BC Hydro
Power smart

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

July 30, 2024

[redacted]

[redacted]

[redacted]

RE: CEAP IR 54 - Taylor Wind Project - Interconnection Feasibility Study Report

Enclosed is the Interconnection Feasibility study report for the proposed Taylor Wind 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 $87.1M.

Major Scope of Work Identified:

- Acquire adequate property for a new switching station close to existing transmission line 2L392
- Construct a new outdoor 230kV, 3- circuit breaker ring bus switching station
- Construct a new control building and other required substation facilities and infrastructures
- Supply and install protection relays and other required protection equipment
- Supply and install microwave towers, waveguides, antennas, and other required telecommunications equipment

Exclusions:

- GST
- Right-of-way
- Permits

Key Assumptions:

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

Key Risks:

- Additional right of way or acquisition of more property may be required
- Existing microwave towers may need to be upgraded at various sites to accommodate new equipment leading to increased costs
- 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 increased costs
- Costs 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_54_Taylor Wind_FeS_Report_final.pdf

[redacted]

Taylor Wind Project

Interconnection Feasibility Study

BC Hydro EGBC Permit to Practice No: 1002449

2024 CEAP IR # 54

Prepared for: [redacted]

[redacted]

Report Metadata

Header:	Taylor Wind Project
Subheader:	Interconnection Feasibility Study
Title:	Taylor Wind Project
Subtitle:	2024 CEAP IR # 54
Report Number:	1000-APR-00024
Revision:	0
Confidentiality:	Public
Date:	2024 Jul 30
Volume:	1 of 1

Prepared for:

[redacted]

Related Facilities:	2L392 SBK-SGB
Additional Metadata:	Transmission Planning 2024-066 Filing Subcode 1350

[redacted]

Revisions

Revision	Date	Description
0	2024 Jul	Initial release

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Executive Summary

[redacted] the interconnection customer (IC), requests to interconnect its Taylor Wind Project (2024 CEAP IR # 54) to the BC Hydro (BCH) system. Taylor Wind Project has fifty (50) [redacted] 4 MW [redacted] Type 4 wind turbine generators with total installed capacity of 200 MW and a maximum power injection of 195.7 MW into the BC Hydro system at the POI. The proposed Point of Interconnection (POI) is on 2L392 at 22.1 km from Hydro's South Bank (SBK) 230 kV substation. The IC's project will connect to the POI via a 14.83 km 230 kV interconnection line. The IC's proposed commercial operation date (COD) is April 30, 2029.

To interconnect the Taylor Wind Project 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 "P54T") on 2L392 is required at the proposed POI for interconnecting the IC's generating project to the BCH system. With the new switching station P54T, 2L392 will be segregated into three new lines, temporarily referred to as: 2L392_A (SBK-P54T), 2L392_B (P54T-SGB) and 2L392_C (P54T-P54). The temporary line designations will be replaced by permanent designations at a later stage of interconnection study.
2. The connection of Taylor Wind Project does not cause any performance violation (i.e. thermal overload, voltage performance violation or voltage stability concern) under system normal conditions.
3. The study does not find any new thermal or voltage performance violation attributed to the new IC's project based on single contingency analysis.
4. In addition to entrance protection and line protection of 2L392_C, the IC is required to install anti-islanding protection within their facility to disconnect the IC's wind farm when an inadvertent island with the local loads forms.
5. BC Hydro will provide line protection for 2L392_A, 2L392_B, and 2L392_C (BC Hydro end only) protections. As part of the new line protection for each of the three lines, telecommunication facilities will be required to accommodate the new protection schemes. The IC shall provide required

entrance protection, 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
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
BLH	Bullhead Microwave Station
EDM	Edmonds Office
FVO	Fraser Valley Office
SBK	South Bank Substation
SGB	Shell Groundbirch Switching Station
SIO	South Interior Office

1 Introduction

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

Table 1-1 Summary of Project Information

Project Name	Taylor Wind Project	
Name of Interconnection Customer (IC)	[redacted]	
Point of Interconnection (POI)	on 2L392 at 22.1 km from SBK	
IC's Proposed COD	30th April 2029	
Type of Interconnection Service	NRIS ☒	ERIS ☐
Maximum Power Injection [1] (MW)	195.7 MW (Summer)	195.7 MW (Winter)
Number of Generator Units	50 x 4 MW WTGs	
Plant Fuel	Wind	
Note 1: The maximum achievable power injection at the POI is approx. 196 MW after accounting for MW losses and service load which is the same as the IC proposed amount.		

[redacted] the interconnection customer (IC), requests to interconnect its Taylor Wind Project (2024 CEAP IR # 54) to the BC Hydro (BCH) system. Taylor Wind Project has fifty (50) [redacted] 4 MW [redacted] Type 4 wind turbine generators with total installed capacity of 200 MW and a maximum power injection of 195.7 MW into the BC Hydro system at the POI. The proposed Point of Interconnection (POI) is on 2L392 at 22.1 km from Hydro's South Bank (SBK) 230 kV substation. The IC's project will connect to the POI via a 14.83 km 230 kV interconnection line. The IC's proposed commercial operation date (COD) is April 30, 2029.

Figure 1-1 shows the Peace region 138/230 kV transmission system diagram. including P54 interconnection. The study area – south Peace region 230/138 kV network has six existing IPPs, several transmission voltage customers, and BC Hydro distribution substations. SGB is a major substation in the 230 kV network, which normally receives power from SBK and SLS. P54 will add power delivery to SGB. SGB also connects to BMT substation, which has four 230/138 kV transformers and supplies DAW substation as well as 138 kV transmission voltage customers. 1L377 is normally open between ET3 and PLD, which separates the

north Peace 138 kV regional network from the south Peace 230/138kV regional network.

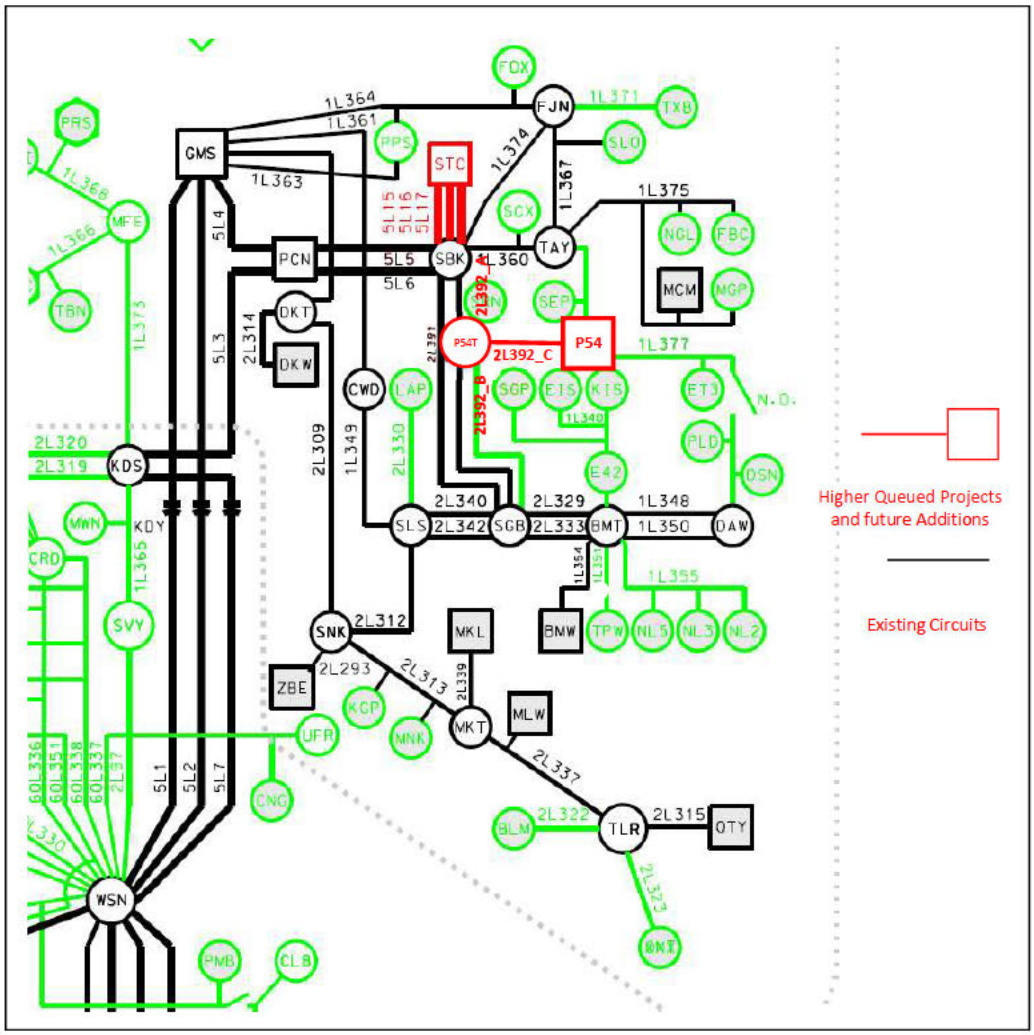

Figure 1-1: Peace Region 138/230 kV Transmission System Diagram

The existing wind farms are as follows:

- Moose Lake Wind Farm (MLW) has a total capacity of 15 MW and is tap connected on 2L337
- Zonnebeke Wind Farm (ZBE) has a total capacity of 30 MW and is connected to SNK via 2L393.
- Meikle Wind Farm (MKL) has a total capacity of 184.6 MW and is connected to MKT via 2L339.

- Quality Wind Farm (QTY) has a total capacity of 142.2 MW and is connected to TLR via 2L315.
- Dokie Wind Farm (DKW) has a total capacity of 144 MW and is connected to DKT via 2L314.
- Bear Mountain Wind Farm (BMW) has a total capacity of 105.4 MW and is connected to BMT via 1L354.

There are major network upgrades being planned in the Peace region as follows.

- Site C generating project will add six hydroelectric generators with a total installed capacity of 1200 MW. Two parallel 500 kV lines (5L5 and 5L6) to Peace Canyon substation (PCN) came to service in 2023. Based on the current schedule, the Site C project will be completed by end of 2025.
- A new 230 kV/138 kV transformer at BMT (i.e. BMT T4) is planned to be installed in June 2026 to accommodate load addition.

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 estimated time to construct will be provided.

Per OATT, the feasibility study is performed individually for each of the participating projects in the CEAP process 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, 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.

2) Based on the latest information at the time of this study, the projected in-service date for BMT T4 project is June 2026, which is before the projected in-service date of this IC.

3) Based on the schedule available at the time of this study, the Site C project will be completed by end of 2025.

4) 1L377 is normally open between ET3 and PLD. Change of this configuration could affect the study results.

5 System Studies and Results

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.

The study focuses on the 2029 light summer (29LS) system load condition which is typically a stressed condition for a generation interconnection project, taking into considerations of factors such as load conditions, seasons and generation patterns. The 2029 heavy summer (29HS) and 2029 heavy winter (29HW) cases are also checked at a high level to capture any possibility of performance violations under high load conditions.

5.1.1 Branch Loading Analysis

The study finds no transformer or line overload under system normal conditions for all three load conditions studied.

The study also does not find any new thermal violation attributed to the IC's project based on single contingency analysis.

5.1.2 Steady-State Voltage Analysis

With the connection of the IC's project, the voltage performance under system normal condition and single contingencies is acceptable for all the three load conditions (29LS, 29HS, 29HW). Table 5-1 shows a summary of steady-state voltage performance under heavy winter system condition and contingencies.

Table 5-1: Summary of Steady-State Voltage Study Results

Case	IC's Plant Output	Contingency		Bus Voltages (pu)			
		Cat.	Description	P54W	SGB 230	SLS 230	SNK 230
29HW	Max	P0	System Normal	1.021	1.029	1.030	1.031
		P1	SBK_T21	1.020	1.029	1.029	1.031
		P1	SBK_T22	1.020	1.029	1.029	1.031
		P2	SBK 2CB12	1.019	1.027	1.028	1.031
		P2	SBK 2CB13	1.019	1.027	1.028	1.031

[redacted]

Case	IC's Plant Output	Contingency		Bus Voltages (pu)			
		Cat.	Description	P54W	SGB 230	SLS 230	SNK 230
		P2	SBK 2CB21	1.019	1.027	1.028	1.031
		P2	SBK 2CB22	1.013	1.027	1.028	1.031
		P1	SBK_T11	1.021	1.029	1.030	1.031
		P1	SBK_T12	1.021	1.029	1.030	1.031
		P1	SBK_Reactor	1.021	1.029	1.030	1.031
		P1	GMS_T14&12	1.021	1.029	1.029	1.031
		P1	GMS_T13&11	1.021	1.029	1.029	1.031
		P1	2L391	1.021	1.028	1.028	1.031
		P1	2L392_A	1.018	1.029	1.029	1.031
		P1	2L392_B	1.018	1.029	1.029	1.031
		P1	2L308	1.017	1.023	1.022	1.027
		P1	2L309	1.021	1.028	1.029	1.031
		P1	2L314	1.023	1.030	1.031	1.032
		P1	2L393	1.022	1.030	1.030	1.031
		P1	2L313	1.024	1.031	1.032	1.031
		P1	2L329	1.017	1.019	1.021	1.029
		P1	2L333	1.017	1.019	1.021	1.029
		P1	2L339	1.023	1.031	1.032	1.032
		P1	2L337	1.023	1.031	1.031	1.032
		P1	2L322	1.021	1.029	1.030	1.031
		P1	2L315	1.023	1.031	1.031	1.032
		P1	2L330	1.021	1.029	1.030	1.031
		P1	2L312	1.022	1.030	1.030	1.027
		P1	2L340	1.021	1.029	1.029	1.031
		P1	2L342	1.021	1.029	1.029	1.031
		P1	2L348	1.022	1.031	1.032	1.031
		P2	SGB 2CB3	1.017	1.019	1.021	1.029
		P2	SGB 2CB4	1.015	1.012	1.014	1.026
		P2	SGB 2CB5	1.015	1.012	1.014	1.026
		P2	SGB 2CB6	1.008	0.997	1.035	1.031
		P2	SGB 2CB7	1.020	1.027	1.035	1.031
		P2	SGB 2CB9	1.016	1.017	1.021	1.029
		P2	SGB 2CB12	1.022	1.031	1.031	1.031
		P1	SLS 2CB11	1.021	1.028	1.028	1.027
		P2	SLS 2CB12	1.022	1.030	1.030	1.027
		P2	SLS 2CB13	1.021	1.029	1.029	1.031
		P2	SLS 2CB21	1.021	1.027	1.027	1.031

Case	IC's Plant Output	Contingency		Bus Voltages (pu)			
		Cat.	Description	P54W	SGB 230	SLS 230	SNK 230
		P1	1L354	1.019	1.021	1.022	1.029
		P2	SNK 2CB1	1.021	1.029	1.030	1.033
		P2	SNK 2CB21	1.024	1.031	1.032	1.029
		P2	SNK 2CB12	1.022	1.030	1.031	1.025

5.1.3 Reactive Power Capability Evaluation

The BC Hydro TIR requires IBR power plant to have the dynamic reactive power capability at a minimum of +/- 33% of its 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 by the IC and the power flow study, the proposed generating project would be capable of meeting the BC Hydro's reactive capability requirement at the plant's maximum MW output, which is subject to further verification in the next stage of interconnection study.

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. According to the IC-provided reactive capability curve, the proposed WTG has +2.55/-2.22 Mvar reactive capability at zero MW output, which needs to be re-confirmed adequate in subsequent detailed studies if the IC's project proceeds further.

5.1.4 Anti-Islanding Requirements

The IC is required to install anti-islanding protection within its facility to disconnect the IC's wind farm 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 230kV, 3-circuit breaker ring bus Air Insulated Switchgear switching station (P54T temporarily) will be built at POI, close to the existing 230 kV transmission line 2L392. The existing transmission line 2L392 will be cut and looped in/out, and 230 kV line of Taylor Wind 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 2L392.
- Construct a new outdoor 230kV, 3-circuit breaker ring bus AIS switching station. Refer to the one-line sketch in Appendix B for details.
- Construct a new control building and other required substation facilities and infrastructures.
- Cut the existing 2L392 and loop in/out the switching station.
- Terminate 230kV transmission line of Taylor Wind Project at the station.

5.4 Protection & Control Requirements

BC Hydro will provide line protections for 2L392_A, 2L392_B and 2L392_C (BC Hydro end only) protections. Existing 2L392 is a single transmission line but will be segregated into three as a part of this project: SBK to P54T is 2L392_A (three terminal line), P54T to SGB is 2L392_B and P54T to P54 is 2L392_C. BCH to build a new 230kV three-breaker-ring terminal switching station (tentatively designated as P54T) for interconnecting to the new proponent Taylor Wind Farm (tentatively designated as P54). 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, Taylor Wind Project to provide the following for the interconnection of P54:

- 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 P54 to provide protection coverage for 2L392_C. BC Hydro P&C Planning will provide core protection settings for these

relays to protect transmission line 2L392_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 stated in Section 5.1.

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

- Provide WECC Level 3 64 kbps synchronous circuits between SBK and P54T for “SBK-P54T 2L392_A PY DIGITAL TELEPROT” and “SBK-P54T 2L392_A SY DIGITAL TELEPROT” with C37.94 interfaces.
- Provide WECC Level 3 64 kbps synchronous circuits between P54T and SGB for “P54T-SGB 2L392_B PY DIGITAL TELEPROT” and “P54T-SGB 2L392_B SY DIGITAL TELEPROT” with C37.94 interfaces.
- Provide WECC Level 3 64 kbps synchronous circuits between P54T and P54 for “P54T-P54 2L392_C PY DIGITAL TELEPROT” and “P54T-P54 2L392_C SY DIGITAL TELEPROT” with C37.94 interfaces..

Telecontrol Requirements for Telecom

- Provide two P54T SCADA circuits off FVO & SIO.
- Provide P54 SCADA circuit off FVO & SIO.
- Provide P54T REMACC circuit off EDM.

Other Requirements for Telecom

- Provide PY & SY T1s over separate OC3s between P54T-P54.
- Provide TMS circuit for P54T (end point TBD)
- Provide MPLS links and LSPs for new SBK, SGB, and P54T 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 Taylor Wind 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 “P54T”) on 2L392 is required at the proposed POI for interconnecting the IC’s generating project to the BCH system. With the new switching station P54T, 2L392 will be segregated into three new lines, temporarily referred to as: 2L392_A (SBK-P54T), 2L392_B (P54T-SGB) and 2L392_C (P54T-P54). The temporary line designations will be replaced by permanent designations at a later stage of interconnection study.
2. The connection of Taylor Wind Project does not cause any performance violation (i.e. thermal overload, voltage performance violation or voltage stability concern) under system normal conditions.
3. The study does not find any new thermal or voltage performance violation attributed to the new IC’s project based on single contingency analysis.
4. In addition to entrance protection and line protection of 2L392_C, the IC is required to install anti-islanding protection within their facility to disconnect the IC’s wind farm when an inadvertent island with the local loads forms.
5. BC Hydro will provide line protection for 2L392_A, 2L392_B, and 2L392_C (BC Hydro end only) protections. As part of the new line protection for each of the three lines, telecommunication facilities will be required to accommodate the new protection schemes. The IC shall provide required entrance protection, 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 Taylor Wind Project single line diagram used for power flow study.

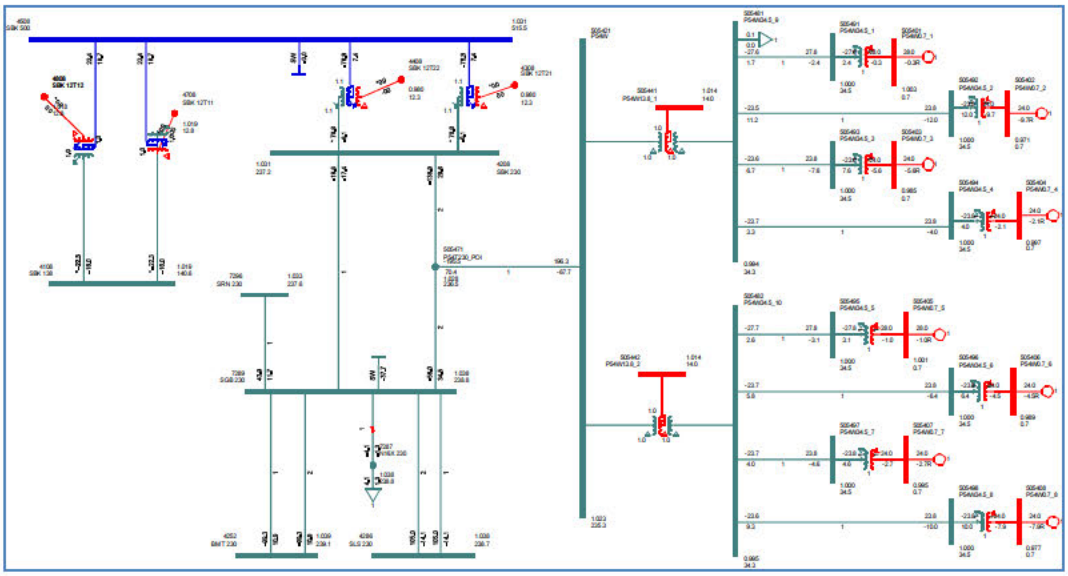

Figure A-1: Taylor Wind Project Single Line Diagram for Power Flow Study.

As seen in the diagram, Taylor Wind Project has two main power transformers dividing the plant into two parts. Each part has four (4) feeders connecting 25 wind turbines to the collector station.

Appendix B
One-Line Sketch for the new switching station P54T with the connection of the IC

Figure B-1 shows the Stations Planning One-Line Sketch for the new switching station P54T with the connection of the IC.

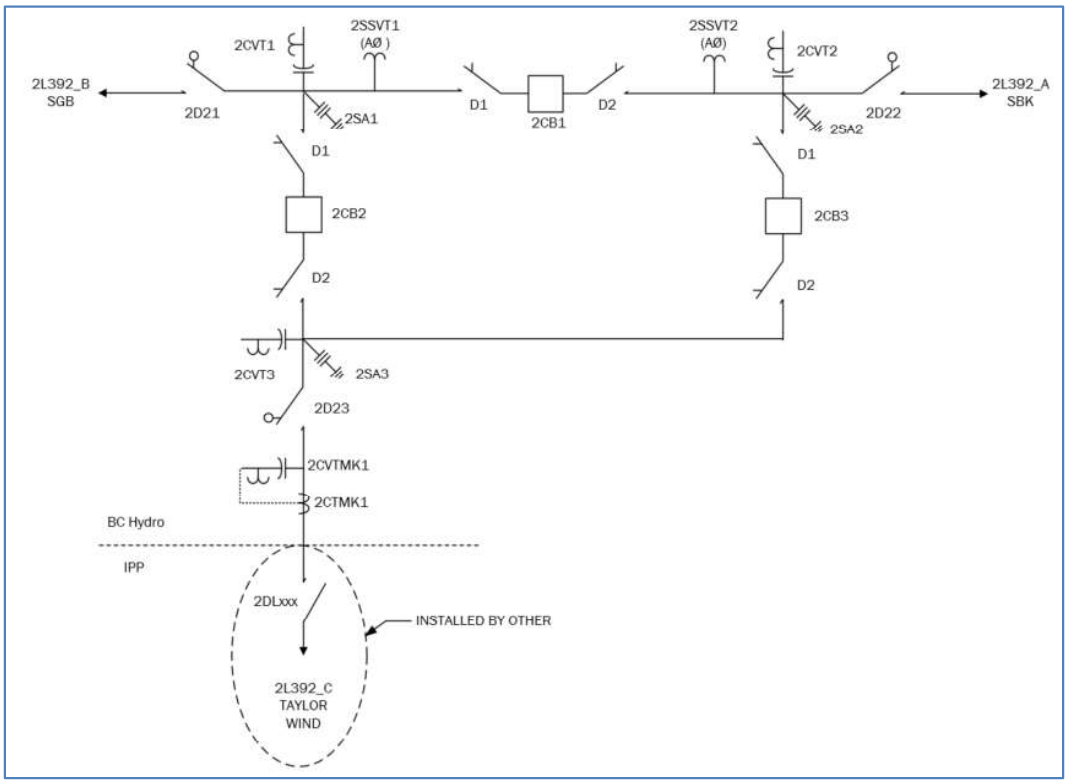

Figure B-1: Stations Planning One-Line Sketch for the new switching station P54T.