

# **NETWORK ECONOMY SERVICE**

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#### 1.0 OVERVIEW

Pursuant to <u>Attachment Q-2</u> of BC Hydro's <u>Open Access Transmission Tariff</u> (OATT), Network Economy Service means the use of the BC Hydro's transmission system, pursuant to Section 28.4 of the Tariff, to deliver energy to its Network Loads from resources that have not been designated as Network Resources.

BC Hydro's OATT requires that all transmission service requests, including Network Economy Service, be made on BC Hydro's OASIS (Open Access Same-Time Information System). If OASIS is not functioning, BC Hydro will post a bulletin to advise of the OASIS outage.

Network Economy Service is available on an hourly basis only.

#### 2.0 ECONOMIC TEST

#### 2.1 Price Determinations

## 2.1.1 Market Price

## Alberta – BC Intertie

 At all times and for each hour, the Market Price equals the most recently available Alberta Pool Price for each hour posted as of 16:00:00.

## US - BC Intertie

- the HLH Market Price equals the ICE Mid-C Peak weighted average index price multiplied by the US Exchange Rate multiplied by the Loss Factor for BPA;
- the LLH Market Price equals the ICE Mid-C Off-Peak weighted average index price multiplied by the US Exchange Rate multiplied by the Loss Factor for BPA;
- The LLH Market Price will apply all day Sunday and all US NERC Holidays;



- The Loss Factor for BPA is determined by BPAT's loss factor to Mid-C;
- BC Hydro will determine Market Prices, as defined above, for extended delivery windows consistent with the current practice for firm and nonfirm service.

## 2.1.2 Trigger Price

At all times, for both interties, the Trigger Price equals the Threshold Purchase Price confidentially provided by BC Hydro; and as defined and determined in the Transfer Pricing Agreement between BC Hydro and Powerex.

## 2.2 <u>Economic Test Results</u>

BC Hydro Operations will perform the Economic Test for each hour of the delivery day and for each intertie. Based on the results of the Economic Test, BC Hydro will declare Network Economy (NE) reservations as Type 1 - normal priority or Type 2 - non-firm priority. Results will be posted as set out in Section 4.0 below.

#### 3.0 UTILIZATION TEST

BC Hydro Operations will calculate the average utilization rate, for the Alberta-BC and US-BC import interties, of NE reservations and the Non-firm PTP reservations by Transmission Customers other than the Network Customer or its marketing affiliates, respectively, as follows:

- BC Hydro Operations will calculate the utilization rate of all hourly and daily service for each week in a reporting period by dividing the sum of total energy scheduled for hourly and daily services by the sum of total reservations for hourly and daily services in that week; and
- 2. The average utilization rate over the reporting period equals the average of the utilization rates calculated for each of the 4 or 5 weeks in the reporting period, as applicable.

Any week in a reporting period that has zero reservations in sum will be excluded from the calculation of the average utilization rate.

A Network Customer passes the Utilization Test if the average utilization rate of NE reservations divided by the average utilization rate of the Non-firm PTP reservations of third party Transmission Customers is greater than or equal to 95 percent; otherwise, the Network Customer fails the Utilization Test.

The result of the Utilization Test for the last reporting period will be used to establish the priority of NE reservations for the following calendar month.



## 4.0 POSTING RESULTS

BC Hydro Operations will publish the type of NE service (Economic Test result) declared by date and hour for the US – BC and AB – BC Import Interties. These results will be posted at: <a href="https://www.bchydro.com/energy-in-bc/operations/transmission/transmission-scheduling/transaction-data/economic-test-results.html">https://www.bchydro.com/energy-in-bc/operations/transmission/transmission-scheduling/transaction-data/economic-test-results.html</a> by 23:59:00, two business days before the delivery date. If the delivery day is part of an Extended Delivery window, then BC Hydro Operations will post Economic Test results for the appropriate days.

BC Hydro Operations will post archived Economic Test results for up to the previous 90 days on a Historical Results webpage at: <a href="https://www.bchydro.com/energy-in-bc/operations/transmission/transmission-scheduling/transaction-data/economic-test-results/historical-results.html">https://www.bchydro.com/energy-in-bc/operations/transmission/transmission-scheduling/transaction-data/economic-test-results/historical-results.html</a>. BC Hydro operations will store archived Economic Test results for up to 3 years.

#### 5.0 TRANSMISSION PROCESSING and CURTAILMENTS

A Transmission Customer may access Economic Test results in advance of an OASIS request to check whether the delivery hours of interest have been declared as Type 1 or Type 2 priority.

Requests for NE submitted on OASIS are validated as follows.

## 5.1 Transmission Processing

Once a NE reservation has been received, and the priority type for the service assigned based on the Economic Test (Type 1 or Type 2), the reservation will not undergo any further Economic Testing, and the assigned priority type will persist regardless of subsequent changes.

BC Hydro will determine the ATC available for the reservation and the curtailment order of the reservation based upon whether the reservation was assigned a Type 1 or Type 2 priority.

If a Network Customer has failed the Utilization Test, then in the next calendar month any subsequent NE requests for the next hour that are submitted after xx:30 and before xx:40 will be assigned Type 2 priority.

If a Network Customer has passed the Utilization Test, then in the next calendar month if any of the hours are of Type 2 then the reservation will be assigned Type 2 priority; otherwise, the reservation will be assigned Type 1 priority.

In determining priority BC Hydro will exclude any hours with a 0 MW entry (a gap in the transmission reservation).



#### 5.2 Curtailments

Unused NE reservations will be curtailed before any other necessary curtailments.

BC Hydro will curtail unused NE reservations as follows:

- BC Hydro will curtail unused NE reservations at the end of the preschedule window, on or after 17:00:00, for the following day and any days within an extended delivery window. BC Hydro will curtail unused NE transmission reservations down to the total sum of the flow amount for all energy schedules.
- 2. If a Network Customer has passed the Utilization Test, BC Hydro will curtail all unused NE at XX:40 in real time prior to the delivery hour. BC Hydro will curtail unused NE transmission reservations down to the total sum of the flow amount for all energy schedules.
- 3. If a Network Customer has failed the Utilization Test, BC Hydro will curtail all unused NE at XX:30 in real time and at XX:40 in real time prior to the delivery hour. BC Hydro will curtail unused NE transmission reservations down to the total sum of the flow amount for all energy schedules.

The following practices also apply:

- 1. The submission time of the eTag is used to determine if the energy schedule is valid and can be associated with the NE reservation and considered utilized.
- The assigned priority of Type 1 or Type 2 has no effect on the extent of the curtailment of unused NE. Both types will have all unused transmission fully curtailed.
- 3. BC Hydro will perform all curtailments for unused NE on the two Intertie paths at the same time.
- 4. An energy schedule that is received will be validated for any non-curtailed NE reservations as well as any non-NE type reservations.
  - Blanket energy schedules may be associated with a set of NE reservations, of which one or more may be subject to curtailment, but BC Hydro will not allocate the NE energy schedule to the NE reservation currently being curtailed. However, BC Hydro will continue to validate the energy schedule against the other NE reservations not subject to curtailment.

#### 6.0 REPORTING

## 6.1 Network Economy Service

On a weekly basis, BC Hydro will post the following data with respect to NE Service at <a href="https://www.bchydro.com/energy-in-bc/operations/transmission/transmission-scheduling/transaction-data/network-economy-utilization.html">https://www.bchydro.com/energy-in-bc/operations/transmission/transmission-scheduling/transaction-data/network-economy-utilization.html</a>

MWh Volume of NE reservations – Amount of NE transmission reservations;



- MWh Volume of NE Scheduled Energy Energy scheduled on NE transmission reservations;
- Number of NE transactions Number of transactions for NE transmission reservations. Number of transactions for NE with scheduled energy. Number of NE Schedules.
- Unused NE MWh volume of NE transmission reservations minus MWh volume of NE energy scheduled (both adjusted for curtailments and interruptions), and the utilization percentage for each hour;
- NE Economic Interruptions NE interruptions of Non-Firm Point-To-Point transmission service at XX:40, reflecting the last action that resulted in the interruption;
- The date and time of any change to the Threshold Purchase Price, as defined in section 1 of Tariff Supplement BC Hydro-1; and

## 6.2 Non-Firm Point-to-Point Service

On a weekly basis, BC Hydro will post the following data with respect to non-firm PTP service at <a href="https://www.bchydro.com/energy-in-bc/operations/transmission/transmission-scheduling/transaction-data/non-firm-utilization.html">https://www.bchydro.com/energy-in-bc/operations/transmission/transmission-scheduling/transaction-data/non-firm-utilization.html</a>.

- MWh Volume of Non-Firm Point-To-Point reservations Amount of Non-Firm Point-To-Point transmission reservations;
- MWh Volume of Non-Firm Point-To-Point Scheduled Energy Energy scheduled on Non-Firm Point-To-Point transmission reservations;
- Number of Non-Firm Point-To-Point transactions Number of transactions for Non-Firm Point-To-Point transmission reservations. Number of transactions for Non-Firm Point-To-Point with scheduled energy. Number of Non-Firm Point-To-Point Energy Schedules; and
- Unused Non-Firm Point-To- Point MWh volume of Non-Firm Point-To-Point transmission reservations minus MWh volume of Non-Firm Point-To-Point energy scheduled (both adjusted for curtailments and interruptions) and the utilization percentage for each hour.

## 6.3 Weekly Utilization Reports

On a weekly basis, BC Hydro will post the following data with respect to non-firm PTP service at <a href="https://www.bchydro.com/energy-in-bc/operations/transmission/transmission-scheduling/transaction-data/network-economy-utilization.html">https://www.bchydro.com/energy-in-bc/operations/transmission/transmission-scheduling/transaction-data/network-economy-utilization.html</a>.

 MWh volume of total energy scheduled for hourly and daily services for the applicable week of the Utilization Test reporting period, as per Attachment Q, Section 5 of the Tariff; and



 MWh volume of total reservations for hourly and daily services for the applicable week of the Utilization Test reporting period, as per Attachment Q, Section 5 of the Tariff.



# **Document Change History**

Issue	Reason for Issue	Date
6	Updated language and removed Burrard Heat Rate per BCUC Order	September XX, 2022
	G-158-15 from Network Economy Service Reporting.	
5	Clarified import interties are used in utilization test, same interties	March 9, 2018
	that are used in the economic test.	
4	Updated methodology used to determine the Trigger Price,	April 1, 2016
	advanced the time that data is extracted each day and corrected	
	references & typographical errors.	
3	Updated hyperlinks to OATT, Attachment Q-2, posting results, and	July 23, 2015
	reporting under bchydro.com	
2	Updated reference to price index name	June 30, 2015
1	Updated format.	November 1, 2010
	Previously Business Practice 17.	

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