 %	-	19.2 %	29.3 %
	MAX	P1	2L95 (RBF- SCK)	13.4 %	19.3 %	10.6 %	-
	MAX	P2	BLW 2CB4	32.5 %	-	17.0 %	26.9 %
	MAX	P2	WSN 2CB7	7.6 %	36.7 %	35.8 %	26.4 %
31HW	MAX	P0	System Normal	7.2 %	36.9 %	37.0 %	27.9 %
	MAX	P1	2L96.1 (WSN-SS) OOS	-	31.3 %	29.0 %	19.6 %
	MAX	P1	2L96.2 (BLW - SS) OOS	32.4 %	-	18.6 %	28.2 %
	MAX	P1	2L95 (RBF- SCK) OOS	14.1 %	18.6 %	10.0 %	-
	MAX	P2	BLW 2CB4 Internal Fault	32.4 %	-	16.7 %	26.1 %
	MAX	P2	WSN 2CB7 Internal Fault	6.9 %	35.4 %	34.6 %	25.7 %
Summer Rating (Amp)				817	817	574	515
29HS	MAX	P0	System Normal	7.6 %	47.4 %	43.2 %	38.0 %
	MAX	P1	2L96.1 (WSN-SS) OOS	-	45.5 %	41.5 %	35.4 %
	MAX	P1	2L96.2 (BLW - SS) OOS	47.0 %	-	25.4 %	39.8 %
	MAX	P1	2L95 (RBF- SCK) OOS	23.4 %	24.3 %	10.6 %	-
	MAX	P2	BLW 2CB4	47.0 %	-	23.5 %	37.6 %
	MAX	P2	WSN 2CB7	8.8 %	46.0 %	41.0 %	35.7 %
29LS	MAX	P0	System Normal	20.8 %	27.3 %	23.8 %	22.8 %
	MAX	P1	2L96.1 (WSN-SS) OOS	-	44.8 %	48.2 %	47.7 %
	MAX	P1	2L96.2 (BLW - SS) OOS	47.1 %	-	15.3 %	24.9 %
	MAX	P1	2L95 (RBF- SCK) OOS	31.5 %	15.7 %	6..5 %	-
	MAX	P2	BLW 2CB4	47.1 %	-	16.1 %	25.3 %
	MAX	P2	WSN 2CB7	21.7 %	27.5 %	24.6 %	24.3 %
32LS	MAX	P0	System Normal	22.1 %	26.1 %	22.6 %	21.7 %
	MAX	P1	2L96.1 (WSN-SS) OOS	-	44.8 %	48.9 %	48.6 %
	MAX	P1	2L96.2 (BLW - SS) OOS	47.2 %	-	14.5 %	23.9 %
	MAX	P1	2L95 (RBF- SCK) OOS	32.1 %	15.1 %	6.3 %	-
	MAX	P2	BLW 2CB4 Internal Fault	47.1 %	-	15.7 %	24.6 %
	MAX	P2	WSN 2CB7 Internal Fault	22.8 %	26.4 %	23.6 %	23.3 %
32HS	MAX	P0	System Normal	9.6 %	46.6 %	42.5 %	37.7 %
	MAX	P1	2L96.1 (WSN-SS) OOS	-	45.6 %	42.5 %	36.8 %
	MAX	P1	2L96.2 (BLW - SS) OOS	46.6 %	-	25.3 %	39.4 %
	MAX	P1	2L95 (RBF- SCK) OOS	23.8 %	23.7 %	10.3 %	-
	MAX	P2	BLW 2CB4 Internal Fault	46.6 %	-	23.5 %	37.3 %

Case	IC's Plant Output	Contingency Identified		Branch Loading			
				2L96_A	2L96_B	2L354	2L95
		Cat.	Description	WSN-P19T	BLW-P19T	BLW-RBF	RBF-SCK
	MAX	P2	WSN 2CB7 Internal Fault	11.3 %	45.3 %	40.4 %	35.7 %

5.1.2 Steady-State Voltage Analysis

With the existing HMH (One Hundred Mile House) RAS, the voltage performance under system normal condition (P0) and single contingencies (P1 and P2) is acceptable.

Hixon Wind Power project does not contribute to the low voltage performance concerns identified under heavy load conditions.

5.1.3 Reactive Power Capability Evaluation

The BCH TIR requires IBR generators have the dynamic reactive power capability at a minimum of +/- 33% of its Maximum Power Output (MPO) at the high voltage side of the IC's switchyard over the full MW operating range.

Based on the PSS/E power flow data submitted for this project, the study finds that the proposed generating project cannot meet the BC Hydro's reactive capability requirement at full MW output.

Furthermore, the BCH TIR requires the IC's project to provide sufficient reactive power capability over full MW operating range including at zero MW output level. The proposed wind farm does not meet this requirement at near zero MW output.

5.1.4 Anti-Islanding Requirements

If the new 230 kV transmission line connected to Hixon Wind Power is islanded with local 230 kV and 66 kV lines during various operation conditions or under system contingencies such as loss of 2L95 & 2L96_A (WSN-P19T) or loss 2L354 & 2L96_A (WSN-P19T), an Anti-islanding Transfer Trip is required to isolate the wind farm and trip the new 230 kV interconnection line at P19T is required.

Hixon Wind Power is not arranged for islanded operation. The IC is required to install anti-islanding protection within their facility to disconnect the wind farm from the grid when an inadvertent island with the local load forms.

5.2 Fault Analysis

The short circuit analysis in the FeS is based upon the latest BC Hydro system model, which includes the generating facility information and associated impedance data provided by the IC. A more detailed study will be performed at the system impact study stage if needed.

5.3 Stations Requirements

A new outdoor 230 kV, 3-circuit breaker ring bus switching station will be built at POI, close to the existing 230 kV transmission line 2L96. The existing transmission line 2L96 will be cut and looped in to, and 230kV transmission line of Hixon Wind Power Project will be terminated at the new switching station.

Scope of switching station work:

- Acquire adequate property for a new switching station close to the existing transmission line 2L96.
- Construct a new outdoor 230 kV, 3-circuit breaker ring bus switching station. Refer to Appendix B one-line sketch for details.
- Construct a new control building and other required switching station facilities and infrastructures.
- Cut the existing 2L96 and loop into the switching station.
- Terminate 230 kV transmission line of Hixon Wind Power Project at the station. Refer to Appendix B one-line sketch for details.

5.4 Protection & Control Requirements

BC Hydro will provide line protections for 2L96_A, 2L96_B and 2L96_C (BC Hydro end only) protections. Existing 2L96 is a single transmission line but will be segregated into three as a part of this project: WSN to P19T is 2L96_A, P19T to BLW is 2L96_B and P19T to P19 is 2L96_C. BCH will build a new 230 kV three-breaker-ring terminal switching station (tentatively designated as P19T) for interconnecting to the new proponent Hixon Wind farm (tentatively designated as P19).

The IC shall provide the following for the interconnection of P19:

- Entrance protection that complies with the latest version of the "60 kV to 500 kV BC Hydro Technical Interconnection Requirements for Power Generators."
- Provide two SEL-411L-1 relays (firmware and options specified by BC Hydro) at the entrance of P19 to provide protection coverage for 2L96_C. BC Hydro P&C Planning will provide core protection settings for these relays to protect transmission line 2L96_C during a transmission line fault. Non-core protection such as local breaker failure, auto-reclosing, backup protection for station elements will not be provided by BC Hydro P&C Planning.
- The IC is responsible for NERC PRC-related tasks, settings to compliance standards within their facilities.
- The IC is responsible for providing a communications link for remote interrogation of the PPIS equipment by BCH servers.
- Provide anti-islanding protection as per Section 5.1.4.

5.5 Telecommunications Requirements

BC Hydro performed a high-level feasibility assessment of a telecom solution to meet the following requirements.

Teleprotection Requirements for Telecom

- WECC Level 3 PY & SY, WSN - P19T, with C37.94 interfaces.
- WECC Level 3 PY & SY, P19T – BLW, with C37.94 interfaces.
- WECC Level 3 PY & SY, P19T – P19, with C37.94 interfaces.
- WECC Level 3 transfer trip PY & SY, SCK – to BLW
- WECC Level 3 transfer trip PY & SY, RBF (2L95) to – BLW (2L95)
- WECC Level 3 transfer trip PY & SY, RBF (2L354) to – BLW (2L354)

Telecontrol Requirements for Telecom

- Provide two P19T SCADA circuits off FVO & SIO.
- Provide P19 SCADA circuit off FVO & SIO.
- Provide P19T REMACC circuit off EDM.

Other Requirements for Telecom

- Provide PY & SY T1s over separate OC3s between P19T – P19.
- Provide TMS circuit for P19T (end point TB).
- Provide MPLS links and LSPs for new P19T and BLW MPLS nodes.

Certain assumptions were made for determining a potential telecom solution. Details of the telecom solution (e.g. assumptions made, alternatives investigated and work required for BCH and the IC) would be provided at the next study stage.

6 Cost Estimate and Schedule

The non-binding good faith estimated cost and time to construct the Network Upgrades required to interconnect the proposed project will be provided in a separate letter to the IC.

7 Conclusions

To interconnect the Hixon Wind Power Project and its facilities to the BCH Transmission System at the POI, this Feasibility Study has identified the following conclusions and requirements:

1. A new 230 kV switching station (referred to as "P19T") on 2L96 is required as the proposed POI for interconnecting the IC's generating project to the BCH system. With the new switching station P19T, the existing line 2L96 will be segregated into two new lines, temporarily referred to as: 2L96_A (WSN to P19T) and 2L96_B (P19T-BLW). The proposed customer-built interconnection line (P19T-P19) is designated as 2L96_C.

2. The connection of Hixon Wind Power Project does not cause any performance violation (i.e. thermal overload, voltage performance violation or voltage stability concern) under system normal and single contingency conditions.

3. An Anti-islanding Transfer Trip scheme to P19T is required to isolate the wind farm when it is islanded with local loads during various operation conditions or under system contingencies. In addition to the entrance protection and line protection of 2L96, the IC is required to install anti-islanding protection within their facility to disconnect the wind farm from the grid when an inadvertent island with the local load forms.

4. According to BC Hydro's TIR, the IC's project must have sufficient reactive power capability over full MW operating range including at the zero MW output level. The Hixon wind farm as submitted does not meet the reactive capability requirement at full MW output level, which requires additional reactive power compensation. Furthermore, the proposed wind farm does not meet this requirement at near zero MW output.

5. IC shall build a new 230-kV line (whose length is approximately 25 km) for interconnecting the Hixon Wind farm to the POI. The new line 2L96_C will become IC's BES and the IC will be responsible for the compliance with applicable MRS requirements.

6. BC Hydro will provide line protections for 2L96_A, 2L96_B and 2L96_C (BC Hydro end only) protections. As part of the line protection replacements for each of the three lines, telecommunication facilities will

be required to accommodate the new protection schemes. The IC shall provide required relays, telecom facility and associated equipment at its facilities to accommodate the new protection schemes.

Appendix A
Plant Single Line Diagram Used for Power Flow Study

Figure A-1 shows Hixon Wind Power Project single line diagram used for power flow study.

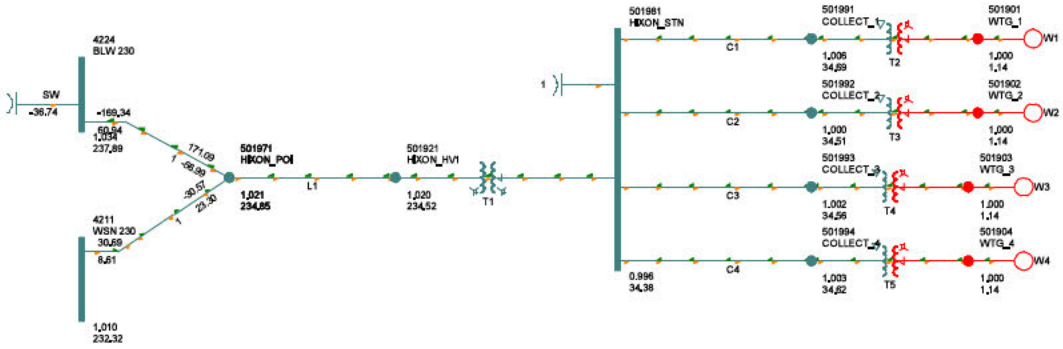

Figure A-1: Hixon Wind Power Project Single Line Diagram for Power Flow Study.

As seen in the diagram, Hixon Wind Power Project has one main power transformer, which connects to a bus that has 4 feeders connecting all 18 wind turbines, as well as a capacitor bank.

Appendix B
One-Line Sketch for New Switching Station

Figure B-1 shows the Stations Planning One-Line Sketch for the New Switching Station P19T.

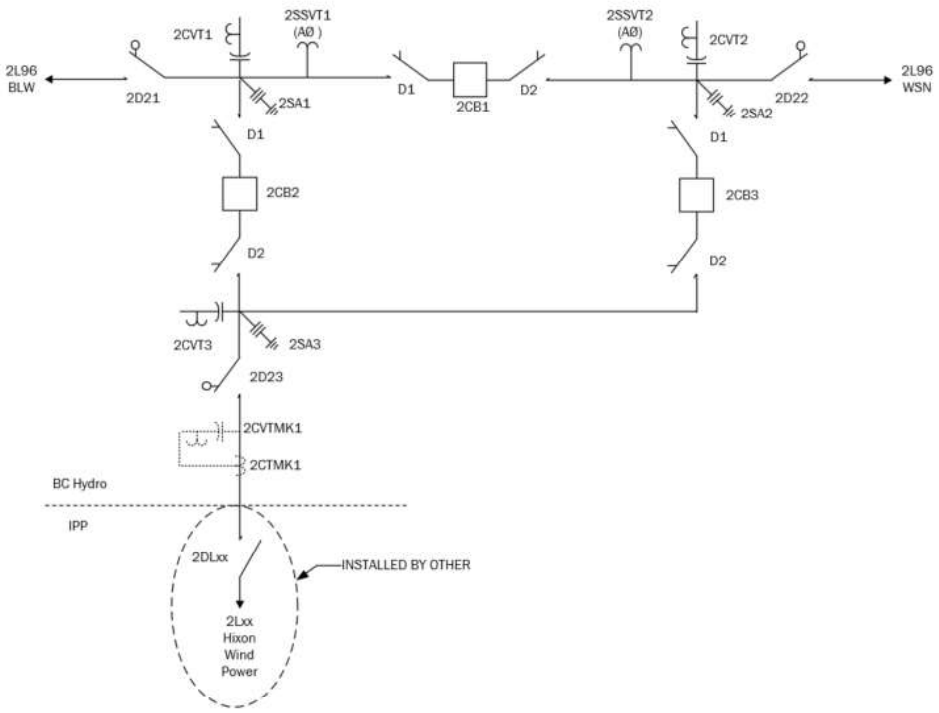

Figure B-1: Stations Planning One-Line Sketch for the New Switching Station P19T.