

**TESTIMONY OF PHILIP RAPHALS ON
ENERGY IMBALANCE**

ENGLISH TRANSLATION

(answer 45.1)

5.2 NYISO rates for imbalance services

A simple check on the NYISO site seems to confirm information given by the Transmission Provider. Schedule 4: “Energy Imbalance Service” of its OATT includes the following passage:

For hours when the Transmission Customer’s Actual Energy Withdrawals are greater than that customer’s scheduled Energy delivery and applicable tolerance band, the Transmission Customer shall pay to the ISO an amount equal to the greater of 150% of the Real-Time LBMP price at the Point of Delivery or \$100 per MWh. In the event that the Transmission Customer’s Actual Energy delivery exceeds that customer’s Actual Energy Withdrawals, the Transmission Customer shall not receive payment for such Energy.⁶ (Emphasis added)

The title page of the document indicates that it is a “Composite Tariff Reflecting Commission Orders and NYISO Filings Through May 29, 2009”. That suggests that FERC would have deemed that the provision quoted complies with requirements in FERC orders.

That being said, it is surprising to find that Schedule 4, on original Sheet No. 256 to 260 inclusive, have not been modified since November 10, 2000, when the schedule was initially produced. Is it possible that the FERC orders entailed no modifications to this Schedule?

To explain this apparent inconsistency, the documents filed by NYISO with FERC following the orders must be consulted. On October 11, 2007, NYISO submitted a compliance filing related to Order 890 (hereafter “NYISO 2007”). A similar document was filed on April 15, 2008 related to Order 890-A.

NYISO 2007 first explains that, given its structure as an ISO, most of the OATT amendments required by Order 890 do not apply to it:⁷

⁶ New York Independent System Operator Inc., FERC Electric Tariff, Original Sheet 257, http://www.nyiso.com/public/webdocs/documents/tariffs/oatt/oatt_schedules.pdf.

⁷ NYISO Compliance Filing of October 11, 2007, Cover Letter, p. 5.

Undue discrimination concerns, by their very nature, are applicable to traditional Commission-jurisdictional transmission providers, *i.e.*, for-profit utilities that continue to own or to be affiliated with generation assets and that are not members of an Independent System Operator or Regional Transmission Organization (“ISO/RTO”). By contrast, ISOs/RTOs are independent not-for-profit entities that do not own or control generation, are not affiliated with any market participant, and have no incentive to favor any market participant over another. There is thus no reason to suspect that an ISO/RTO might engage in undue discrimination. Although Order No. 890 noted that the Commission had other, secondary, policy objectives that applied to both traditional transmission providers and ISOs/RTOs,¹⁰ most of Order No. 890’s tariff revisions are aimed at addressing allegedly discriminatory incentives and practices that are not present within ISOs/RTOs.

It then explains that NYISO operates a system of financial reservations that differs fundamentally from the physical reservation system established by Order 888. This financial reservation system, where the price of energy at each point in the grid is set based on the Locational Based Marginal Pricing (LBMP) system, has also been approved by FERC.⁸

Under a “physical reservation” design, customers expressly reserve transmission service using the ATC that remains after the needs of a transmission provider’s native load is accounted for. To the extent that there is insufficient ATC to support all desired uses of the grid, transmission service is allocated on a first-come, first-served basis, subject to certain priorities based on the firmness and duration of the service requested. When established long-term reservations expire, customers have a right of first refusal to retain the transmission capacity by matching competing offers for it. Physical reservation customers may choose between “Point-to-Point” service, which was designed primarily for those who wished to move power from one discrete location to another, and “Network Integration” service which was intended for those that wanted to integrate many generators and many loads at diverse locations and use the grid in much the same way as transmission providers did to serve their own bundled retail customers.

Under the “financial reservation,” model ISOs/RTOs use locational marginal pricing to manage congestion and to operate bid-based spot markets. These arrangements allow customers more flexibility, and allow for greater use of the transmission system, than is possible under either the *pro forma* Point-to-Point or Network Integration Transmission Services.

NYISO next explains (on page 9) that, unlike most transmission providers, it has two FERC-approved tariffs: it *OATT* (conforming to the pro forma *OATT*) and its *Market Administration and Control Area Services Tariff* (hereafter “*Services Tariff*”).

Schedule 4 quoted above notes in Section 1.0 that, for each customer that has executed a service agreement under the *Services Tariff*, the energy imbalance service is supplied by the real-time market at the LBMP price with no multiplier.

⁸ *Ibid.* p.6.

1.0 Energy Imbalance Service Charges

For each Transmission Customer that has executed a Service Agreement under the ISO Services Tariff, Energy Imbalance Service is considered to be supplied by the Real-Time Market and will be charged at the Real-Time LBMP price determined pursuant to Attachment J.

Thus the rates the Transmission Provider refers to in its answer to the Régie only pertains to transmission customer that are not also customers under the *Services Tariff*:

For each Transmission Customer that is not a Customer under the ISO Services Tariff and is receiving service under Part II or III of this Tariff, the ISO shall establish a deviation band of +/- 1.5 percent (with a minimum of 2 MW) of the scheduled transaction to be applied hourly ... (Emphasis added)

NYISO specifies that for customers using the *Services Tariff*, **it is the real-time price that applies without any additional multiplier.**⁹

The NYISO OATT currently bases charges for imbalances between transaction schedules and actual energy deliveries on the prices determined through its real-time LBMP markets. Specifically, with respect to imbalances between transaction schedules and actual energy deliveries, Rate Schedule 4 of the NYISO OATT currently provides that imbalances for transmission customers that have signed agreements under the Services Tariff will be considered to be supplied at the Real Time LBMP without any additional multiplier.⁵³ That is, generators that inject less energy into the transmission system than their scheduled transaction called for pay for the imbalance by buying energy from the NYISO's spot market. Similarly, loads that withdraw more energy than their scheduled transaction provided pay for the imbalance by buying the difference from the NYISO's spot market.⁵⁴

The compliance filing of 2007 indicates that the only NYISO transmission customers that are not covered by the *Services Tariff* are those that conduct wheel-through transactions. It is impossible, however, for Schedule 4 to apply to such transactions, as the passage below explains.¹⁰

⁹ NYISO 2007, p. 20.

¹⁰ Ibid., page 23.

Virtually all NYISO customers take service under both the OATT and Services Tariff and thus are not subject to the OATT-only imbalance rules. The only customers that take service under the OATT without also taking service under the Services Tariff are those that schedule “wheel-through transactions” in which energy is imported from one Control Area and exported to another. Such customers are never subject to the OATT-only imbalance charge, however, because the NYISO always schedules the same amount of energy for both the import and export portions of wheel-through transactions. To the extent that a wheel-through transaction is entirely or partially curtailed, its export and import components will be reduced by the same amount. Thus, as a practical matter, the OATT-only imbalance charge rules are never applied, even to wheel-through customers. Indeed, the NYISO is not aware of any occasions on which the OATT-only charges were triggered. For these reasons, the NYISO is exploring the possibility of eliminating the OATT-only imbalance charge rules in a future filing to simplify, clarify, and update its OATT.

Consequently, Schedule 4 of the OATT actually applies to no NYISO customer. NYISO thus asked FERC to exempt it from the obligation to amend its Schedule 4, since it does not apply to any customer and *Services Tariff* provisions for dealing with energy and generator imbalances are *superior* to requirements in the FERC orders.¹¹

In its Order dated May 7, 2008, FERC accepted this reasoning.¹²

13. In Order No. 890, the Commission recognized that some of the changes adopted in Order No. 890 may not be as relevant to ISO and RTO transmission providers as they are to non-independent transmission providers. The Commission stated that revisions to the *pro forma* OATT are not intended to upset the market designs used by existing ISOs and RTOs, and that ISOs and RTOs may well have adopted practices that are already consistent with or superior to the reforms adopted in Order No. 890.⁹ We also note that no party objects to the aforementioned deviations. Therefore, we recognize that NYISO’s proposed deviations from the *pro forma* OATT reflect the actual market design used by NYISO, and find these deviations to be consistent with or superior to the *pro forma* OATT, except as otherwise addressed below.

We thus conclude that **the NYISO rate cited by HQT to justify its proposed schedule 4 and 5 rates do not, in fact, apply to any customer.** This is the only reason why it can remain technically in effect; otherwise, it would have had to be amended in accordance with FERC orders.

The rate actually applied to all NYISO customers is actually must less punitive than the one established by FERC orders: to use the Régie term, the “prix de reference” (reference price) is simple the real-time market price with no multiplier.

¹¹ NYISO also reported that it intended to delete Schedule 4 in the near future (NYISO 2007, p. 23).

¹² FERC, OA08-13-000 (NYISO), Order Accepting Compliance Filing, as Modified, May 7, 2008, p. 5.

The system applicable to NYISO wind power producers is also less punitive than the one established by FERC orders. Most intermittent resources are completely exempt of generator imbalance rates:¹³

The NYISO has also adopted special imbalance rules for all intermittent renewable resources currently interconnected to its system which account for and accommodate their special characteristics. All New York intermittent resources that existed in 1999, plus up to an additional 1,000 MW of intermittent resources that have been added since 1999, or that will be added in the future, are completely exempt from imbalance charges. The amount of scheduled transmission service for such a resource is retroactively revised, interval by interval, to equal its output.⁵⁵ Loads that purchased such transmission service will buy energy from the NYISO's spot market to make up for any shortfalls between the intermittent resource's transaction schedule and its actual output. This approach completely accommodates the inability of intermittent resources to accurately predict their output when scheduling transmission service.

Thus the NYISO system is less punitive than the one required by FERC, both for intermittent power producers and for customers at large, and much less punitive than the one proposed by Hydro-Québec.

6 Discussion and recommendation

As shown in Table 2 above, the proposed rates are doubly punitive (and thus contrary to Decision D-2009-015) since the incremental price is set to CA\$100 for bands 2 and 3, and since the decremental price is set to CA\$25 for Band 2 and to CA\$0 for Band 3. These values in no way reflect hourly prices on neighboring markets.

The modifications required to make the proposal consistent with Régie requirements are thus very simple. For Schedule 4, it just involves modifying the fourth paragraph as follows:

- In subparagraphs (1) and (2), strike the words “Band 1”, as follows:
 - (1) ~~Band 1~~ Incremental price: This price equals the highest hourly price for each hour on the following three (3) markets: ...
 - (2) ~~Band 1~~ Decremental price: This price equals the lowest hourly price for each hour

¹³ NYISO 2007, p. 21.

on the following three (3) markets: ...

o Delete subparagraphs (3), (4) and (5):

~~(3) Incremental Band 2 and Band 3 price: price equals the highest hourly price for each hour among (1) the NY Incremental price, (2) the NE Incremental Price, (3) the ONT Incremental Price and (4) CA\$100.00/MWh.~~

~~(4) Band 2 decremental price: This price equals the lowest hourly price for each hour among (1) the NY Decremental Price, (2) NE Decremental Price, (3) ONT Decremental Price and (4) CA\$25.00/MWh.~~

~~(5) Band 3 decremental price: This price is \$0.00/MWh.~~

Similar modifications may be made to Schedule 5. Thus the “reference price” will be specified in all instances on the basis of the prices on the three neighboring markets, as required by the Régie. **By applying these modifications, the proposed rates will comply both with Decision D-2009-015 requirements and with FERC orders.**

The question remains, however, as to whether such rates are acceptable to the entity that provides the imbalance services. In its Decision, the Régie stated that “use of a market price meets the objective of offering fair compensation to the service provider” [unofficial translation of the French text]. It is implicit in the Offer, however, that Hydro-Québec Production does not entirely share this view. Its Offer adopts hourly prices on neighboring markets as the reference price but only for deviations of less than 1.5% of the reserved capacity.

Unlike the framework agreement (R-3689-09, under consideration), it is not a matter of an agreement between HQP and a regulated entity but instead of an HQP offer.¹⁴ If providing such service is monopolistic by nature, its price should normally be set based on regulatory principles to avoid that the price be set arbitrarily by the provider. Some seem to believe that other entities are also able to provide this service, at least in part. The matter of how a non-regulated entity’s right to set the prices it is prepared to offer for a service relates to the Régie’s power to set a rate for a regulated entity is clearly a legal one clearly outside the scope of our mandate.

¹⁴ The fact that HQP’s Offer and the Transmission Provider’s proof bear the same date suggests that the two had discussions before the written Offer was filed, though we have no knowledge about the content of such discussions.

That being said, at this stage of the filing, two things remain clear:

- 1. The Transmission Provider's rate proposal does not comply with either Decision D-2009-015 or FERC orders; and**
- 2. No valid reason has been provided to justify the prices contained in the Offer by Hydro-Québec Production and in the rate proposal.**