System Impact Study

Long Term Point-To-Point OASIS Request
AREF: 102007084, 102007085
On the AB.BC to BC.US.BORDER Path

January 1, 2025 to January 1, 2030

BC Hydro EGBC Permit to Practice No: 1002449

Revision 1

Report No: 000-APR-00013
May 2024

BC Hydro
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Executive Summary

Pursuant to BC Hydro OATT Section 19, two Long Term Firm Point-to-Point (LTFPTP) transmission service requests (TSRs) with OASIS AREF# 102007084 and # 102007085 have been studied:

OASIS #	102007084	102007085
Point of Receipt	AB.BC	AB.BC
Point of Delivery	BC.US.BORDER	BC.US.BORDER
Amount Requested	50 MW	50 MW
Start Time	2025-01-01	2025-01-01
Stop Time	2027-01-01	2030-01-01
Term	2 Years	5 Years
Submission Date	2024-01-31	2024-01-31

This SIS concludes the following with reference to the BCH transmission system:

1. Neither of the following Transmission Service Requests can be accommodated in whole as Long Term Firm transmission service without system upgrades,
    - 50 MW Service for 2 years under OASIS AREF# 102007084, or
    - 50 MW Service for 5 years under OASIS AREF# 102007085 if OASIS AREF# 102007084 is withdrawn.
2. To accommodate full 50 MW of LTFPTP Transmission Service, either the NLY phase shifting transformer or the 5L41 series capacitor at CHP needs to be upgraded.
3. Without the necessary system upgrades identified in this study, one of the following Transmission Service Requests can be partially accommodated as Long-Term Firm Transmission Service.
    - 30 MW Partial Service for 2 years under OASIS AREF# 102007084, or
    - 30 MW Partial Service for 5 years under OASIS AREF# 102007085 if OASIS AREF# 102007084 is withdrawn.
4. If the customer would withdraw the OASIS AREF# 102007084 and execute the 30 MW Partial Service for 5 years with OASIS AREF # 102007085, a roll-over right of 30 MW can be granted after the initial Partial Service period is due.

A separate document titled Evaluation of Conditional Firm Service (CFS) determines the remaining capacity that can be granted to the OASIS AREF# 102007084 and # 102007085 and the associated rollover rights.

ACRONYMS

The following are acronyms used in this report for BC Hydro's three letter codes and the planning regions.

AMC	American Creek Series Capacitor Station
BSY	Burrard Synchronous Condenser station
BDY	Boundary Substation in the US
CBN	Clayburn Substation
CHP	Chapmans Series Capacitor Station
CKY	Cheekye Substation
CRK	Creekside Series Capacitor Station
CUS	Custer Substation in the US
ING	Ingledow Substation
KLY	Kelly Lake Substation
MDN	Meridian Substation
MLN	Mclellan Substation
NIC	Nicola Substation
NLY	Nelway Substation
STC	Site C Generating Station
WSN	Williston Substation

NI	North Interior
SI	South Interior
LM	Lower Mainland
LMVI	Lower Mainland and Vancouver Island

LTFPTP	Long Term Firm Point-to-Point Transmission Service
OATT	Open Access Transmission Tariff

1. Introduction

Pursuant to BC Hydro Open Access Transmission Tariff (OATT) Sections 17.1, 17.2, and 17.3, the Transmission Service Requests (TSRs) with OASIS AREF# 102007084 and #102007085 were submitted by the Transmission Customer, Capital Power Energy (EPCR), to the Transmission Provider, British Columbia Hydro and Power Authority (BC Hydro). The requests were accepted and deemed complete. An excerpt of the key information is as follows, with the full details shown in Appendix A.

Table 1-1: OASIS AREF 102007084 and 102007085

OASIS #	102007084	102007085
Point of Receipt (POR)	AB.BC	AB.BC
Point of Delivery (POD)	BC.US.BORDER	BC.US.BORDER
Amount Requested	50 MW	50 MW
Start Time	2025-01-01	2025-01-01
Stop Time	2027-01-01	2030-01-01
Term	2 Years	5 Years
Submission Date	2024-01-31	2024-01-31

In accordance with the BC Hydro OATT Sections 19.1 and 19.2, BC Hydro (Transmission Provider) determined that a System Impact Study (SIS) was needed to accommodate the service that was requested by EPCR on January 31, 2024, and subsequently a System Impact Study Agreement was executed on February 12, 2024.

It can be observed from Table 1-1 that each of the two TSRs requests a 50 MW power transfer along the same delivery path with a different but overlapping service period. Due to the system limitations, it is not possible to accommodate both TSRs simultaneously with full service. Thus, the following two possible scenarios were investigated in this study: the customer would execute the first TSR with OASIS AREF# 102007084 for 2 years; or the customer would withdraw the OASIS AREF# 102007084 and only execute the TSR with OASIS AREF # 102007085 for 5 years.

This SIS is mainly to determine whether the Full Service can be offered in response to the two TSRs with OASIS AREF# 102007084 and # 102007085, and whether a roll-over right can be offered after the initial service period is due for the TSR # 102007085. A separate document titled Evaluation of Conditional Firm Service (CFS) determines the conditional service that can be granted to the OASIS AREF# 102007084 and # 102007085.

This SIS evaluates the incremental impact of the 50 MW export on the BC Hydro transmission grid. This 50 MW export is in addition to the current transmission commitments, which includes:

- The Network Integration Transmission Service (NITS) that serves the domestic loads
- The pre-existing Long Term Firm Point-to-Point (LTFPTP) transmission service agreements

The study outcomes indicate whether the 50 MW requested in the TSR # 102007084 and # 102007085 can be granted without system reinforcements; if system reinforcements are required for a full service, how much partial Long Term Firm Point-to-Point transmission service can be made available for the period requested in the TSR # 102007084 and # 102007085 before system reinforcements will be added, and whether a roll-over right can be offered after the initial Partial Service period is due for the TSR # 102007085.

2. Study Scope

The SIS only determines, under specified assumptions and limitations, whether 50 MW of transmission capacity is available, and if not, the network upgrades which will be needed to provide the transfer capacity for the duration of the transmission service request. The SIS

does not determine nor guarantee the availability of generation resources should a transmission service agreement be executed. It is up to the Transmission Customer (EPCR) of the executed Service Agreement to provide the generation resources.

In accordance with the System Impact Study Agreement and BC Hydro OATT Section 19.3, this SIS identifies the following to accommodate the Transmission Service Request:

- any transmission system constraints
- any necessary network upgrades to accommodate the TSRs in full
- availability of a roll-over right of the service to be offered

A separate document titled Evaluation of Conditional Firm Service (CFS) determines the conditional service that can be granted to the OASIS AREF# 102007084 and # 102007085 and the rollover rights associated. Note that the study analyzed the BCH System only. A study of transfer limits in the neighboring systems is not within the scope of this study. **Customers requesting these services are responsible for obtaining transmission service from the neighboring Transmission Service Providers.**

3. Planning Criteria and Study Methodology

3.1. Planning Standards and Criteria

BC Hydro follows the general methodology outlined in BC Hydro's OATT Attachment D, *Methodology for Completing a System Impact Study*, as shown in Appendix B of this report.

BC Hydro performs this SIS to determine the impact of the requested transmission service on the BC Hydro transmission System in accordance with the following standards and criterion.

1. NERC Standard TPL-001-4
2. WECC Criterion TPL-001-WECC-CRT-3.2

To supplement the planning standard and criterion, BC Hydro's TPL-001-4 Study Methodology documents (Report No: T&S-Planning 2020-003 and T&S-Planning 2020-004) are also applied in this SIS.

This SIS reviews the limiting factors including branch loading, voltage performance, voltage stability and transient stability limits under both normal and contingency conditions.

This SIS considers the following categories of contingencies:

- System normal or N-0 (Planning Event P0 in TPL-001-4)
- Single contingencies or N-1 (Planning Events P1 and P2 in TPL-001-4)
- Multiple contingencies (Planning Events P3 to P7 in TPL-001-4)

3.2. Generation Dispatch Methodology

In addition to the above NERC standard and the WECC criterion, the BC Hydro's Generation Dispatch in Transmission Planning (GDTP) Guideline (Pages 1282 to 1290) was adopted for the pre-existing commitments, which requires certain generation dispatch scenarios used to establish required system performance for those pre-existing services. To determine the incremental impact of the 50 MW export, the GDTP guideline included in the base scenarios for the pre-existing conditions is introduced below.

The GDTP Guideline specifies the generation dispatch scenarios that need to be implemented for three types of cut-planes in the 500 kV system, i.e., source, network, and load cut-planes. The relevant cut-plane for this SIS is Interior to Lower Mainland cut-plane (ILM). The ILM is a network cut-plane, and the dispatch requirements are described as:

1. Under both N-0 and N-1 conditions, the ILM must be capable of serving the Lower Mainland and Vancouver Island (LMVI) peak load (including the firm export to US) with the specified coastal generation scenario[1].

2. Under N-0 condition, the ILM must have the capability to transfer either the maximum North Interior generation or South Interior generation from the source side to the load side.

3. Under N-1 condition, the ILM must be capable of serving the LMVI peak loads (including the firm export to US) with the following conditions:
   - for a single line outage on KLY-LM, 12% of the total generating capacity in the South Interior region is set to be out of service.
   - for a single line outage on NIC-LM, 12% of the total generating capacity in the North Interior region is set to be out of service.

4. System Study Conditions

In this SIS, a range of system conditions and factors were considered when assessing the impact of the requested LTFPTP transmission service on BC Hydro's transmission system, which include, but are not limited to, relevant load forecasts, system interchanges, resource plans, generation dispatch scenarios, and in-plan transmission capital projects.

The study period mirrors the Start Time and Stop Time of the two TSRs, from January 2025 to January 2030, plus additional years as necessary. Study cases for both winter and summer are considered. The winter cases represent system conditions from November to April, and the summer cases represent system conditions from May to October.

4.1. Resource Plan

The study is performed based on the BC Hydro NITS Base Resource Plan (BRP) released on March 31, 2023 (referred to March 2023 NITS BRP). The available resources in March 2023 NITS BRP inform the generation dispatch scenarios in this SIS.

Site C is the major capital project that will add a total of 1100 MW of generating capacity in the Northern Interior, and it will enter service by the end of 2024 upon the BRP.

In addition, following the BCUC's Decision and Order G-58-24 on the approval (Section 3.6.1) of including the Contingent Resource Plans (CRPs) and high load scenarios of BC Hydro's Updated 2021 IRP in BC Hydro's Network Integration Transmission Services update under the OATT, a TSR was received in April 2024 to request an updated Network Integration Transmission Service (NITS). However, the CRPs in the TSR for an updated NITS is not considered as a part of the NITS commitment in this study.

4.2. Load Forecasts

The BC Hydro April 2023 System Reference Load Forecast and August 2022 Distribution Substation Load Forecast were used in this SIS. The high load forecasts associated with the CRPs is not included in this study.

4.3. System Interchanges

The pre-existing system interchanges (Committed Long Term Firm Point-to-Point transmission service) between the BC Hydro system and the neighboring utilities are modelled as follows:

1. GMS.MCA.REV – BC.US.Border[2]: 600 MW (Oct.1, 2023 – Oct.1, 2028); 230 MW (Oct.1, 2028 onwards)
2. KI - BC.US Border: 370 MW
3. POWELL.RIVER – BC.US Border: 45 MW (Jan.1, 2024 – Oct.1, 2024); 78 MW (Oct.1, 2024 – Jan.1, 2029)

[1] In accordance with the GDTP, 12% of the total generating capacity in the LMVI area is set out of service which includes the largest load-side generator (a 150 MW unit) to create the base generation dispatch scenario. With the turn-off of the largest load-side generator, the Planning Event P3 as defined in NERC TPL-001-4 is inherently satisfied when assessing the first single contingency.

[2] 50 MW is used as Transmission Reliability Margin (TRM) on the BC Hydro to US transfer path, i.e., WECC Path 3.

4. AB.BC – BCHA.NTWK.LD: 0 MW
5. BC Hydro - Fortis BC[3]: 200 MW

4.4. Transmission Capital Projects

The study cases used in this SIS include all the existing transmission facilities and the in-plan transmission capital projects. Two of the in-plan transmission capital projects that are most relevant are listed below.

1. **Burrard Synchronous Condensers Ceasing Operation**
   Burrard synchronous condenser station (BSY) currently has three operable units and this SIS has assumed the three units will be available until the end of 2028.

2. **Auto-Var Control Scheme Addition to Shunt Reactors**
   The shunt reactors at the Kelly Lake (KLY) and six other substations are currently manually controlled by grid operators. A capital project is initiated to place all these reactors under automatic controls to locally regulate bus voltages. The purpose of this capital project is to increase of operational efficiency and ILM path transfer capability. The scheduled in-service date (ISD) for this project is July 2024.

5. Transfer Capability and Demand Analysis

The Point of Receipt (POR) for these two transmission requests are at the Alberta-BC border. The BC-Alberta interconnection, also defined as Path 1 in the WECC Path Rating Catalog, includes one 500 kV circuit 5L94 and two 138 KV circuits 1L274 and 1L275.

The Point of Delivery (POD) is at BC-US border. The BC-US interconnection, also defined as Path 3 in the WECC Path Rating Catalog, includes West Side and East Side. The West Side includes two 500 kV lines 5L51 and 5L52 from BC Hydro's Ingledow Substation (ING) to Custer Substation (CUS) in Bonneville Power Administration (BPA) operation area. The East side includes 230 kV circuit 2L112 between BC Hydro's Nelway Substation (NLY) and Boundary Substation (BDY) in the BPA operation area together with the Nelway 230 kV Phase Shifting Transformer (PST). Together, the West side and East side are referred to as Path 3.

For a firm transmission service request with the POR at Alberta-BC border and the POD at BC-US border, the power may be transferred via two paths: one is from Alberta to BC Hydro South Interior, Lower Mainland and to US border through westside of BC-US interconnection (5L51 and 5L52); the other is from Alberta to BC Hydro South Interior east, Nelway substation and to US border through eastside of BC-US interconnection (2L112). The transfer capabilities of both transfer paths are investigated in this study for the requested TSRs.

For each part of Path 3, there are various cut-planes as shown in Figure 5-1 below. These are the crossings between the following system nodes or stations:

Transfer through Eastern part of the BC-US intertie for Path 3:

- Alberta-BC Tie
- Eastern intertie of WECC Path 3: BC's Nelway (NLY) substation to the US border

Transfer through Western part of the BC-US intertie for Path 3:

- Alberta-BC Tie
- West of Selkirk (Cut-plane 5)
- West of Ashton Creek and Selkirk (Cut-plane 6)
- Interior (NIC and KLY) to Lower Mainland cut-plane (ILM cut-plane)
- Western intertie of WECC Path 3: BC's Ingledow (ING) substation to the US border (Lower Mainland to US)

[3] The 200 MW net transfer from BC Hydro to Fortis BC (FBC) represents the existing firm power sale to FBC.

Adequate transfer capabilities on each of these cut-planes applicable to the specific transfer shall be maintained to accommodate a specific firm transmission service request in a safe and secure manner. If a transmission service request transverses multiple cut-planes, then adequate transfer capability must exist on each of the cut-planes for the path to be considered secured.

As described in Section 3 Planning Criteria and Study Methodology, the transfer capability is determined as per the NERC Transmission Planning Standard (TPL-001-4) and WECC Criterion (TPL-001-WECC-CRT-3.2). Transmission constraints are identified based on branch ratings, voltage performance, voltage stability and transient stability. The system study conditions outlined in Section 4 are applied.

The analysis of the transfer capability of Path 3 are discussed in section 5.1 and 5.2.

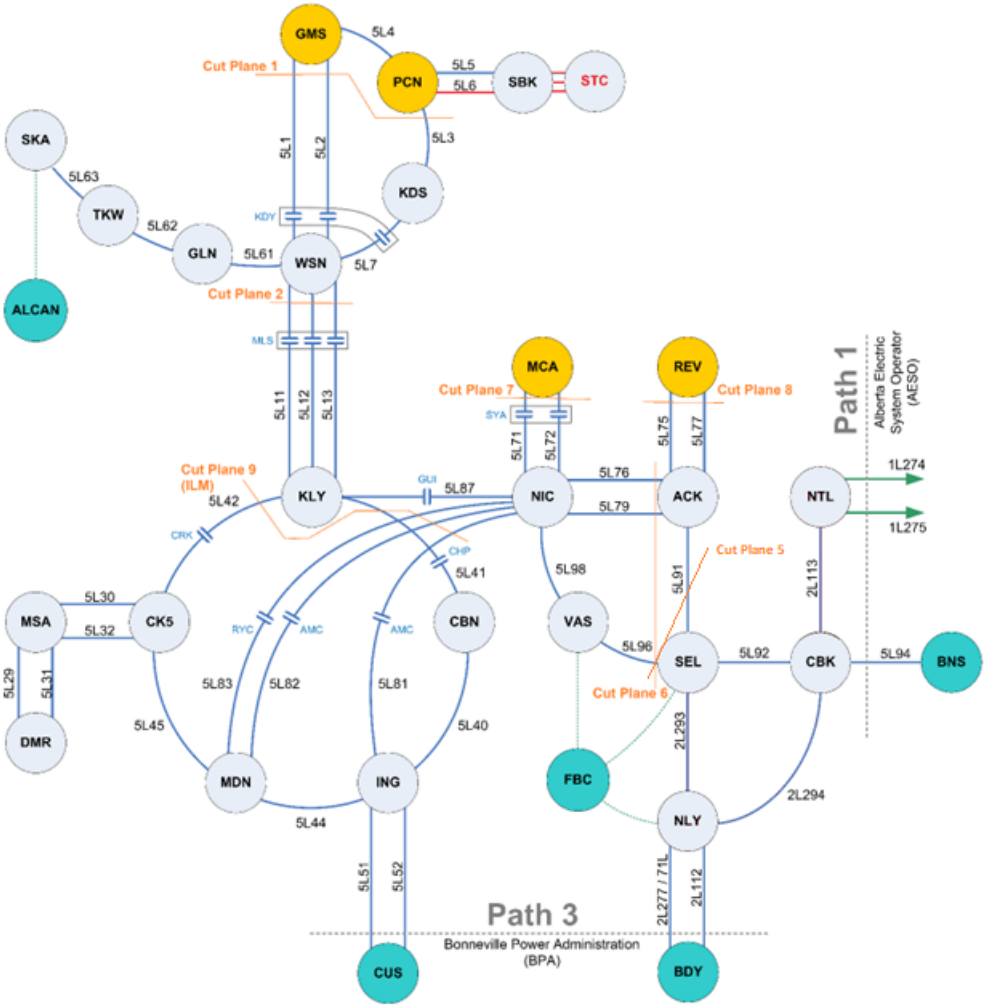


Figure 5-1: BC Hydro Grid One Line Diagram

5.1. Path Through Eastern Part of the BC-US Intertie for Path 3

The BC-Alberta interconnection, also defined as Path 1 in the WECC Path Rating Catalog, includes one 500 kV circuit 5L94 and two 138 KV circuit 1L274 and 1L275. The requested TSRs will go through Path 1 from Alberta to BC Hydro Southern Interior east transmission system and be delivered to U.S. via BC Hydro's Nelway substation (NLY).

NLY is a 230 kV switching station and transmission intertie between BC Hydro, Bonneville Power Administration (BPA) and FortisBC. At the Nelway terminal, a phase shifting transformer (with a bypass) forms part of the 2L112 circuit. The East side includes 230 kV circuit 2L112 between NLY and Boundary Substation (BDY) in the BPA operation area together with the Newlway 230 kV phase shifting transformer (PST).

There is one 230 kV circuit (designated 2L277 within BC Hydro and 71L within FortisBC) between Waneta Generating Station and Boundary generating station in BPA. Line 71 has two segments in which the first connects Waneta to BC Hydro's Nelway substation (2L277) and the second is from a point near Nelway to the BC-US border into BPA's transmission system which is normally kept open. Thus, NLY is connected to U.S. system via the single line 2L112.

There is an existing long term firm reservation totaling 370 MW on the East side of BC to US path.

When the full 50 MW LTFPTP transmission service together with the 370 MW existing reserved transmission capacity are delivered on 2L112, overloading on the NLY 230 kV PST was observed. To accommodate the 50 MW export in full, the NLY phase shifting transformer will need to be uprated via a replacement of the existing one or addition of a new unit. For a replacement, the new unit would have a normal rating greater than 420 MVA or 1054 A.

Figure 5-2 is the BCH Southern Interior east transmission system diagram.

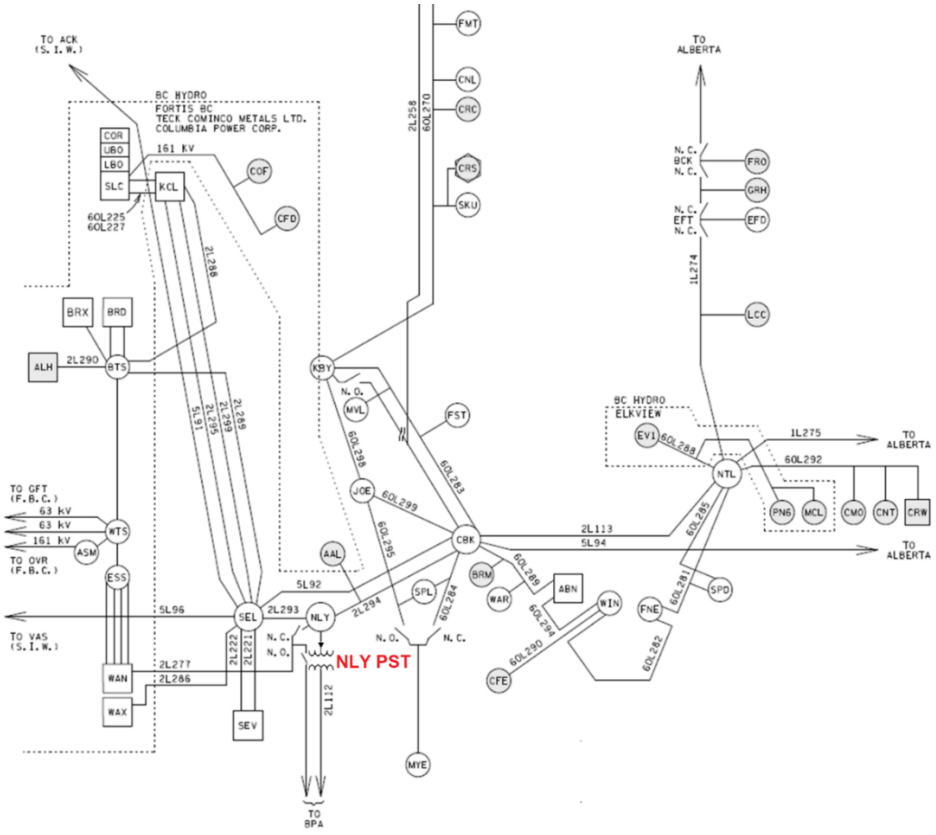


Figure 5-2: BCH Southern Interior East Transmission System Diagram

5.2. Path Through Western Part of the BC-US Intertie for Path 3

There are 5 major cut-planes along the AB-BC-US western intertie path. These are crossings between system segments:

1. Alberta-BC Tie
2. West of Selkirk (Cut-plane 5)

3. West of Ashton Creek and Selkirk (Cut-plane 6)
4. Interior (NIC and KLY) to Lower Mainland cut-plane (ILM cut-plane)
5. Western intertie of WECC Path 3: BC's Ingledow (ING) substation to the US border (Lower Mainland to US)

Among those cut-planes, the study focuses mainly on the limiting cut-plane of Interior to Lower Mainland.

5.2.1. Interior to Lower Mainland Cut-plane (ILM)

This cut-plane is generally referred to as the ILM cut-plane, which crosses lines 5L41, 5L42, 5L81, 5L82, 5L83 and 2L90. Through this cut-plane, electricity is transmitted from the generation in both Northern Interior and South Interior to the BC provincial load centers in the Lower Mainland and Vancouver Island (LMVI) region, which is approximately 70% of provincial demand.

The flow through the ILM cut-plane is driven by the net load in the LMVI region including the export to the US border near Custer substation. Decreasing the load or increasing the Coastal Generation will reduce the committed use on the ILM cut-plane.

The ILM system is fed by two sources at KLY from the generation in the Northern Interior and NIC from the generation in South Interior, respectively. The ILM system connected to these two generation sources is asymmetrical: there are three 500 kV transmission lines (5L81, 5L82 and 5L83) connecting NIC to Lower Mainland while two 500 kV transmission lines (5L41 and 5L42) connect KLY to Lower Mainland.

In accordance with the GDTP Guideline, under system normal for the network cut-plane, the Lower Mainland and Vancouver Island loads plus the export to US may be served by either maximum Northern Interior generation or maximum South Interior generation with specified coastal generation outputs. No system constraint was observed to serve the system winter peak in the normal operating condition.

When the Northern Interior generation operates at the maximum in the heavy winter load condition, if a single contingency occurs on one of the 500 kV lines between KLY and Lower Mainland (5L41 and 5L42), overloading on the series capacitor of the remaining circuit (5L41 or 5L42) was observed. As per the GDTP, generation re-dispatch from the Northern Interior region to the South Interior region is used to address the overloading as long as adequate reserve can be maintained in South Interior.

However, with the mentioned generation re-dispatch, the ILM cut-plane could be slightly overloaded in 2024 heavy winter, 2025 and 2027 heavy winter scenarios under a single contingency. This slight overload would occur on the series capacitors on 5L41 when an outage occurs on one of the other 500 kV lines.

There is no capacity on ILM to accommodate additional transfer demand. To accommodate 50MW requested TSRs, the 5L41 Series Capacitor at CHP will need to be uprated to have a continuous rating of 3000 A.

5.2.2. Other Cut-planes

The transfer capability of other cut-planes is also investigated in the study. Those cut-planes have adequate transfer capability to accommodate the 50 MW LTFPTP transmission service in full for the entire requested period. Therefore, no further details are discussed in the report.

Those cut-planes include:

- West of Selkirk (Cut-plane 5)

  This cut-plane crosses lines 5L91 and 5L96. Power from Selkirk (SEL) westward to Nicola (NIC) and Ashton Creek (ACK).

- West of Ashton Creek and Selkirk (Cut-plane 6)

  This cut-plane crosses lines 5L96, 5L76 and 5L79. Power from Ashton Creek Substation and Selkirk Substation flows through this cut-plane westward to NIC Substation.

- BC ING to US border (Lower Mainland to US), which is the western tie of WECC Path 3

5.3. Transfer Analysis Results

The transfer capabilities established in sections 5.1 to 5.2 are associated with transmission constraints identified under either system normal or single contingency conditions. To supplement these results, this SIS includes a high-level assessment of multiple contingencies and extreme events under selected scenarios. The assessment indicates that BC Hydro's transmission system performance under those contingencies meets the requirements under the NERC Planning Standard[4]. As such, the transfer capabilities established in sections 5.1 to 5.2 remain valid under all contingencies and scenarios studied.

The key results are summarized below:

- To accommodate full 50 MW of LTFPTP Transmission Service,
    - either the NLY phase shifting transformer needs to be uprated via a replacement of the existing one or addition of a new unit. For a replacement, the new unit would have a normal rating greater than 420 MVA or 1054 A; or
    - the series capacitor on 5L41 at CHP transmission service needs to be uprated to have a continuous rating of 3000 A.
- Without the upgrade stated above, only a partial LTFPTP transmission service of 30 MW can be accommodated for one of the TSR: either with OASIS AREF# 102007084, or with OASIS AREF # 102007085 if the customer would withdraw the OASIS AREF# 102007084.
- A roll-over right of 30 MW can be granted after the initial service due date for the TSR with OASIS AREF # 102007085, should a Service Agreement related to OASIS AREF #102007084 is not executed.

6. Conclusions

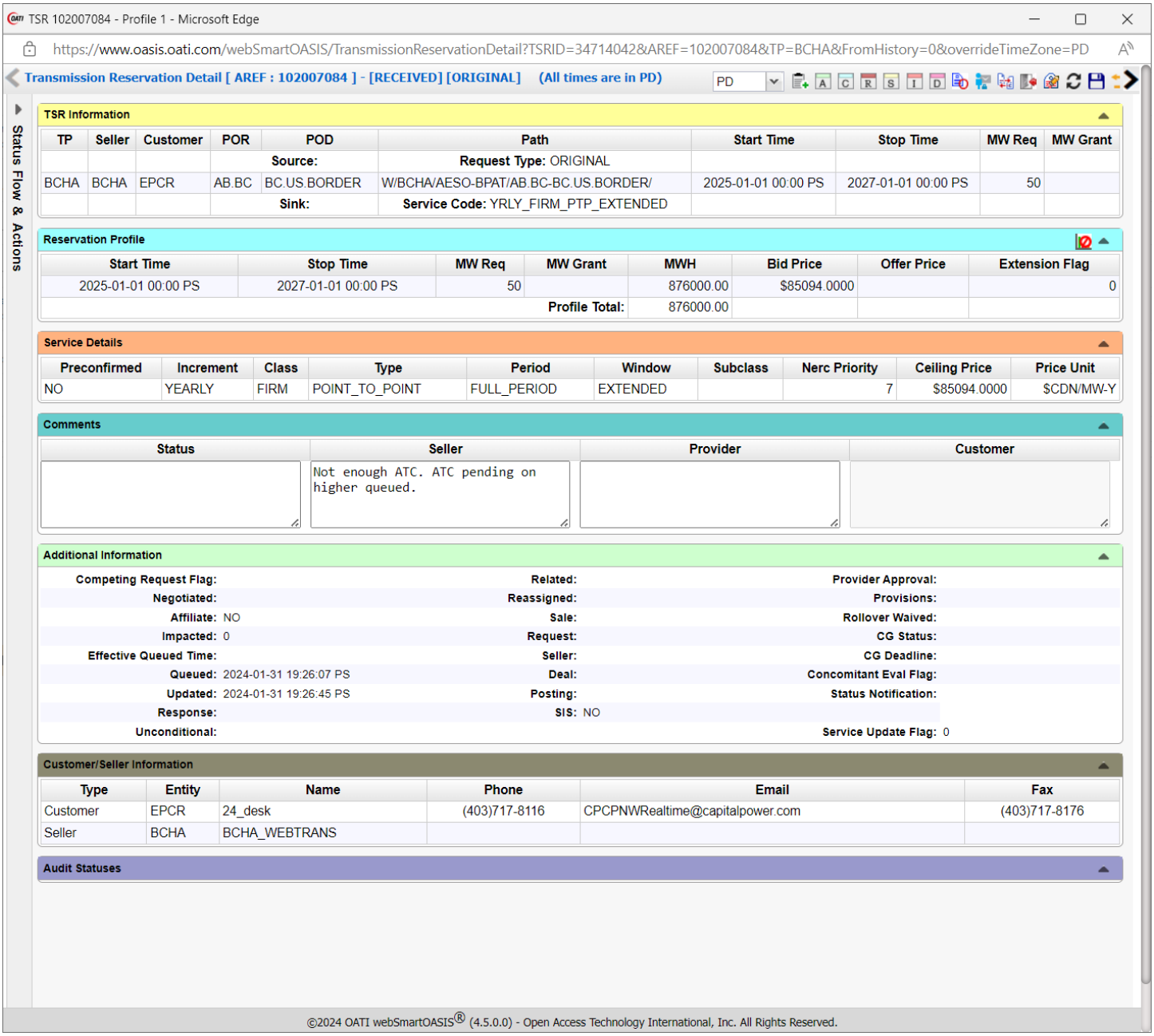
This SIS concludes the following with reference to the BCH transmission system:

1. Neither of the following Transmission Service Requests can be accommodated in whole as Long-Term Firm transmission service without system upgrades as identified in this study.
    - 50 MW Service for 2 years under OASIS AREF# 102007084, or
    - 50 MW Service for 5 years under OASIS AREF# 102007085 if OASIS AREF# 102007084 is withdrawn.
2. To accommodate full 50 MW of LTFPTP Transmission Service, either the NLY phase shifting transformer or the 5L41 series capacitor at CHP needs to be upgraded.
3. Without the necessary system upgrades identified in this study, one of the following Transmission Service Requests can be partially accommodated as Long-Term Firm transmission service.
    - 30 MW Partial Service for 2 years under OASIS AREF# 102007084, or
    - 30 MW Partial Service for 5 years under OASIS AREF# 102007085 if OASIS AREF# 102007084 is withdrawn.
4. If the customer would withdraw the OASIS AREF# 102007084 and only execute the 30 MW Partial Service for 5 years with OASIS AREF # 102007085, a roll-over right of 30 MW can be granted after the initial Partial Service period is due.

A separate document entitled Evaluation of Conditional Firm Service (CFS) determines the remaining capacity that can be granted to OASIS AREF# 102007084 and # 102007085 and the rollover rights associated.

[4] In accordance with NERC TPL-001-4 Table 1, non-consequential load loss and interruption of firm transmission services are allowed to meet the system performance requirement for certain categories of planning events.

Appendix A: TSR 102007084, 102007085



TSR 102007084 - Profile 1 - Microsoft Edge

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Transmission Reservation Detail [AREF : 102007084] - [RECEIVED] [ORIGINAL] (All times are in PD)

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Status Flow & Actions

TSR Information

TP	Seller	Customer	POR	POD	Path	Start Time	Stop Time	MW Req	MW Grant
			Source:		Request Type: ORIGINAL				
BCHA	BCHA	EPCR	AB.BC	BC.US.BORDER	W/BCHA/AESO-BPAT/AB.BC-BC.US.BORDER/	2025-01-01 00:00 PS	2027-01-01 00:00 PS	50	
			Sink:		Service Code: YRLY_FIRM_PTP_EXTENDED				

Reservation Profile

Start Time	Stop Time	MW Req	MW Grant	MWH	Bid Price	Offer Price	Extension Flag
2025-01-01 00:00 PS	2027-01-01 00:00 PS	50		876000.00	$85094.0000		0
			Profile Total:	876000.00			

Service Details

Preconfirmed	Increment	Class	Type	Period	Window	Subclass	Nerc Priority	Ceiling Price	Price Unit
NO	YEARLY	FIRM	POINT_TO_POINT	FULL_PERIOD	EXTENDED		7	$85094.0000	$CDN/MW-Y

Comments

Status	Seller	Provider	Customer
	Not enough ATC. ATC pending on higher queued.		

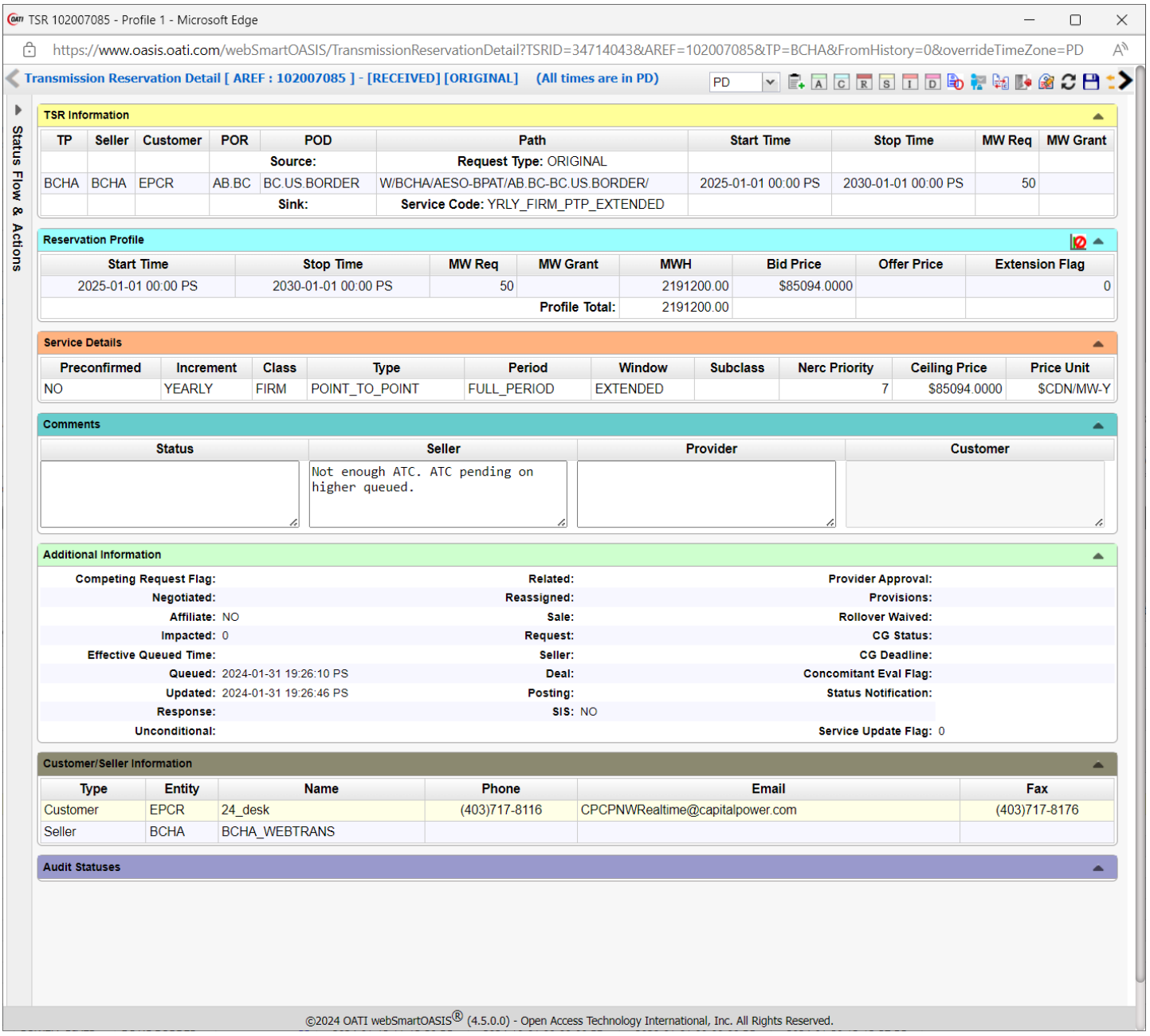
Additional Information

Competing Request Flag:		Related:		Provider Approval:	
Negotiated:		Reassigned:		Provisions:	
Affiliate:	NO	Sale:		Rollover Waived:	
Impacted:	0	Request:		CG Status:	
Effective Queued Time:		Seller:		CG Deadline:	
Queued:	2024-01-31 19:26:07 PS	Deal:		Concomitant Eval Flag:	
Updated:	2024-01-31 19:26:45 PS	Posting:		Status Notification:	
Response:		SIS:	NO		
Unconditional:				Service Update Flag:	0

Customer/Seller Information

Type	Entity	Name	Phone	Email	Fax
Customer	EPCR	24_desk	(403)717-8116	CPCPNWRealtime@capitalpower.com	(403)717-8176
Seller	BCHA	BCHA_WEBTRANS			

Audit Statuses


TSR 102007085 - Profile 1 - Microsoft Edge
https://www.oasis.oati.com/webSmartOASIS/TransmissionReservationDetail?TSRID=34714043&AREF=102007085&TP=BCHA&FromHistory=0&overrideTimeZone=PD
Transmission Reservation Detail [AREF : 102007085] - [RECEIVED] [ORIGINAL] (All times are in PD)
PD
Status Flow & Actions
TSR Information
TP | Seller | Customer | POR | POD | Path | Start Time | Stop Time | MW Req | MW Grant
Source: | Request Type: ORIGINAL
BCHA | BCHA | EPCR | AB.BC | BC.US.BORDER | W/BCHA/AESO-BPAT/AB.BC-BC.US.BORDER/ | 2025-01-01 00:00 PS | 2030-01-01 00:00 PS | 50
Sink: | Service Code: YRLY_FIRM_PTP_EXTENDED
Reservation Profile
Start Time | Stop Time | MW Req | MW Grant | MWH | Bid Price | Offer Price | Extension Flag
2025-01-01 00:00 PS | 2030-01-01 00:00 PS | 50 | | 2191200.00 | $85094.0000 | | 0
Profile Total: 2191200.00
Service Details
Preconfirmed | Increment | Class | Type | Period | Window | Subclass | Nerc Priority | Ceiling Price | Price Unit
NO | YEARLY | FIRM | POINT_TO_POINT | FULL_PERIOD | EXTENDED | | 7 | $85094.0000 | $CDN/MW-Y
Comments
Status | Seller | Provider | Customer
Not enough ATC. ATC pending on higher queued.
Additional Information
Competing Request Flag: | Related: | Provider Approval:
Negotiated: | Reassigned: | Provisions:
Affiliate: NO | Sale: | Rollover Waived:
Impacted: 0 | Request: | CG Status:
Effective Queued Time: | Seller: | CG Deadline:
Queued: 2024-01-31 19:26:10 PS | Deal: | Concomitant Eval Flag:
Updated: 2024-01-31 19:26:46 PS | Posting: | Status Notification:
Response: | SIS: NO
Unconditional: | Service Update Flag: 0
Customer/Seller Information
Type | Entity | Name | Phone | Email | Fax
Customer | EPCR | 24_desk | (403)717-8116 | CPCPNWRealtime@capitalpower.com | (403)717-8176
Seller | BCHA | BCHA_WEBTRANS
Audit Statuses
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Appendix B: BC Hydro OATT Attachment D

ATTACHMENT D

Methodology for Completing a System Impact Study

BC Hydro will perform system planning studies and apply its published planning criteria, standards and procedures to determine the impacts of the requested Transmission Service. The transfer capability of the system will be assessed for the period of the requested service to determine if the requested service can be accommodated. Thermal loading, transient stability, and voltage stability limits will be investigated for normal and outage conditions. If this analysis indicates that the requested Transmission Service cannot be accommodated, then alternative reinforcements will be investigated. A least cost transmission expansion plan will be developed for consideration by BC Hydro and the Transmission Customer and will include but not be limited to the following considerations: technical, economic, reliability, losses, environmental and social. The Transmission Customer can decide whether to proceed, modify, or cancel its request. More details can be found in the BC Hydro System Planning document entitled "Planning Process".