

December 19, 2003

Report to the Chairman

**Subject: Inspection of OASIS system – final audit report**

Madam Chairman:

On April 28, 2003, you assigned us to audit the compliance of the Open Access Same-Time Information System (OASIS) used by Hydro-Québec in its transmission-related activities (the Provider) with the requirements stipulated in article 4 of Hydro-Québec's *Open Access Transmission Tariffs*, i.e. Part 37 of the Federal Energy Regulatory Commission's Regulations and the directives issued by the Régie in its Decision D-2002-95.

On December 3, 2003, we submitted to you our preliminary report and sent a copy to the Provider.

You will find enclosed our final audit report, including our findings concerning the compliance of the Provider's OASIS system and, where applicable, the changes made by the Provider during the audit period and the changes the Provider has undertaken to make in response to the comments made in the course of the audit. It also takes into account the Provider's observations of December 10, 2003 in response to our preliminary audit report.

A copy of this report has been sent to the Provider and is posted on the Régie's Web site.

Sincerely yours,

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Paul Paquin

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Monique Rouleau

Encl.

**FINAL AUDIT REPORT**

**FINDINGS CONCERNING THE COMPLIANCE OF THE  
OPEN ACCESS SAME-TIME INFORMATION SYSTEM  
(OASIS) USED BY HYDRO-QUÉBEC IN ITS  
TRANSMISSION-RELATED ACTIVITIES**

Submitted to the Chairman of the Régie de l'énergie

By Paul Paquin and Monique Rouleau  
Economic Regulation analysts

**DECEMBER 19, 2003**

TO THE CHAIRMAN OF THE RÉGIE DE L'ÉNERGIE

We hereby submit a final report on our compliance audit of the Open Access Same-Time Information System (OASIS) used by Hydro-Québec in its transmission-related activities, conducted pursuant to Sections 43 to 47 of the *Act respecting the Régie de l'énergie*.<sup>1</sup>

Montréal, December 19, 2003

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<sup>1</sup> R.S.Q., Chapter R-6.01

## **SUMMARY**

The Régie has performed an inspection of the Open Access Same-Time Information System (OASIS) used by Hydro-Québec in its transmission-related activities (“the Provider”) in order to ascertain its compliance with Part 37 of the Regulations of the Federal Energy Regulatory Commission (FERC) and with the directives issued by the Régie in its Decision D-2002-95.

The audit was performed over an 8-month period, between April 28 and November 26, 2003. It was based primarily on an analysis of the OASIS system via the Internet and meetings with the Provider’s staff. The process was conducted in a cooperative and open atmosphere.

In conclusion, we found that the Provider’s OASIS system generally meets the above-mentioned requirements. However, some shortcomings were noted in the following areas:

- obligation to inform the Régie of changes to the OASIS site on an ongoing basis;
- obligation to provide a reason for denying requests for service;
- consistency of information on paths;
- changes to the HQT-MASS path;
- TTC consistency, TRM values and ATC calculations;
- posting of information on OASIS; and
- coordination of TTC values with neighbouring systems.

Each of these points is discussed in this report. The problems and the inspection findings are described as well as, where applicable, the changes already made and the Provider’s undertakings. It also takes into account the Provider’s observations of December 10, 2003 in response to our preliminary audit report.

In that correspondence, the Provider stated that “appropriate action will be taken with respect to the shortcomings of the OASIS site noted in the preliminary audit report, within the timeframe indicated in our letter of November 26, 2003,” i.e. by May 1, 2004.

## **MANDATE**

On April 28, 2003, we were assigned to audit the compliance of the Provider's Open Access Same-Time Information System (OASIS) with the requirements stipulated in section 4 of Hydro-Québec's *Open Access Transmission Tariff*, i.e. Part 37 of the FERC's Regulations and the directives issued by the Régie in its Decision D-2002-95.

The audit was performed over an 8-month period, between April 28 and November 26, 2003. It was based primarily on an analysis of the information on the OASIS site and meetings with the Provider's staff. Meetings were held for this purpose on June 26, September 8 and 11, and November 4, 2003. The file was completed by means of telephone conversations with the Provider and supplementary information provided in writing. Finally, on December 10, 2003, the Provider sent us its observations in response to the preliminary audit report, a copy of which had been sent to it by the Régie on December 3, 2003.

We wish to acknowledge the fact that the Provider was forthcoming and cooperative throughout the inspection.

## **OASIS □ DESCRIPTION**

OASIS is a same-time information system consisting in a continuously updated dynamic database that can be accessed over the Internet. It contains information on the transmission capacity (TTC, TRM and ATC<sup>2</sup>) of each of the Provider's interconnection paths with neighbouring systems, and on the applicable tariffs for the different types of transfers. OASIS provides customers with simultaneous, non-discriminatory access to relevant information, enabling them to reserve the transmission services they require.

Section 4 of *Open Access Transmission Tariff* provides that the terms and conditions stipulated in Part 37 of the FERC Regulations apply to the OASIS system and that OASIS is subject to the Régie's decisions, orders and regulations.

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<sup>2</sup> TTC: Total Transfer Capability  
TRM: Total Reserve Margin  
ATC: Available Transfer Capability

## **INSPECTORS' FINDINGS AND PROVIDER'S UNDERTAKINGS**

In our inspection, we found that the Provider's OASIS system generally meets the above-mentioned requirements. However, we noted some shortcomings, which are described below along with any changes already made and the Provider's undertakings.

The shortcomings relate to the following areas:

1. obligation to inform the Régie of changes to the OASIS site;
2. obligation to provide a reason for denying requests for service;
3. consistency of information on paths;
4. changes to the HQT-MASS path;
5. TTC consistency, TRM values and ATC calculations;
6. posting of information on OASIS; and
7. coordination of TTC values with neighbouring systems.

We note that in its correspondence of December 10, 2003, the Provider stated that "appropriate action will be taken with respect to the shortcomings of the OASIS site noted in the preliminary audit report, within the timeframe indicated in our letter of November 26, 2003," i.e. by May 1, 2004.

### **1. OBLIGATION TO INFORM THE RÉGIE OF CHANGES TO THE OASIS SITE ON AN ONGOING BASIS**

#### **A) Requirements**

On page 311 of its Decision D-2002-95 of April 30, 2002, the Régie set out the following requirements:

1. *The Régie asks the Provider to inform it of changes to its OASIS site on an ongoing basis, indicating those that arise directly from changes to the characteristics and operation of the system described in Part 37 of the FERC's Regulations.*
2. *Customers must be informed by systematically announcing changes on the Provider's OASIS site.*

#### **B) Findings**

– Requirement 1

On July 30, 2002, the Provider informed the Régie of the work required on its OASIS site in order to comply with some parts of Decision D-2002-95, namely the publication of a detailed manual, specific terms and conditions of access for each of the paths posted on OASIS, and new information on matters such as ATC and transfer history.

The Provider reported that this work was being carried out as part of a broader process of overhauling and improving its OASIS site. The Provider planned to organize a formal meeting with all customers to give them more information about the revised and improved OASIS site, and intended to invite Régie staff.

On November 15, 2002, the Provider informed the Régie that work on overhauling and improving its OASIS site was continuing in order to make it more user-friendly and hence, facilitate access to the information required by transmission service customers.

On May 16, 2003, the Provider advised the Régie that changes were being made to the site.

We note that as of June 26, 2003, the date of the first meeting with the Provider's officials, the Régie had received no notice of the changes made.

In addition, the Provider has not informed the Régie "of changes to its OASIS site on an ongoing basis" since April 30, 2002.

#### – Requirement 2

On August 14, October 20 and November 4, 2003, the Provider sent us information at our request for the purposes of the inspection, concerning changes made during the inspection period.

We noted that, as of November 24, 2003, the notices archived on the OASIS site did not all match those received in response to our request.

We therefore find that the Provider has not announced all changes on the OASIS site.

#### C) Changes made as of November 26, 2003

No changes were noted as of November 26, 2003.

#### D) Provider's undertakings

The Provider indicated to us verbally that it intended to notify the Régie of changes made to its OASIS site in its annual report, in accordance with Section 75 of the *Act respecting the Régie de l'énergie*.

## 2. OBLIGATION TO PROVIDE A REASON FOR DENYING REQUESTS FOR SERVICE

### A) Requirements

When a request for service is denied, the Provider must give a reason, pursuant to paragraph 37.6(e)2(i) of Part 37 of the FERC's Regulations, which stipulates: "When a request for service is denied, the Responsible Party must provide the reason for that denial as part of any response to the request."

### B) Findings

Our review of a report on requests for sliding annual transmission service, dated September 10, 2003, found 8 cases in which no reason was provided for a denial.

In a report filed on October 20, the Provider stated that of the 1,109 denials in the database, there were only 58 for which no reason was given.

There are therefore a number of cases in which the reasons for denial were not recorded in the OASIS system.

### C) Changes made as of November 26, 2003

No follow-up inspection was made between October 20 and November 26, 2003.

### D) The Provider's undertakings

The Provider stated that it is aware of the situation and that the cases in which it neglected to provide a reason were exceptions.

In its report of October 20, 2003, the Provider stated that management had recently issued a reminder of the importance of providing a reason for a denial of service.

## 3. CONSISTENCY OF INFORMATION ON PATHS



#### A) Requirements

Section 37.6(b)(1)(i) of Part 37 of the FERC's Regulations defines "posted path" as "any control area to control area interconnection."

#### B) Findings

The list of paths on OASIS shows interconnections with neighbouring systems, and the posted capacity for each path can be used to determine the quantities that can be reserved. This list is posted at two different locations on OASIS: the *List of Paths*<sup>3</sup> and a list that appears on the pull-down menu showing the various headings under *Transmission Service*. The *Path Map* also shows the route of each path.

We found a lack of consistency in the information posted at these three locations, which could cause confusion for the Provider's customers.

#### C) Changes made as of November 26, 2003

As of November 26, 2003, we had not been informed of any changes.

#### D) The Provider's undertakings

In a document filed with the Régie on November 18, 2003,<sup>4</sup> the Provider stated that it intended to replace the descriptions in question. It also provided specific explanations concerning the HQT-ALCA and HQT-OTTO paths.

In a letter dated November 26, 2003, the Provider further undertook to make the changes by May 1, 2004, and it repeated that undertaking in its letter of December 10, 2003.

### **4. CHANGES TO THE HQT-MASS PATH**

#### A) Requirements

On page 312 of its Decision D-2002-95, the Régie required the Provider to specify the paths on which there could be restrictions limiting its customers' possible transactions.

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<sup>3</sup> Transactions section, *Miscellaneous information* heading, *Paths – list* link

<sup>4</sup> Inspection of OASIS system by the Régie de l'énergie – case R-3401-98, as required by Decision D-2002-95 – responses to oral queries of November 4, 2003.

The document entitled *Specifics on OASIS Path Access*, posted on the Provider's OASIS site, states:

*Pursuant to Régie de l'énergie Decision D-2002-95, TransÉnergie began applying the rule below on May 1, 2002.*

*For interconnections requiring that generating units be synchronized with a neighboring system, prior agreement must be reached with the generating unit owner for each reservation request for transmission service to export over such interconnections. As of May 1, 2002, any transmission provider (TP) customer who submits a reservation request for export over a path involving the Ontario system and requiring use of a generating station in Québec not belonging to the TP and that must be synchronized with the Ontario system to fill the reservation request, must have reached a prior agreement with the generating station's owner and include the number and date of the agreement reached in the CUSTOMER\_COMMENTS section of the OASIS reservation request. Also as of May 1, 2002, this measure applies to the HQT-CRT path using the output of a generating station in Québec and requiring synchronization with the New York system. In a few weeks, it will also apply to exports on the path linking the New York and TransÉnergie systems over Line 7040 (currently designated HQT-MASS). In the latter instance, implementing this measure will make it necessary to modify the paths posted on the TransÉnergie OASIS site so as to separate transfers requiring the use of TransÉnergie converter stations from those requiring the use of Beauharnois generating station (property of Hydro-Québec Production). Until the measure is implemented, the status quo will be maintained over the current HQT-MASS path. A new procedure for processing transmission capacity reservations over Line 7040 is being devised. TransÉnergie had announced that a new method would be implemented on June 1, 2002. Implementation has been deferred by a few weeks. A future message will specify the effective implementation date, the changes made, and the procedure for transferring current reservations from HQT-MASS to the new paths. Currently all generating stations affected by this notice belong to Hydro-Québec Production, which can be contacted at (514) 289-6789.<sup>5</sup> (emphasis added)*

## B) Findings

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<sup>5</sup> Transactions section, Miscellaneous information heading, Paths - description link, page 2

Our inspection found that the Provider has not modified “the paths posted on the TransÉnergie OASIS site so as to separate transfers requiring the use of TransÉnergie converter stations from those requiring the use of Beauharnois generating station (property of Hydro-Québec Production),” a change which was announced and described as necessary in *Specifics on OASIS Path Access*.

In its document of November 18, 2003, the Provider stated: “While the available capacities of converter stations are not explicitly posted on the OASIS site, the Provider assures the inspectors that the capacities shown as available on the site are indeed available and that third-party customers can indeed transmit energy through the converter stations, provided of course that they are available. Otherwise, the rules stipulated in Hydro-Québec’s *Open Access Transmission Tariff* apply.”

C) Changes made as of November 26, 2003

On October 17, 2003, the Provider posted a notice on its OASIS site specifying that as of Saturday, October 18, 2003, it would require prior agreement with Hydro-Québec Production for any request for transmission service using the HQT-MASS or MASS-HQT path that requires the use of the turbine generators at the Beauharnois power station.

D) The Provider’s undertakings

The Provider did not make any other specific undertakings concerning the path changes deemed necessary. However, in its letter of December 10, 2003, it stated that “appropriate action will be taken with respect to the shortcomings of the OASIS site noted in the preliminary audit report, within the timeframe indicated in our letter of November 26, 2003,” i.e. by May 1, 2004.

## **5. TTC CONSISTENCY, TRM VALUES AND ATC CALCULATIONS**

A) Requirements

The TTC, TRM and ATC values indicate the maximum capacity of a path, the reliability margin, and the available capacity in view of existing reservations, respectively.

Since the TTC and TRM values are used to calculate ATC,<sup>6</sup> the determination of the TTC and TRM values must be understood in order to understand the ATC calculation.

Section 37.6(b) of Part 37 of the FERC's Regulations, "Information to be posted on the OASIS," stipulates: "Posting transmission capability. The transmission capability that is expected to be available on the Transmission Provider's system (ATC) and the total transmission capability (TTC) of that system shall be calculated and posted for each Posted Path..."

Similarly, Decision D-2002-95 states, on page 312:

*The Régie notes that ATC is a matter that has drawn considerable attention from the Provider's current and potential customers. At the hearing, the Provider expressed a readiness to post more information on its OASIS site to make its ATC calculations more comprehensible. The Provider also acknowledged that the explanations provided in the document entered into evidence, describing the main factors used to establish ATC, could be improved.*

*The Régie orders the Provider to publish on its OASIS site the explanations necessary to understand its ATC calculations, and to keep a file posted on the site containing customers' questions and the Provider's answers. The information available on the OASIS site must include the information requested by OPG in questions 3a) through 3e) of Part II of its interrogatory concerning the ATC calculation."*<sup>7</sup> (emphasis added)

## B) Findings

We found that some of the TTC values posted on the *Transmission capacities* page for the period of September 2003 to September 2004 were not consistent with the TTC values indicated in *Specifics on OASIS Path Access*.<sup>8</sup>

As well, the information provided in *Specifics on OASIS Path Access* is not sufficient to explain and support the values shown. TTC values are provided without stating the criteria used to establish them, and often without giving reasons for the changes during the period of September 2003 to September 2004. The same applies to TRM values.

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<sup>6</sup> OASIS site, *Information* section, *Working guide* heading, page 4

<sup>7</sup> OPG: Ontario Power Generation

<sup>8</sup> *Transactions* section, *Miscellaneous information* heading, *Paths – description* link

Following the Provider's observations of December 10, 2003, we noted that the Provider's response to OPG's questions 3(a) through 3(e) was posted in the FAQ section of the OASIS site, in accordance with the requirements stipulated by the Régie in Decision D-2002-95. However, that response relates specifically to the winter and summer of 2001.

C) Changes made as of November 26, 2003

As of November 26, 2003, we had not been informed of any changes.

D) The Provider's undertakings

In its document of November 18, 2003, the Provider addressed each of the cases noted in which the TTC values were inconsistent and stated that it intended to make the necessary corrections. The Provider indicated that it would harmonize the TTC values posted at different locations on the OASIS site. In its letter of November 26, 2003, the Provider undertook to make the adjustments by May 1, 2004.

The Provider did not make any specific undertaking concerning the explanations necessary to understand its ATC calculations. However, in its letter of December 10, 2003, it stated that "appropriate action will be taken with respect to the shortcomings of the OASIS site noted in the preliminary audit report, within the timeframe indicated in our letter of November 26, 2003," i.e. by May 1, 2004.

## **6. POSTING OF INFORMATION ON OASIS**

A) Requirements

Section 37.6(a) of Part 37 of the FERC's Regulations stipulates: "The information posted on the OASIS must be in such detail and the OASIS must have such capabilities as to allow Transmission Customers to: (1) Make requests for transmission services offered by Transmission Provider..." Therefore, the system must include the necessary information for reservation requests.

B) Findings

During our inspection, we found the site to be inaccessible on several occasions. We made the following observations:

- on August 29, 2003, at 8:15 a.m., it was not possible to access information that requires a password; however, an attempt made at 9:30 a.m. was successful;
- the site was down on September 3, 2003 between 8:30 and 9:30 a.m.;
- on October 1, 2003, at 3:30 p.m., the path diagram showed an interchange of 0 MW for each path.

We did not see any notice from the Provider concerning any of these disruptions.

With respect to these findings, the Provider indicated that when the site is down reservations can be made by other means, such as telephone or fax, and that such requests are recorded as soon as the system is operational again.

C) Changes made as of November 26, 2003

As of November 26, 2003, we had not been informed of any changes.

D) The Provider's undertakings

In its document of November 18, 2003, the Provider stated that it already posts a notice on the OASIS homepage prior to any scheduled down time and it intends to post a notice following any unscheduled disruption of more than half an hour.

## 7. COORDINATION OF TTC VALUES WITH NEIGHBOURING SYSTEMS

A) Requirements

On page 311 of Decision D-2002-95, the Régie stipulated the following requirement:

*In accordance with NERC/NPCC standards and procedures, the Régie considers that the Provider's general policy must be to coordinate its transfer capacity calculations and results with other systems; should this requirement be inapplicable for one or more paths, the Provider must submit to the Régie a specific application for an exemption, including the reasons and details of proceedings undertaken with NERC/NPCC.*

B) Findings

The TTC values posted on the OASIS site do not take into account the transfer capacity limitations of neighbouring systems at the interconnection points. This information is sometimes included in *Specifics on OASIS Path Access*,<sup>9</sup> but it is not reported elsewhere, such as the *Transmission capacities* link.<sup>10</sup> Therefore, a reservation may appear possible on the Provider's OASIS site although the neighbouring system's capacity cannot support it.

The Provider did not request an exemption.

C) Changes made as of November 26, 2003

As of November 26, 2003, we had not been informed of any changes.

D) The Provider's undertakings

In its document of November 18, 2003, the Provider stated that its capacity calculations are in keeping with industry standards and that, following discussions with neighbouring systems, network studies have been undertaken which promise to alleviate the problem.

The Provider added that it does not consider it appropriate to apply to the Régie for an exemption at this time.

However, in its letter of December 10, 2003, the Provider stated that "appropriate action will be taken with respect to the shortcomings of the OASIS site noted in the preliminary audit report, within the timeframe indicated in our letter of November 26, 2003," i.e. by May 1, 2004.

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<sup>9</sup> Transactions section, *Miscellaneous information* heading, *Paths - description* link

<sup>10</sup> Transactions section, *Transmission services* heading, *Transmission capacities* link