



OASIS

Guide to Business Practices for Hydro-Québec
TransÉnergie Transmission Services

2011-12-16

Change History

Section	Change	Date
2.2.5	Losses increased from 5.3% to 5.4%.	2011-03-21
3.1	Transmission services removed from Table 5: NF HOURLY INADVERTENT, NF WEEKLY SEC, NET NF HOURLY SEC, NF MONTHLY SEC, NET NF DAILY SEC and NF DAILY SEC.	2011-03-21
4.3	Section entitled “Work horizons” removed.	2011-03-21
4.4.4	Transmission services removed from Table 17: NF MONTHLY SEC, NF WEEKLY SEC, NET NF DAILY SEC, NET NF DAILY SEC and NET NF HOURLY SEC.	2011-03-21
2.1	Basic rules changed: removed the possibility for a customer to have the Transmission Provider cancel a reservation already confirmed.	2011-10-28
2.2.4	Changes made to Figure 1.	2011-10-28
3.1	Table 4 changed: maximum duration of weekly service set to 4 weeks.	2011-10-28
3.1	Table 3 changed: the window for the monthly increment becomes “Fixed” (“Sliding” no longer offered); the start date for monthly and yearly increments is now the first of the month.	2011-10-28
3.1	Table 5 changed: several services added or modified.	2011-10-28
3.2	Minor changes made to the rules for calculating ATC.	2011-10-28
3.3	Table 6 capacity calculations changed.	2011-10-28
4.1	Details added regarding requests submitted after the processing period.	2011-10-28
4.3	Figure 2 description of DECLINED changed.	2011-10-28
4.4.2	Detail added regarding the possibility for the Transmission Provider to invalidate or to decline transmission services. Changes made under the headings Price and Relinquishment.	2011-10-28
4.4.3	Changes made to service displacement rules.	2011-10-28
4.4.4	Section number changed (previously 4.5) and a redirect criterion added.	2011-10-28
5.3	Table 18 changed: details added regarding the start time.	2011-10-28
5.4	New section added on consulting schedules over the web.	2011-10-28
4.4.4	Elimination of the following rule: «The redirect must apply to services of the same category (wheel-in, wheel-out or wheel-through)».	2012-12-16

Table of Contents

1.	Introduction.....	1
2.	Basic rules and concepts	2
2.1	Basic rules	2
2.2	Concepts	2
2.2.1	Transmission reservation	2
2.2.2	Transmission schedule	3
2.2.3	Categories of wheeling.....	3
2.2.4	Service points and paths.....	3
2.2.5	Wheeling-through	4
2.3	Transmission Provider systems	4
2.3.1	Transmission service reservation system	5
2.3.2	Transmission schedule submission system	5
3.	Transmission services	6
3.1	Services and products	6
3.2	Transfer capability calculation	8
3.3	Transmission Provider offerings	9
4.	Transmission service reservations.....	10
4.1	Timing for processing requests.....	10
4.2	Weekends and holidays	10
4.3	Service request statuses	12
4.4	Processing service requests	14
4.4.1	Response times.....	14
4.4.2	Validating requests.....	15
4.4.3	Service displacement rules.....	16
4.4.4	Redirect	18
5.	Schedules and e-Tags.....	20
5.1	Submitting schedules.....	20
5.2	Curtailing schedules	20
5.3	Validating schedules.....	22
5.4	Consulting schedules	22
6.	Scheduling penalties.....	23

1. Introduction

This *Guide to Business Practices for Hydro-Québec TransÉnergie Transmission Services* (the “Guide”) covers the basic rules and concepts regarding the transmission services commercially offered by Hydro-Québec TransÉnergie (the “Transmission Provider”) and describes standard operations on its OASIS system. The OASIS system and the Guide are based on the following documents, which take precedence in the event of conflicting interpretations:

- The *Hydro-Québec Open Access Transmission Tariff* (the “OATT”)
- Decisions of the Régie de l’énergie du Québec (Québec’s energy board)
- The Federal Energy Regulatory Commission’s (FERC’s) Standards and Communications Protocols (SCP) and Business Practice Standards (BPS)
- Electricity industry practices as set down by the North American Electric Reliability Corporation (NERC), Northeast Power Coordinating Council (NPCC) and North American Energy Standards Board (NAESB)

2. Basic rules and concepts

2.1 Basic rules

A customer purchases transmission service through a two-step process. The customer must first acquire rights to use the Transmission Provider’s system by means of a reservation. The customer must then schedule power flows, associating them with the rights just acquired.

The customer makes its reservation by means of a transmission service request that it submits to the Transmission Provider in the form and time stipulated in this Guide.¹ Unless it has preconfirmed its reservation, the customer must confirm it within the time stipulated (see Section 4.4) or the Transmission Provider will reject it. The customer may withdraw an unconfirmed reservation at any time before the service reserved starts.

The Transmission Provider responds to service requests in the order it receives them and within the time allotted (see Section 4.4). It generally accepts requests submitted to it, except in the following cases: customer’s bid does not match Transmission Provider’s posted price,² redirect request exceeds primary service rights, deadline missed or requested capacity exceeds available capacity. If need be, the Transmission Provider proceeds with any necessary service displacements in accordance with existing rules.

Once it has reserved services, the customer creates electronic tags (e-Tags) for transactions and sends them to the Transmission Provider to say how it intends to use the rights that it has acquired on the system. Using the e-Tags, the Transmission Provider accepts transmission schedules, and implements them after checking their compliance with adjacent control areas. If the Québec Control Area runs short of operating reserves or a given path becomes congested,³ the Transmission Provider curtails schedules as necessary following established rules (see Section 5.2).

2.2 Concepts

2.2.1 Transmission reservation

A **transmission reservation**, submitted in the Transmission Provider’s reservation system⁴ in the form of a transmission service request, enables the customer to reserve a specific transfer capability

1. This Guide describes the principles and basic concepts for using transmission service. For information on using webOASIS (www.oatioasis.com) or webTag (<https://www.oati.net>), refer to the guides for those applications or to their online help. The names “webOASIS” and “webTag” are service marks of Open Access Technology International, Inc.

2. The Transmission Provider offers no discounts on transmission service; the selling price is the one it posts.

3. Congested: Said of a path over which the scheduled capacity exceeds total capacity.

4. The reservation system for transmission services used by the Transmission Provider is webOASIS (see Section 2.3.1).

(MW) for a given time over a particular path. The reservation is billed based on the service purchased.

2.2.2 Transmission schedule

A transmission schedule submitted by the customer in the form of e-Tags⁵ enables the rights acquired through a transmission service request to be used to transmit energy over the power system.

2.2.3 Categories of wheeling

Transmission Provider services fall into four categories based on the origin and destination (inside/outside) of the energy transmitted. Table 1 presents the categories.

Table 1: Categories of wheeling

Wheel-in	The energy transmitted comes from a generating station located outside the Transmission Provider's system and is destined to a wholesale load inside Québec accessible over the Transmission Provider's system.
Wheel-out	The energy transmitted comes from a generating station connected to the Transmission Provider's system and is destined to a power system other than that of the Transmission Provider.
Wheel-through	The energy transmitted comes from a generating station outside the Transmission Provider's system and is destined to a power system other than that of the Transmission Provider.
Wheel-within	The energy transmitted comes from a generating station connected to the Transmission Provider's system and is destined to a wholesale load inside Québec accessible over that system.

2.2.4 Service points and paths

“**Service point**” or simply “**point**” is the name given to the location where the Transmission Provider receives energy to transmit (**point of receipt** or POR) or delivers transmitted energy (**point of delivery** or POD). Point HQT represents the whole of the Transmission Provider's system less interconnections, and is either the point of receipt or the point of delivery. Other service points act as interchange points with neighboring systems.

“**Transmission path**” or simply “**path**” is the name given to the set of facilities linking a point of receipt to a point of delivery and for which the Transmission Provider posts transfer capabilities.

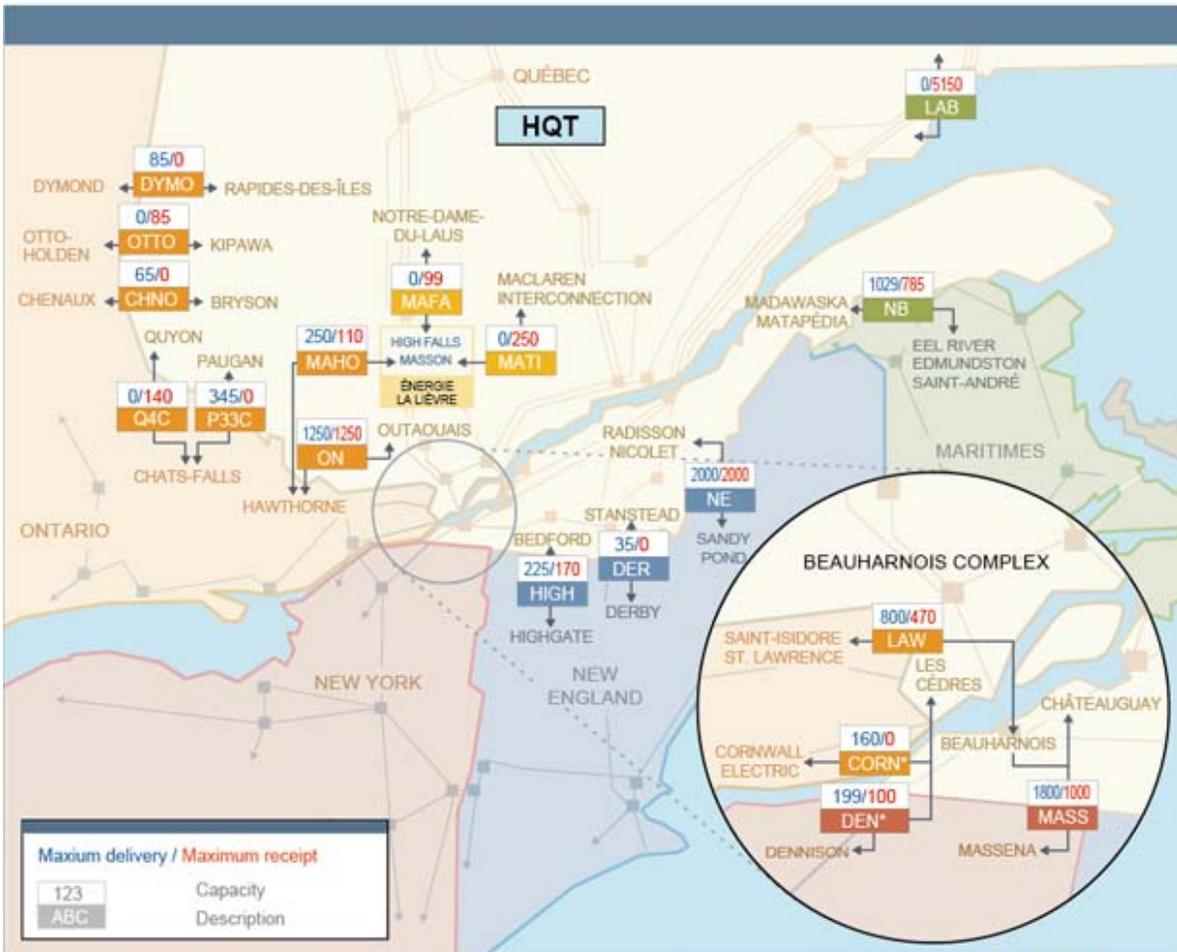
The path diagram (see Figure 1) shows the service points and paths of the Transmission Provider's system.

⁵ The system used by the customer to create e-Tags is webTag (see Section 2.3.2).

Figure 1: Service points and paths of the Transmission Provider’s system

Path diagram

Maximum delivery and receipt capability for the year 2011 (MW)



*Note: Combined exports to CORN and DEN cannot exceed 325 MW.

2011.10.28



The diagram of Transmission Provider paths is also found in its transmission service reservation system (see Section 2.3.1). By clicking on a service point, additional information is displayed about paths related to that point.

2.2.5 Wheeling-through

“Wheeling-through” is the name given to the operation whereby the Transmission Provider, at the customer’s request, receives a quantity of energy at one service point and simultaneously delivers the same quantity of energy, less losses, at another service point. To offset losses, the customer must adhere to the following rules for every wheel-through transaction:

- POR MW values must equal POD MW values plus 5.4%.
- Scheduled capacity for each hour must not exceed reserved capacity.

2.3 Transmission Provider systems

2.3.1 Transmission service reservation system

The Transmission Provider makes its power transmission services commercially available using webOASIS at <http://www.oatioasis.com/>.

It is also possible to access webOASIS from the Transmission Provider's business page at <http://www.hydroquebec.com/transenergie/en/index.html>.

On the webOASIS home page, simply click on the Hydro-Québec logo to access the Transmission Provider's public page. The public page contains general information on the Transmission Provider's power transmission services. Products marketed by the Transmission Provider and its offerings are listed there, as are transfer capabilities it sells on the various paths of its power system. A customer⁶ wishing to submit transmission reservations must register with Open Access Technology International, Inc. (OATI) by selecting the Registration menu on the public page. Afterwards, the customer can access the private webOASIS page either by clicking the Login button or directly at <https://www.oatioasis.com/>.

2.3.2 Transmission schedule submission system

A customer submits its transmission schedules by creating e-Tags in the webTag system at <https://www.oati.net>.

⁶ The procedure for becoming a Transmission Provider customer is posted on its OASIS site. Only a Transmission Provider customer is authorized to make transmission reservations.

3. Transmission services

3.1 Services and products

“**Transmission service**” or simply “**service**” is the name given to the service that the Transmission Provider renders to a customer by transmitting a given quantity of energy along a given path over a given period. “**Product**” is the name given to any combination of six service attributes (type, class, subclass, increment, period and window) for which the Transmission Provider associates a price.

Table 2 below presents the transmission service attributes. Table 3 specifies the possible combinations of values for the attributes increment and window. Table 4 give the minimum and maximum durations for each value of the attribute increment. Table 5 gives the complete list of all Transmission Provider service offerings.

Table 2: Service attributes of Transmission Provider products

Type	Class	Subclass	Increment	Period	Window
Point-to-point Network	Firm	INADVERTENT	Hourly	Full	Fixed Sliding
	Non-firm	QC_RD ^a	Daily		
	Secondary	QC_RND ^b	Weekly		
		STANDARD	Monthly		
			Yearly		
<p>a. Native load supplied by designated resources (subclass used by the Distributor for supplying native load)</p> <p>b. Native load supplied by non-designated resources (subclass used by the Distributor and Generator for supplying native load)</p>					

Table 3: Possible increment-window combinations

Increment	Window	Start	Stop
Hourly	Fixed	Beginning of clock hour	End of same hour
Daily	Fixed	00:00 of any day	00:00 of next day
Weekly	Sliding	00:00 of any day	00:00 on same day of next week
Monthly	Fixed	00:00 on first day of month	00:00 on first day of next month
Yearly	Sliding	00:00 on first day of any month	00:00 on the first, 12 months later

Table 4: Minimum and maximum duration based on increment

Increment	Minimum duration	Maximum duration
Hourly	1 hour	24 hours
Daily	1 day	7 days
Weekly	1 week	4 weeks
Monthly	1 month	12 months
Yearly	1 year	Based on agreement

Table 5: Transmission Provider service offerings

Name of Service	Class	Increment	Window	Subclass
NET F YEARLY QC_RD	Firm	Yearly	Sliding	QC_RD
F YEARLY	Firm	Yearly	Sliding	STANDARD
NET F MONTHLY QC_RD	Firm	Monthly	Fixed	QC_RD
F MONTHLY	Firm	Monthly	Fixed	STANDARD
NF MONTHLY	Non-firm	Monthly	Fixed	STANDARD
NET F WEEKLY QC_RD	Firm	Weekly	Sliding	QC_RD
F WEEKLY	Firm	Weekly	Sliding	STANDARD
NF WEEKLY	Non-firm	Weekly	Sliding	STANDARD
NET F WEEKLY QC_RD	Firm	Daily	Fixed	QC_RD
F DAILY	Firm	Daily	Fixed	STANDARD
NET NF DAILY QC_RND	Non-firm	Daily	Fixed	QC_RND
NF DAILY QC_RND	Non-firm	Daily	Fixed	QC_RND
NF DAILY	Non-firm	Daily	Fixed	STANDARD
NET NF HOURLY QC_RND	Non-firm	Hourly	Fixed	QC_RND
NF HOURLY QC_RND	Non-firm	Hourly	Fixed	QC_RND
NF HOURLY	Non-firm	Hourly	Fixed	STANDARD
NF HOURLY SEC	Secondary	Hourly	Fixed	STANDARD

3.2 Transfer capability calculation

The Transmission Provider calculates total transfer capability (TTC) and transmission reliability margin (TRM), which enables it to determine **available transfer capability** (ATC). It recalculates ATC on a 10-minute basis up to the end of the hour and for the next three hours, on an hourly basis for the remainder of the real-time horizon, and on a daily basis for the days thereafter.

Transfer capability is calculated differently depending on whether it is firm (FATC) or non-firm (NFATC):

$$\text{FATC} = \text{TTC} - \text{TRM} - (\text{reserved firm capacity})$$

$$\begin{aligned} \text{NFATC} = & \text{TTC} - (\text{scheduled firm capacity}) - (\text{reserved non-firm capacity}) \\ & + (\text{scheduled firm capacity over the reverse path}) \\ & + (\text{scheduled non-firm capacity over the reserve path}) \end{aligned}$$

Where:

FATC is the firm available transfer capability

NFATC is the non-firm available transfer capability

TRM is the transmission reliability margin

TTC is the total transfer capability

ATC is recalculated whenever any of the input factors changes.

To increase ATC, a customer may, using the Transmission Provider's reservation system, request that an outage be rescheduled or oppose the rescheduling of an outage proposed by the Transmission Provider in response to another customer's request.

3.3 Transmission Provider offerings

The customer may consult Transmission Provider offerings on the reservation system. An offering corresponds to the capacity offered over a specific path for a particular increment. Table 6 specifies how the capacity of offerings is calculated based on a service's class and increment.

Table 6: Capacity of offerings posted by the Transmission Provider

Class	Increment	Capacity of offering
Firm	Yearly	Eighteenth lowest daily FATC of the year
	Monthly	Second lowest daily FATC of the month
	Weekly	Lowest daily FATC of the week
	Daily	Lowest hourly FATC of the day
Non-firm	Monthly	Highest daily NFATC of the month
	Weekly	Highest daily NFATC of the week
	Daily	Highest hourly NFATC of the day
	Hourly	NFATC of the hour

4. Transmission service reservations

This section covers in detail the principles that customers must follow in using the Transmission Provider’s reservation system.

4.1 Timing for processing requests

A customer wishing to submit a transmission reservation must comply with time constraints for processing requests. Table 7 specifies when the processing period starts based on increment and service class, and on the time service starts. Table 8 specifies when the processing period ends based on the time the particular service stops. A request submitted before the processing period starts is considered invalid and refused outright. A request submitted after the processing period ends may be processed by the Transmission Provider at its discretion if it is feasible for it to do so.

Table 7: Start time for service request processing

A request for...	service cannot be submitted before...
hourly	8:00 a.m. 1 day prior to service start date
daily non-firm	8:00 a.m. 2 days prior to service start date
weekly non-firm	8:00 a.m. 14 days prior to service start date
monthly non-firm	8:00 a.m. 60 days prior to service start date
firm	No restrictions

Table 8: End time for service request processing

A request for a service...	must be submitted...
ending the same day	at least 30 minutes before service starts
ending the next day	before 1:00 p.m. 1 day prior to service start date
ending after the next day but before the next month ends	before 1:00 p.m. 2 days prior to service start date
ending after the next month ends but not yearly service	before 1:00 p.m. 5 days prior to service start date
yearly	before 1:00 p.m. 20 days prior to service start date

4.2 Weekends and holidays

Fridays, a customer may submit requests for services starting on the following three days (Saturday, Sunday and Monday). Saturdays, a customer may submit requests for services starting on the following two days (Sunday and Monday).

Requests for services starting on the day after a holiday may be submitted the day before the holiday. If the holiday falls on Friday, requests for services starting on Saturday, Sunday or

Monday may be submitted the day before the holiday, i.e., Thursday. If the holiday falls on Monday, requests for services starting on Tuesday may be submitted on the preceding Friday, Saturday or Sunday.

Table 9 lists holidays.

Table 9: Holidays

Name	Date
New Year's Day	January 1
Martin Luther King, Jr. Holiday	Third Monday in January
Washington's Birthday	Third Monday in February
Good Friday	Variable
Easter Monday	Variable
Victoria Day	Monday preceding May 25
Memorial Day	Last Monday in May
Fête nationale (Québec Day)	June 24
Canada Day	July 1
Independence Day	July 4
Labor Day	First Monday in September
Thanksgiving (Canada)/Columbus Day (U.S.)	Second Monday in October
Thanksgiving Day (U.S.)	Fourth Thursday in November
Christmas	December 25

Table 10: Meaning of each status in the Transmission Provider’s reservation system

Status	Definition
QUEUED	The initial status assigned by the reservation system to the transmission service request at the time it is received.
STUDY	The status assigned by the Transmission Provider to flag that it must study the service request.
RECEIVED	The status assigned by the Transmission Provider to flag that it acknowledges that it has received the service request.
ACCEPTED	The status assigned by the Transmission Provider to flag that it has accepted the service request at the proposed price and for the requested capacity.
CONFIRMED	The status assigned by the customer to confirm its request once the Transmission Provider has posted the status ACCEPTED or COUNTEROFFER. Confirmation of the request ensures that the transmission service is reserved. This is a final status unless the request is displaced by the status DISPLACED or ANNULLED.
REBID	The status assigned by the customer to say that it is proposing a new price or modifying the capacity requested. (status not used in the Transmission Provider’s OASIS system)
COUNTEROFFER	The status assigned by the Transmission Provider to say that it has proposed a new price or a new capacity for the requested service, i.e., that it wishes to offer less capacity or negotiate a new price.
ANNULLED	The final status assigned by the Transmission Provider (with the customer’s consent) when a reservation or preconfirmed request must be annulled, or assigned unilaterally by the Transmission Provider when it must annul a resale reservation.
DISPLACED	The final status assigned by the Transmission Provider to a customer’s confirmed request that has been displaced by a higher priority reservation and for which the customer has not exercised, or has not been offered, a right of first refusal (i.e., the opportunity to match the conditions of the new request).
SUPERSEDED	The final status assigned by the Transmission Provider to a service request not yet confirmed that has been displaced.
REFUSED	The final status assigned by the Transmission Provider to a service request that it has rejected due to insufficient available transfer capability.
RETRACTED	The final status assigned by the Transmission Provider when a customer has neither confirmed nor withdrawn its request on time.
WITHDRAWN	The final status assigned by the customer to terminate the study of its service request.
INVALID	The final status assigned by the reservation system or Transmission Provider to any request with a field containing an incorrect value (e.g., point of delivery or point of receipt).
DECLINED	The final status assigned by the Transmission Provider to signify that it considers unacceptable the conditions of the service request, particularly the proposed purchase price, and that it is terminating negotiations, or to signify a failure to comply with the conditions of the agreement between the customer and Transmission Provider.

4.4 Processing service requests

4.4.1 Response times

The customer and Transmission Provider must adhere to certain response times in processing the request. When a request is submitted, the OASIS system automatically assigns it the initial state QUEUED. The Transmission Provider takes note of it and assigns it the status RECEIVED. It then has a set time to assign it a new status. In certain cases, that time depends on the turnaround, i.e., the time from when the request is submitted to when the requested service starts. A number of intermediate statuses are possible, which may serve to study the request before accepting or rejecting the reservation. Once the Transmission Provider has assigned the status ACCEPTED to the request, the customer must in turn assign it the status CONFIRMED before a deadline, which may also depend on the turnaround. If the customer fails to confirm the reservation request before the deadline, the request automatically takes on the status RETRACTED. Table 11 gives a breakdown of response times.

Table 11: Response times vs. class/increment/turnaround of the requested service

Class	Increment	Turnaround	Transmission Provider response time ^a	Customer response time (non-renewable)
Non-firm	Hourly	Less than one hour	As quickly as possible in same hour	5 minutes
Non-firm	Hourly	More than one hour	30 minutes	5 minutes
Non-firm	Hourly	Next day request	30 minutes	30 minutes
Non-firm	Daily	–	30 minutes	2 hours
Non-firm	Weekly	–	4 hours	24 hours
Non-firm	Monthly	–	2 days	24 hours
Firm	Daily	Less than 24 hours	As quickly as possible in same hour	2 hours
Firm	Daily	– ^b	30 days	24 hours
Firm	Weekly	–	30 days	48 hours
Firm	Monthly	–	30 days	4 days
Firm	Yearly	60 calendar days or more ^c	30 days	15 days

a. The Transmission Provider response time is only counted during the period for request processing (see Table 7 and Table 8).

b. If the turnaround is between 2 and 30 calendar days, the Transmission Provider makes every effort to respond as quickly as possible, within a 72-hour maximum and meeting the time limit set for submitting schedules.

c. If a request is submitted less than 60 calendar days in advance, the Transmission Provider nevertheless makes every effort to accommodate it.

4.4.2 Validating requests

When a transmission service request is submitted by a customer, it is first automatically or manually validated in the Transmission Provider’s system before being assigned a final status (see Figure 2). The validation criteria are outlined below.

Available transfer capability

The ATC check is for FATC if the request is for firm service and for NFATC is the request is for non-firm service. Table 12 shows the checks that the reservation system makes automatically.

Table 12: Automatic system checks for ATC

Service	Day-ahead scheduling		Real-time scheduling	
	Sufficient capacity	Insufficient capacity	Sufficient capacity	Insufficient capacity
Hourly	ACCEPTED	RECEIVED and COUNTEROFFER	ACCEPTED	REFUSED and COUNTEROFFER
Daily firm	ACCEPTED	RECEIVED and COUNTEROFFER	ACCEPTED	REFUSED and COUNTEROFFER
Daily non-firm	ACCEPTED	RECEIVED and COUNTEROFFER	ACCEPTED	REFUSED and COUNTEROFFER
Weekly firm	RECEIVED	RECEIVED	RECEIVED	RECEIVED
Weekly non-firm	RECEIVED	RECEIVED	RECEIVED	RECEIVED
Monthly firm	RECEIVED	RECEIVED	RECEIVED	RECEIVED
Monthly non-firm	RECEIVED	RECEIVED	RECEIVED	RECEIVED
Yearly	RECEIVED	RECEIVED	RECEIVED	RECEIVED

With both real-time and day-ahead scheduling, requests for hourly or daily service are automatically assigned the final status ACCEPTED if sufficient capacity is available. If some but insufficient capacity is available, a counteroffer is generated for the available capacity and the status of the request becomes COUNTEROFFER. If no capacity is available, requests for real-time transactions are refused and those for day-ahead transactions are assigned the status RECEIVED until a decision is made regarding their final status.

The system assigns all requests for weekly, monthly or annual service the status RECEIVED so that they can be validated manually before assigning their final status.

The Transmission Provider may set the status of a transmission service request to INVALID or DECLINED for the reasons below.

Point of receipt and point of delivery

A request with an inadequate POR or POD is automatically assigned the status INVALID.

Submission time

A request submitted too early or one with a start or stop time that is not consistent with the type of service selected is assigned the status INVALID.

Customer permissions

A request for an unauthorized product is assigned the status INVALID.

Redirect

Submitting a request of type REDIRECT for a product not allowing redirect (secondary and non-firm services – see Section 4.4.4) automatically results in the status INVALID.

Price

A request with a price differing from those specified in the OATT is automatically assigned the status DECLINED. This check is not run for the resale of transmission services.

Renewal

A request of type RENEWAL submitted for any service other than annual transmission service is automatically assigned the status INVALID.

Deferral

A service request of type DEFERRAL submitted for a non-firm service is automatically given the status INVALID since deferral only applies to firm services.

Relinquishment

A request of type RELINQUISH waives a non-firm redirect so that the primary service reservation recovers the transmission rights. If such a request is filed for anything but unscheduled secondary non-firm service, it is automatically assigned the status INVALID.

4.4.3 Service displacement rules

The Transmission Provider responds to service requests in the order received. If the remaining capacity that it can offer is insufficient, the Transmission Provider rejects any new service request, assigning it the status REFUSED except in specific situations. If the Transmission Provider is able to provide only part of the requested capacity, it can return the request with the status COUNTEROFFER. If service displacement rules so permit, it can also assign to a service request received earlier the status SUPERSEDED for an unconfirmed request, or DISPLACED for a confirmed request. The originator of the superseded or displaced request may then invoke a right of first refusal. Table 13 summarizes the displacement rules as a function of the priority of the requested services.

Table 13: Service displacement rules

Initial request	Requests potentially displacing the initial request	Potential right of first refusal by originator of the initial request
Tier 1 - Firm service for 1 year or more - Firm service of subclass QC RD	None	–
Tier 2 - Firm service for less than 1 year	Tier 1, if the initial request is conditional ^a	No
	Tier 2 if it is for longer ^b than the initial request and the latter is conditional	Yes
Tier 3 - Non-firm service of subclass QC RND type network	Tier 1 or 2	–
Tier 4 - Non-firm service (other than subclass QC_RND type network)	Tier 1, 2 or 3	No
	Tier 4 if it is of longer duration (except during the hour before the initially requested service is to start)	Yes, if the initial request is confirmed
	Tier 4 of longer duration and higher price, if it is preconfirmed and the initial request is not confirmed	Yes
Tier 5 - Non-firm service of subclass SECONDARY	Tier 1, 2, 3 or 4	No
Tier 6 - Non-firm service of subclass INADVERTENT	Tier 1, 2, 3, 4 or 5	No
<p>a. A request for firm service is no longer conditional one day before a daily service starts, one week before a weekly service starts or one month before a monthly service starts (<i>Hydro-Québec Open Access Transmission Tariff</i>, Section 13.2).</p> <p>b. The increment takes precedence over total duration. Thus a service of increment weekly has precedence over a service of increment daily (NAESB 001-4.16).</p>		

In addition to adhering to the rules in Table 13, service displacement must comply with the following conditions:

- Only a preconfirmed request can displace another request.
- The displacement is done automatically. The right of first refusal by the originator of a displaced request is never exercised automatically. The customer wishing to exercise its right of first refusal must modify its reservation manually.

- Displacement is not always possible since it is subject to response times. Table 14 and Table 15 summarize these response times:

Given A, a confirmed transmission service request from customer A.

Given B, a transmission service request from customer B and having higher priority than request A.

Table 14: Response times for service displacement

Increment of A	Displacement of A by B impossible if A starts in...	If displacement occurs and the right of first refusal is exercised, the competition period ends ^a ...
Hourly	1 hour or less	30 minutes before service starts
Daily	14 hours or less	12 hours before service starts
Weekly	3 days or less	2 days before service starts
Monthly	6 days or less	5 days before service starts
Yearly	21 days or less	20 days before service starts

a. When the competition period ends, no right of first refusal can be exercised and the request of higher priority prevails.

Table 15: Response time for customer A to exercise its right of first refusal once its request is displaced by B

Increment of A	Response time for right of first refusal
Hourly	30 minutes, unless the competition period has ended
Daily	2 hours, unless the competition period has ended
Weekly	24 hours, unless the competition period has ended
Monthly	24 hours, unless the competition period has ended
Yearly	24 hours, unless the competition period has ended

4.4.4 Redirect

The term “**redirect**” designates the operation whereby a customer transfers onto another path, qualified as “**secondary**”, all or part of the capacity reserved under a request for **firm** service. If the requested redirect is firm, the Transmission Provider transfers the capacity definitively once the request is confirmed. If it is not firm (redirect of class secondary), it transfers the capacity once the request is confirmed but the ATC is unaffected until the schedules associated with the redirect are submitted. A customer wishing to have the reserved capacity returned to the primary request first lowers (possibly to zero) the schedules submitted for the secondary path.

The redirect may be made to a different product provided it is of equal or lesser increment. For instance, daily firm service cannot be redirected to weekly firm service. Table 16 shows what redirects are possible.

- The capacity from a request for firm service that remains available for redirect equals the reserved capacity less the higher of the redirected capacity or the scheduled capacity.
- The Transmission Provider rejects any redirect request for capacity exceeding the primary request’s remaining capacity available for redirect. It also rejects any redirect request that depends on a primary request having a lesser duration or increment, or following the same path.

Table 16: Possible redirects

	F YEARLY	F MONTHLY	F WEEKLY	F DAILY	NET F YEARLY QC_RD	NET F MONTHLY QC_RD	NET F WEEKLY QC_RD	NET F DAILY QC_RD	NF HOURLY SEC
Service to be redirected	Redirects possible								
F DAILY				●					●
F WEEKLY			●	●					●
F MONTHLY		●	●	●					●
F YEARLY	●	●	●	●					●
NET F DAILY QC_RD								●	
NET F WEEKLY QC_RD							●	●	
NET F MONTHLY QC_RD						●	●	●	
NET F YEARLY QC_RD					●	●	●	●	

5. Schedules and e-Tags

5.1 Submitting schedules

After having purchased the necessary transmission services, the customer wishing to have energy carried over the Transmission Provider's system must submit its transmission schedules no later than 30 minutes before transmission is to start for real-time transactions, and no later than at 1 p.m. the day before transmission is to start for day-ahead transactions. The customer submits its schedules by creating e-Tags in the webTag system (see Section 2.3.2). For every hour on every date, each e-Tag must specify the following: quantity of energy to be transmitted, path reserved, and number of the associated transmission reservation(s). The Transmission Provider checks that rights under the associated reservation(s) are sufficient for the quantity of energy to transmit.

- The schedulable capacity remaining from a request for firm service equals the reserved capacity less the sum of scheduled capacity, redirected firm capacity and scheduled redirected non-firm capacity. That remaining from a request for non-firm service equals the reserved capacity less the scheduled capacity. If it is a redirect request, the schedulable capacity remaining cannot exceed that of the primary request.
- The Transmission Provider removes any scheduled capacity exceeding the schedulable capacity remaining.

5.2 Curtailing schedules

Following power industry rules, the Transmission Provider curtails transmission schedules as required if the Québec Control Area runs short of operating reserves or a given path becomes congested. To restore operating reserves, the Transmission Provider curtails schedules in the order specified by the customer. To relieve congestion, it curtails schedules based on their related service in the order of the sets specified in Table 17. Sets subject to partial curtailment follow the stages shown.

Table 17: Staged schedule curtailments based on related services

Set	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Schedules unrelated to any service	Proportional curtailment among customers	Same customer: Curtailment in customer-specified order	Same order: Proportional curtailment	–	–
Schedules related to non-firm secondary services [NS-1]	Curtailment by descending order of service request number	Same number: Curtailment in customer-specified order	Same order: Proportional curtailment	–	–
Schedules related to standard non-firm hourly services or QC_RND (Generator service) [NH-2]	Curtailment by ascending order of service duration	Same duration: Curtailment by ascending order of service price	Same price: Proportional curtailment among customers	Same customer: Curtailment in customer-specified order	Same order: Proportional curtailment
Schedules related to standard non-firm daily services or QC_RND (Generator service) [ND-3]	Curtailment by ascending order of service duration	Same duration: Curtailment by ascending order of service price	Same price: Proportional curtailment among customers	Same customer: Curtailment in customer-specified order	Same order: Proportional curtailment
Schedules related to standard non-firm weekly services [NW-4]	Curtailment by ascending order of service duration	Same duration: Curtailment by ascending order of service price	Same price: Proportional curtailment among customers	Same customer: Curtailment in customer-specified order	Same order: Proportional curtailment
Schedules related to standard non-firm monthly services [NM-5]	Curtailment by ascending order of service duration	Same duration: Curtailment by ascending order of service price	Same price: Proportional curtailment among customers	Same customer: Curtailment in customer-specified order	Same order: Proportional curtailment
Schedules related to network-type QC_RND non-firm services [NN-6]	Curtailment by ascending order of service duration	Same duration: Proportional curtailment among customers	Same customer: Curtailment in customer-specified order	Same order: Proportional curtailment	–
Non-essential schedules ^a related to firm services [F-7]	Proportional curtailment among customers	Same customer: Curtailment in customer-specified order	Same order: Proportional curtailment	–	–
Essential schedules ^b related to firm services [F-8]	Equal curtailment among sink control areas	Same area: Proportional curtailment among customers	Same customer: Curtailment in customer-specified order	Same order: Proportional curtailment	–
<p>a. Non-essential schedules: Schedules curtailment of which leads to no load shedding.</p> <p>b. Essential schedules: Schedules curtailment of which leads to load shedding.</p>					

5.3 Validating schedules

The criteria in Table 18 are applied to validate a schedule once submitted. A schedule passing all criteria is automatically set to APPROVED. A schedule failing to pass any criterion is set to DENIED.

Table 18: Schedule validation criteria

Criterion	Explanation
Status of associated reservation	The transmission reservation associated with the schedule must have the status CONFIRMED.
Point of receipt and delivery	The point of receipt and point of delivery must match those in the associated transmission reservation.
Transmission reservation owner	The PSE code in the schedule must match the customer owning the transmission reservation in the Transmission Provider’s system.
Loss factor	The loss factor entered in the schedule must match that required by the Transmission Provider.
Reservation ID	The associated reservation must exist in the Transmission Provider’s system.
Reservation capacity	There must be sufficient schedulable capacity remaining in the associated reservation.
Start time	The schedule must start at the beginning of a clock hour (##:00).
Point of receipt/delivery combination	The combination of the point of receipt and the point of delivery must be valid (valid path).

5.4 Consulting schedules

Schedules may be consulted using the Transmission Provider’s webOASIS tool. It must be noted that webOASIS does not reflect cuts and adjustments made to schedules in real time using a tool other than webTag (the tool for submitting schedules) or resulting from a posteriori reconciliation. To consult the final values of such schedules, the customer must send a request for access to web-based schedule consultation to OASIS_Support@hydro.qc.ca.

6. Scheduling penalties

Penalties apply when a customer fails to associate a transmission service with a schedule that it has submitted, or submits a transmission schedule and associates with it a transmission reservation of insufficient capacity.

Even if the customer has sufficient reservations to cover its schedules, it must make sure that its e-Tags correctly match schedules to reservations if it wants to avoid penalties.

Scheduled capacity to which penalties are applied is billed at 150% of the hourly price in the OATT for every hour to which the penalties apply.

It is possible to associate one or more reservations with a schedule up to one hour before the schedule starts. For schedules shared with neighboring systems, the customer must make sure that all systems appearing in the schedule allow such late association; otherwise, schedule adjustments may be refused and penalties imposed.

Penalties apply in the following cases:

- The reservation number in the schedule is not applicable (N/A), i.e., no reservation is associated with the schedule. Penalties then apply to the entire schedule.
- Part of the schedule is not associated with a valid transmission reservation, i.e., N/A association. Penalties then apply only to the part of the schedule not covered.

Plans et encadrements de contrôle du réseau
Hydro-Québec TransÉnergie
Division d'Hydro-Québec