



VIA E-FILING & COURIER

Friday, March 28, 2003

The Honorable Eleanor Stein
Administrative Law Judge
New York State Department of Public Service
3 Empire State Plaza
Albany, NY 12223-1350

**Re: Proceeding on Motion of the Commission Regarding a
Retail Renewable Portfolio Standard (Case 03-E-0188)**

Dear Judge Stein,

Please accept for filing in the above-captioned matter, the enclosed submission by the Independent Electricity Market Operator of Ontario. We thank you for your attention to the IMO's comments and according the IMO full rights to participate as a party in these proceedings.

If you have any questions, please contact me at (416) 506-2858.

Sincerely,

Original signed by

Carl A. Burrell
Senior Analyst
Corporate and Legal Affairs
Independent Electricity Market Operator

Encl.

**STATE OF NEW YORK
PUBLIC SERVICE COMMISSION**

Proceeding on Motion of the Commission Regarding a) Case 03-E-0188
Retail Renewable Portfolio Standard)

**COMMENTS OF THE
ONTARIO INDEPENDENT ELECTRICITY MARKET OPERATOR**

I. Introduction

1. The Ontario Independent Electricity Market Operator (the “IMO”) respectfully submits the following comments in the above-captioned proceeding. On February 19, 2003, the New York State Public Service Commission (the “Commission”) issued an Order commencing its proceeding to, among other things, facilitate the formulation of a policy statement on retail renewable portfolio standards in New York State. As described in greater detail below, the IMO is the organization in Ontario responsible for establishing and administering the wholesale electricity markets and directing the operation and reliability maintenance of the integrated power system. The IMO's roles and responsibilities are defined by regulation and include a broad range of integrated operations, from operations planning, security assessment and transaction scheduling, to real time co-ordination of the power system with independent system operators including the New York Independent System Operator. In addition, on March 21, 2003, the Ontario Ministry of Energy issued a proposed Regulation for public review and comment, which prescribes the planned implementation of an environmental “certificate” tracking system that would characterize generation attributes associated with energy produced and consumed in Ontario, including imports and exports.¹ The proposed tracking system Regulation designates the IMO as system Administrator.² As Administrator, the IMO would be charged with, among other things (1) establishing, developing, maintaining and operating the tracking system, (2) creating certificates for electricity generated in Ontario, imported into Ontario or generated in another jurisdiction

¹ See. Notice of Proposed Regulation, March 21, 2003, (<http://www.ene.gov.on.ca/envregistry/019774er.htm>).

prescribed by the IMO, and (3) determining the quantity of electricity imported into and exported from Ontario, and determining the electricity sources that are deemed to have supplied the electricity imported in Ontario. These additional responsibilities and powers effectively expand on the IMO's current roles in the wholesale electricity markets.

2. Given the threshold issues that have been identified to date³, the IMO and Ontario by and large have a direct and substantial interest that may be directly affected by the outcome of this proceeding. Other parties to this proceeding cannot adequately represent the IMO's interest because the IMO is the only entity charged with administering the wholesale electricity market, performing the transmission operator function for the IMO-controlled grid and administering the impending environmental certificate tracking system. For these reasons, and to promote continued development and harmonization of our respective electricity and ensuing generation attributes markets, the IMO respectfully requests that the Commission give due consideration to the IMO's comments and accord the IMO full rights to participate as a party in these proceedings, towards the development and establishment of a policy statement on retail renewable portfolio standards.

II Communications

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

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III. Description of the Independent Electricity Market Operator

². See. Appendix A, Proposal for an Ontario Regulation made under the *Ontario Energy Board Act, 1998* ¶Environmental Information and Certificate Tracking System.

³ Order Instituting Proceeding, Case 03-E-0188, ¶Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard, February 19, 2003.

3. The IMO was established under the *Ontario Electricity Act, 1998* to administer the Ontario wholesale power markets and to direct the operations and reliability maintenance of the IMO-controlled grid. The IMO is a non-profit, non-share capital corporation independent of all other players in the electricity industry. The IMO does not own any electric power generation facilities but it has operational control⁴ over the transmission and generation facilities, including interconnections that are situated in Ontario, except for distribution systems operating at a nominal voltage of less than 50 kV. The roles of the IMO are established by legislation, Ontario Energy Board license, and the Ontario Market Rules (“the Market Rules”), and include:

- (a) exercising and performing the powers and duties assigned to the IMO under the *Electricity Act, 1998*, the market rules and its licence;
- (b) entering into agreements with transmitters giving the IMO authority to direct the operations of their transmission systems;
- (c) directing the operations and maintaining the reliability of the IMO-controlled grid to promote the purposes of the *Electricity Act, 1998*;
- (d) establishing and operating the IMO-administered markets to promote the purposes of the *Electricity Act, 1998*;
- (e) collecting and providing to the public information relating to the current and future electricity needs of Ontario and the capacity of the integrated power system to meet those needs;
- (f) participating in the development by any standards authority of standards and criteria relating to the reliability of transmission systems;
- (g) working with the responsible authorities outside Ontario to co-ordinate the IMO’s activities with their activities.

IV. Comments on Threshold Issues

While the IMO is interested in various aspects of this proceeding, this written submission will be confined to the following threshold issues:

⁴ Operational control includes: security monitoring, adjustment of generation and transmission resources, coordinating and approval of changes in transmission status for maintenance, determination of changes in transmission status for reliability,

4. **Types of resources that should be considered as “renewable”.** The IMO favours investments in a diverse mix of generation resources. While the IMO doesn't take a position on what type of electricity resources constitute “renewable,” the IMO would like to encourage the Commission to consider a balanced approach to establishing New York's renewable resource mix. The Commission should consider such factors that will promote development of a diverse mix of resources and will also maximize the deployment of economically viable renewable resources and generation attributes trading within, between and through our respective markets.

5. **Appropriateness of including renewable resource energy procured from outside the State.** The IMO believes that generation should be able to reach available markets. Accordingly, cross-border electricity and attributes trade should have the benefit of access principles that apply to intra-jurisdictional electricity trade. Renewable resources procured from outside the State will provide a host of benefits, including

- (a) meeting environmental and other public policy objectives (i.e., contribute to Renewable Portfolio Standards obligation),
- (b) efficient allocation of renewable resources,
- (c) increased availability of resources to meet demand-supply balance, particularly during emergency periods,
- (d) providing consumers with a wider a range of generation choices,
- (e) increased economic development opportunities and trade within and between our respective markets,
- (f) providing our respective system operators with greater flexibility in managing the integrated power system, and
- (g) allowing for the integration and expansion of environmental attributes markets across larger geographic regions.

6. **Appropriateness of a renewable attributes trading system.** As noted earlier, the Ontario Ministry of Energy recently issued a proposed Regulation for public review and

comment, which prescribes the implementation of a "certificate" tracking system that will characterize the environmental attributes for electricity generated and consumed in Ontario, including imports and exports. The Regulation also sets out provisions for incorporating a trading platform within the tracking system to allow certificate sellers to trade certificates in real-time. The Regulation aims to promote the development and sale of a wide range of renewable energy resources and facilitate the trading of environmental attributes in Ontario and neighboring jurisdictions. Recognizing the significant benefits that may accrue from cross-border trades, the impending Regulation has set out a regulatory framework and the powers and duties to enable the IMO to work with responsible authorities in New York, and other jurisdictions to maximize intra- and inter-jurisdictional trades to the benefit of the respective jurisdictions. It is expected that development of the tracking system will commence upon the Regulation coming into force. The IMO believes that a common tracking system to characterize and track generation attributes and common system functionality to facilitate certificates trading will ensure that inter-jurisdictional transactions will flow in a seamless manner. In this regard, the IMO supports development and adoption of a common platform and business standards and trading practices to help harmonize trades between and through our respective markets. It is worth noting that the tracking system envisioned for Ontario will closely mirror the New England Generation Information System. The IMO believes that it will be beneficial to integrate these systems over time.

V. Other Potential Threshold Issues.

7. **Need for Consistent Business Standards and Practices.** The IMO believes that ongoing development of initiatives to characterize, track and quantify generation attributes and the assignment of the ensuing property rights will necessitate the need for a robust set of operational standards and business practices to allow for seamless transactions between respective systems and jurisdictions, and to uphold consumer confidence in tradable certificates. In this regard, the IMO believes that it would be advantageous to leverage and work within established industry forums such as the North American Energy Standards Board (NAESB) to develop and promote business standards and practices to facilitate the development of seamless and credible markets for tracking and trading certificates. These

standards and business practices would promote and support efficient system integration across a wide geographic region.

VI. Conclusion

8. The IMO thanks the Commission for the opportunity to submit comments in respect of this proceeding. Wherefore, for the reasons stated above, the IMO respectfully requests that the Commission consider the IMO comments in its deliberation towards establishing a policy statement on retail renewable portfolio standards. This will promote continued development and harmonization of our respective electricity and ensuing environmental attributes markets to the benefit of our respective jurisdictions. The IMO commits to working with responsible authorities in New York and other areas to ensure that generation attributes can be characterized, tracked and transacted within and through our respective markets in a seamless manner.

Respectfully submitted,

Original signed by

Carl A. Burrell
Senior Regulatory Analyst
Corporate and Legal Affairs
Independent Electricity Market Operator

Friday, March 28, 2003

Appendix A

PROPOSAL FOR AN ONTARIO REGULATION

made under the

ONTARIO ENERGY BOARD ACT, 1998

**ENVIRONMENTAL INFORMATION AND CERTIFICATE TRACKING
SYSTEM**

Definitions

1. In this Regulation,

“Administrator” means the Administrator designated pursuant to section 2;

“Auditor” means the Auditor designated pursuant to section 3;

“biogas” means gaseous fuels or products derived from biomass, including hydrogen and methane;

“biomass” means,

- (a) any organic matter derived from a plant if the matter is available on a renewable basis, including dedicated energy crops and trees, agricultural food and feed crops and waste materials from the harvesting and processing of agricultural crops or forestry products,
- (b) liquid fuels or products made from biomass resources, including the liquid fuels ethanol, methanol and biodiesel;

“certificate” means an electronically-generated and transferable record, created by the tracking system, representing the electricity source, types and quantities of emissions, and other characteristics of one Megawatt hour of electricity, related to the generation facility that produced it;

“certificate seller” means a person that is licensed under clause 57 (i) of the Act to transfer or receive certificates through the tracking system or to sell differentiated electricity products;

“differentiated electricity product” means any electricity sold or offered for sale pursuant to an agreement, including an agreement entered into prior to the filing of this Regulation, by a person licensed as a certificate seller to a consumer, a certificate seller or to a purchaser outside Ontario in which the person makes any statement that,

- (a) contains a reference to an electricity source which is used or deemed to be used to produce the product, other than a reference to the system-wide source mix or the residual system mix,
- (b) contains a reference to an electricity source which is not used or is deemed not to have been used to produce the product,
- (c) contains a reference to the product or the use of the product having an environmental or health effect,
- (d) contains a reference to a generation facility that generates some or all of the product;

“electricity source” means one of the following processes or fuel types used to generate electricity,

- (a) biogas,
- (b) biomass,
- (c) water,
- (d) coal,
- (d) natural gas,
- (e) nuclear energy,
- (f) oil,
- (g) solar energy,
- (h) waste,
- (i) wind,
- (j) any process or fuel type specified by the Independent Electricity Market Operator;

“Environmental Choice Program” means the labelling program established in 1988 by Environment Canada to encourage the demand for and supply of products and services that are more environmentally responsible and to help consumers and organizations make informed choices in accordance with the requirements of the International Organization for Standardization’s standard ISO 14024 “Environmental labels and declarations—Type I environmental labelling—Principles and procedures”;

“oxides of nitrogen” means nitric oxide, expressed in grams;

“Independent Electricity Market Operator” means the Independent Electricity Market Operator established under Part II of the *Electricity Act, 1998*;

“product usage” means the total consumption or usage of a differentiated electricity product during a year by all consumers of that product, expressed in Megawatt-hours;

“prospective source mix” means, for a differentiated electricity product, the electricity sources projected by the certificate seller to be used to generate the differentiated electricity product during the current year, expressed in each case as a percentage of the estimated product usage;

“residual system mix” means the total electricity generated by each electricity source in Ontario and imported into Ontario during a year, less the total electricity used to generate or deemed to have been used to generate all differentiated electricity products by each electricity source, as determined by the Independent Electricity Market Operator;

“source mix” means, for a differentiated electricity product, the total electricity by each electricity source used to generate or deemed to have been used to generate the differentiated electricity product during a year, expressed in each case as a percentage of the product usage;

“system-wide source mix” means the total electricity generated by each electricity source in Ontario and imported into Ontario during a time period prescribed by this Regulation, expressed in each case as a percentage of total electricity available for consumption, as determined by the Independent Electricity Market Operator or the Ministry;

“tracking system” means the electronic databases, accounts and procedures established by the Administrator pursuant to this Regulation for the purposes of collecting information from generators, distributors and certificate sellers to create certificates, label data and reports which associate electricity with the processes and fuel types

used by generation facilities and with the types and quantities of emissions, and to record the transfer of certificates.

DUTIES OF THE ADMINISTRATOR

Administrator

2. For purposes of subclause 88 (1) (a.1) (i) of the Act, the Independent Electricity Market Operator is designated as the administrator of the tracking system and as administrator, shall administer the tracking system by performing directly or through a third party the following powers and duties:

1. Establishing, developing, maintaining and operating a tracking system capable of generating certificates and label data.
2. Establishing rules and procedures for the operation and administration of the tracking system.
3. Developing the electronic data transfer formats and the operational requirements to convey and report information from certificate sellers, distributors, and generators to the tracking system.
4. Prescribing the manner in which information is to be reported to the Independent Electricity Market Operator and the tracking system pursuant to this Regulation.
5. Generating certificates for each Megawatt-hour of electricity that was produced by a registered generation facility in Ontario, imported into Ontario, or generated in another jurisdiction as prescribed by the Independent Electricity Market Operator, and reported to the tracking system.
6. Providing certificates to certificate sellers pursuant to this Regulation.
7. Notifying certificate sellers that the tracking system is operational.
8. Establishing an electronic platform to enable a certificate seller to trade certificates, if it considers it appropriate to do so.
9. Calculating and estimating emissions information pursuant to this Regulation.
10. Calculating the source mix for each differentiated electricity product, the system-wide source mix, and the residual system mix pursuant to this Regulation.

11. Providing information in a form required by the Auditor.
12. Providing label data to a certificate seller for each differentiated electricity product offered by the certificate seller.
13. Making label data public for each differentiated electricity product, the system-wide source mix, and the residual system mix, as specified by the Auditor.
14. Establishing a fee schedule to recover the costs of developing and administering the tracking system.
15. Determining the quantity of electricity imported into and exported from Ontario, and determining the electricity sources that are deemed to have supplied the electricity imported into Ontario.

DUTIES OF THE AUDITOR

Auditor

3. For purposes of subclause 88 (1) a.1 (ii) of the Act, the director is designated as the person or body to audit the tracking system and related activities and the information provided to the Independent Electricity Market Operator and the tracking system, and the following are prescribed as the Auditor's powers and duties:

1. Examining, reviewing, auditing or investigating a certificate seller's right to claim certificates.
2. Examining, reviewing, auditing or investigating the product usage of a differentiated electricity product, as reported to the tracking system by a certificate seller.
3. Examining, reviewing, auditing or investigating the amount of a differentiated electricity product sold to a consumer.
4. Establishing the information that is to be reported by the Independent Electricity Market Operator, and the manner in which it is to be reported.
5. Setting requirements for the Independent Electricity Market Operator to publish the label data.
6. Providing a dispute resolution mechanism for issues relating to the tracking system.

LICENCES AND SELLING DIFFERENTIATED ELECTRICITY PRODUCTS

Sale of differentiated electricity product to a consumer

4. A person selling or offering for sale a differentiated electricity product to a consumer shall,

- (a) obtain a licence pursuant to clause 57 (i) of the Act;
- (b) register with the tracking system pursuant to this Regulation;
- (c) report the differentiated electricity product to the tracking system in the manner and at the times specified by the Independent Electricity Market Operator;
- (d) for the purpose of creating a label through the tracking system, acquire and assign certificates to the differentiated electricity product relating to the number of Megawatt hours sold and to satisfy the electricity source, types and quantities of emissions, or other claims or statements made by the certificate seller for the purpose of selling the differentiated electricity product;
- (e) prepare a label with a four-column table which displays the prospective source mix of the differentiated electricity product and which includes,
 - (i) each electricity source identified individually, vertically and alphabetically in the second column,
 - (ii) the prospective source mix of the differentiated electricity product for the current year with each percentage rounded to the nearest whole percentage point and displayed in the third column next to the appropriate electricity source,
 - (iii) the most recent residual system mix, or if that is not yet available, the system-wide source mix as calculated by the Independent Electricity Market Operator or the Ministry, with each percentage rounded to the nearest whole percentage point and displayed in the fourth column next to the appropriate electricity source,
 - (iv) unless subclause (v) applies, the following statement displayed in the first column “Electricity is generated from a variety of sources—each with different impacts on the environment, particularly in the air emissions it produces. [*Insert differentiated electricity product name*] will be supplied from the mix of sources shown here . Any additional electricity you use will be supplied from the province-wide source mix.”,

- (v) if the differentiated electricity product is supplied to a consumer at a fixed amount per month or other period, then, instead of the statement in subclause (iv), the following statement displayed in the first column “Electricity is generated from a variety of sources—each with different impacts on the environment, particularly in the air emissions it produces. [*Insert differentiated electricity product name*] will be supplied from the mix of sources shown here. Any electricity you use over [*insert the kilowatt-hour or Megawatt-hour per period*] will be supplied from the province-wide source mix.”,
- (vi) the following statement displayed at the bottom of the label “The information shown above is an estimate. Your supplier will provide an updated label showing how your electricity was actually supplied during the year, including the level of air emissions produced by these sources.”, and
- (vii) the certificate seller’s contact information;
- (f) provide a consumer with a copy of the label prepared in accordance with clause (e), or, if available, a copy of the label prepared under subsection 29 (2) before the consumer signs a contract for supply of the differentiated electricity product;

Same, to certificate seller

5. A person selling or offering for sale a differentiated electricity product to a certificate seller shall,

- (a) obtain a licence pursuant to clause 57 (i) of the Act ;
- (b) register with the tracking system pursuant to this Regulation;
- (c) acquire certificates through the tracking system relating to the number of Megawatt hours sold in order to satisfy the electricity source, types and quantities of emissions, or other claims or statements made by the certificate seller for the purpose of selling the differentiated electricity product; and
- (d) transfer to the certificate seller through the tracking system certificates relating to the differentiated electricity product referred to in clause (c).

Same, to purchaser outside Ontario

6. A person selling or offering for sale a differentiated electricity product to a purchaser outside Ontario shall,

- (a) obtain a licence pursuant to clause 57 (i) of the Act;
- (b) register with the tracking system pursuant to this Regulation;
- (c) report the differentiated product to the tracking system, in the manner and at the times specified by the Independent Electricity Market Operator;
- (d) acquire certificates through the tracking system relating to the number of Megawatt hours sold in order to satisfy the electricity source, types and quantities of emissions, or other claims or statements made by the certificate seller for the purpose of selling the differentiated electricity product; and
- (e) inform the tracking system that the certificates are designated to a purchaser outside Ontario.

REQUIREMENTS FOR THE LABEL RESPECTING 2002

Report to Independent Electricity Market Operator

7. On or before May 31, 2003, each distributor with a generation facility connected to the distributor's distribution system that is not a market participant and that is settled by the distributor in accordance with its licence shall report to the Independent Electricity Market Operator the total metered generation output for each of those generation facilities for the period beginning on May 1, 2002 and ending on December 31, 2002.

System-wide source mix

8. On or before September 30, 2003, the Independent Electricity Market Operator shall make available the system-wide source mix for the period beginning on May 1, 2002 and ending on December 31, 2002.

Bill with label

9. After September 30, 2003, and before December 31, 2003, every retailer and every distributor that provides electricity pursuant to subsection 29 (1) of the *Electricity Act, 1998* and that issues a bill to a consumer shall provide a label with a three-column table to the consumer showing the following:

1. Each electricity source identified individually, vertically and alphabetically in the second column.
2. The system-wide source mix displayed in the third column with each percentage rounded to the nearest whole percentage point and displayed next to the appropriate electricity source.

3. The statement displayed in the first column “Electricity is generated from a variety of sources—each with different impacts on the environment, particularly in the air emissions it produces. From May to December 2002, your electricity was supplied from the province-wide source mix, as shown here. Electricity can also be supplied from specific sources, such as from renewable resources.”
4. The statement displayed at the bottom of the label “COMING SOON...INFORMATION ON AIR EMISSIONS ”.

REQUIREMENTS FOR CERTIFICATES AND LABELS RESPECTING 2003 AND AFTER

Registration with tracking system, certificate sellers

10. Before December 31 in each year, a certificate seller shall register with the tracking system by providing the information specified by the Independent Electricity Market Operator, or shall verify that the information already reported to the tracking system is accurate.

Same, generation facilities

11. Before December 31 in each year, a generator or a certificate seller that owns or operates a generation facility shall register with the tracking system by providing the information specified by the Independent Electricity Market Operator, including the following for each such facility, or by verifying that the information already reported to the tracking system is accurate:

1. If the generation facility is connected to a distributor’s distribution system, is not a market participant and is settled by the distributor in accordance with its licence, the identity of the distributor;
2. Each electricity source producing electricity at the generation facility and an identification of the primary electricity source.
3. Environmental Choice Program certification, if any.
4. The year the generation facility became operational.
5. The location of the generation facility.

Same, distributors

12. Before December 31 in each year, a distributor with a generation facility connected to the distributor's distribution system that is not a market participant and that is settled by the distributor in accordance with its licence shall register with the tracking system by providing the information specified by the Independent Electricity Market Operator, including an identification of each such facility, or shall verify that the information already reported to the tracking system is accurate.

Reporting generation, emissions data

13. On or before March 1 in each year after 2003,

- (a) a distributor with a generation facility connected to the distributor's distribution system that is not a market participant and that is settled by the distributor in accordance with its licence shall report to the tracking system the total metered generation output of each such generation facility, and any other related information prescribed by the Independent Electricity Market Operator;
- (b) a certificate seller that owns or operates a generation facility that is not settled by the Independent Electricity Market Operator or a distributor, and that is registered with the tracking system, shall report the total metered generation output of the previous year produced by the generation facility to the tracking system;
- (c) a generator that is required to make reports pursuant to Ontario Regulation 127/01 or any other applicable regulation concerning emissions reporting shall report to the tracking system the most recent annual information compiled under that Regulation for each generation facility registered with the tracking system concerning,
 - (i) the gross quantity of electricity produced, in Megawatt-hours, and
 - (ii) total emissions for each of sulfur dioxide, oxides of nitrogen, and carbon dioxide;
- (d) a certificate seller that purchased a differentiated electricity product from outside Ontario that was generated during the previous year shall report to the tracking system the information prescribed by the Independent Electricity Market Operator including,
 - (i) each electricity source, an identification of the primary electricity source and the emissions rate for each of sulfur dioxide, oxides of nitrogen, and carbon dioxide for each generation facility generating or

deemed to have been generating the differentiated electricity product, for the most recent year for which the data is available, and

- (ii) the quantity of the differentiated electricity product, in Megawatt-hours, supplied by each generation facility mentioned in subclause (i);
- (e) a licensed generator or certificate seller may report total emissions of sulfur dioxide, oxides of nitrogen, and carbon dioxide for a year for any registered generation facility that is not subject to Ontario Regulation 127/01 or any other emissions reporting regulation;
- (f) a licensed generator or certificate seller may report total emissions of sulfur dioxide, oxides of nitrogen, and carbon dioxide for a year for each electricity source used by a registered generation facility.

Determinations for imports and exports

14. For each year, the Independent Electricity Market Operator shall,

- (a) determine the quantity of electricity imported into and exported from Ontario and shall deem the electricity sources supplying these imports; and
- (b) derive the emissions rate for each of sulfur dioxide, oxides of nitrogen, and carbon dioxide for electricity imported into Ontario;

Calculating emissions of registered facilities

15. On or before March 15 in each year after 2003, and prior to the creation of certificates, the tracking system shall derive the emissions rates for each of sulfur dioxide, oxides of nitrogen, and carbon dioxide for each generation facility registered with the tracking system using the following calculations:

1. Gross quantity of emissions divided by gross quantity of electricity (Megawatt-hours), for each generation facility that has reported emissions data as required by section 13.
2. For each generation facility that has not reported emissions information to the tracking system, the Independent Electricity Market Operator shall assign an emission rate equal to the average of all emission rates reported to the tracking system for the electricity source or sources used by the generation facility.

Creation of certificates

16. On or before March 15 in each year after 2003, the Independent Electricity Market Operator shall create a certificate for each Megawatt-hour of electricity that during the previous year was,

- (a) produced by a generation facility that is located in Ontario and that is a market participant;
- (b) produced by a generation facility that is located in Ontario and is not a market participant, but is connected to a distributor's distribution system and settled by the distributor in accordance with its licence;
- (c) produced by a generation facility that is located in Ontario and whose production is reported to the tracking system by a licensed generator or certificate seller;
- (d) imported into Ontario and whose electricity sources are deemed by the Independent Electricity Market Operator; or
- (e) located in another jurisdiction specified by the Independent Electricity Market Operator and whose production was reported to the tracking system by a certificate seller in accordance with this Regulation.

Information contained in certificates

17. Each certificate must include the following information concerning the generation facility that produces the electricity:

1. A unique certificate identification number.
2. Location of the generation facility.
3. The electricity source.
4. The emissions rate for each of sulfur dioxide, oxides of nitrogen and carbon dioxide.
5. The time period in which the generation occurred.
6. The year the generation facility became operational.
7. Whether the generation facility is certified by the Environmental Choice Program.
8. Any other information required by the Independent Electricity Market Operator.

Providing certificates

18. During the period that begins on March 2 and ends on March 15 in each year after 2003, the Independent Electricity Market Operator shall provide each certificate created under section 16 to,

- (a) the generator that generated the electricity that is the subject matter of the certificate, or a certificate seller designated by the generator; or
- (b) the certificate seller that has registered a differentiated electricity product transferred from outside Ontario.

Certificates not available for transferring

19. A certificate created for electricity imported into Ontario that is not associated with a differentiated electricity product shall not be offered for sale and shall be used only for purposes of calculating the residual system mix.

TRANSFER OF CERTIFICATES

Transfer of certificates

20. During the period that begins on March 16 and ends on May 31 in each year after 2003, and at no other time, a certificate seller may,

- (a) transfer certificates to another certificate seller; and
- (b) assign certificates that it owns to a differentiated electricity product registered by the certificate seller for the purpose of creating a label through the tracking system.

Independent Electricity Market Operator to record transfers

21. The Independent Electricity Market Operator shall record the transfer of certificates and shall ensure that certificates are not duplicated.

Report on product usage

22. On or before May 31 in each year after 2003, for each differentiated electricity product offered to a consumer in the previous year, a certificate seller shall report to the tracking system the product usage for the differentiated electricity product for the previous year.

Calculations by the Independent Electricity Market Operator

23. (1) During June in each year after 2003, the Independent Electricity Market Operator shall,

- (a) calculate the system-wide source mix for the previous year by aggregating all certificates created by the tracking system for the previous year;
- (b) calculate the residual system mix for the previous year by aggregating all certificates created by the tracking system for the previous year and not assigned to a differentiated electricity product or to a purchaser outside Ontario through the tracking system;
- (c) calculate the average emission rate for each of sulfur dioxide, oxides of nitrogen, and carbon dioxide of the system-wide source mix for the previous year by averaging the emission rates identified in all certificates created by the tracking system for the previous year;
- (d) calculate the average emission rate for each of sulfur dioxide, oxides of nitrogen, and carbon dioxide of the residual system mix for the previous year by averaging the emission rates identified in all certificates created by the tracking system for the previous year and not assigned through the tracking system to a differentiated electricity product or to a purchaser outside Ontario;
- (e) for each differentiated electricity product sold to a consumer, calculate and provide to the certificate seller offering the differentiated electricity product,
 - (i) the source mix for the previous year using the product usage for the previous year as reported by the certificate seller;
 - (ii) the average emission rate for each of sulfur dioxide, oxides of nitrogen, and carbon dioxide of the differentiated electricity product for the previous year by averaging the emissions rates identified in the certificates assigned to the differentiated electricity product and any portion of the residual system mix which may have been used to determine the differentiated electricity product's source mix as determined in subclause (i), and
 - (iii) the average emission rate for each of sulfur dioxide, oxides of nitrogen, and carbon dioxide as calculated in subclause (ii) shown as a percentage of the average emission rate for each of sulfur dioxide, oxides of nitrogen, and carbon dioxide of the system-wide source mix;
- (f) for each differentiated electricity product sold to a purchaser outside Ontario and supplied from electricity generated in the previous year, provide documentation to the certificate seller describing the information identified in the certificates assigned to the differentiated electricity product.

(2) For the purposes of subclause (1) (e) (i), if the product usage is greater than the total Megawatt-hours represented in the certificates assigned to the differentiated electricity product, then the remaining product usage shall be deemed to be supplied by the residual system mix as calculated in clause (1) (b).

(3) For the purposes of clause (1) (f), electricity exported from Ontario that is not associated with a differentiated electricity product shall be deemed to be supplied by the residual system mix.

EXPIRY OF CERTIFICATES

Expiry of certificates

24. Upon completion of the calculations and other activities prescribed in section 23, all certificates issued by the tracking system for the previous year expire.

AUDIT

Assurance reports

25. On or before August 31 in each year after 2003, a certificate seller shall file with the Auditor assurance reports prepared by a public accountant in a form prescribed by the Auditor attesting that the product usage for each differentiated electricity product offered to a consumer in the previous year is true and correct.

Right of access

26. The Auditor shall have the right to enter into the premises of a certificate seller at all times during business hours and may conduct a review, audit or investigation and may examine any document or record of the certificate seller relating to a sale or offer for sale of a differentiated electricity product.

Maintaining records

27. A distributor, generator or certificate seller reporting to the tracking system or the Independent Electricity Market Operator pursuant to this Regulation shall ensure that a copy of the report and of any record prepared for the purposes of the report are kept for at least seven years after the day the report is required to be submitted.

REQUIREMENTS FOR THE LABEL FOR 2003 AND AFTER

Three-column label

28. (1) On or before December 31 in each year after 2003, each retailer and each distributor providing electricity pursuant to subsection 29 (1) of the *Electricity Act, 1998* shall provide a label with a three-column table to each consumer to which it issues a bill.

(2) A label with a three-column table shall include the following information for the previous year:

1. Each electricity source identified individually, vertically and alphabetically in the second column.
2. The residual system mix, as determined by the Independent Electricity Market Operator, with each percentage rounded to the nearest whole percentage point and displayed in the third column next to the appropriate electricity source.
3. The average emission rate of oxides of nitrogen for the residual system mix, shown as a percentage of the average emission rate of oxides of nitrogen of the system-wide source mix, as determined by the Independent Electricity Market Operator, displayed below the information prescribed in paragraphs 1 and 2.
4. The average emission rate of sulfur dioxide for the residual system mix, shown as a percentage of the average emission rate of sulfur dioxide of the system-wide source mix, as determined by the Independent Electricity Market Operator, displayed below the information prescribed in paragraphs 1 and 2.
5. The average emission rate of carbon dioxide for the residual system mix, shown as a percentage of the average emission rate of carbon dioxide of the system-wide source mix, as determined by the Independent Electricity Market Operator, displayed below the information prescribed in paragraphs 1 and 2.

(3) A label with a three-column table shall include the following statements:

1. Displayed in the first column: “Electricity is generated from a variety of sources—each with different impacts on the environment, particularly in the air emissions it produces. In [*insert the preceding year*], your electricity was supplied from the province-wide source mix, as shown here. Electricity can also be supplied from specific sources, such as from renewable resources.”
2. Displayed at the bottom of the label: “If you have signed up for electricity to be supplied from specific sources, you will receive a separate label from your supplier showing that source mix.”

Four-column label

29. (1) On or before December 31 in each year after 2003, each certificate seller that has delivered a differentiated electricity product to a consumer in the previous year shall provide a label with a four-column table to each consumer of the product that the certificate seller services at the time the labels are issued.

(2) The label with a four-column table shall include the following information for the previous year:

1. Each electricity source identified individually, vertically and alphabetically in the second column.
2. The residual system mix, as determined by the Independent Electricity Market Operator, with each percentage rounded to the nearest whole percentage point and displayed in the fourth column next to the appropriate electricity source.
3. The source mix for the differentiated electricity product, as determined by the Independent Electricity Market Operator, with each percentage rounded to the nearest whole percentage point and displayed in the third column next to the appropriate electricity source.
4. The average emission rate of oxides of nitrogen for the differentiated electricity product, shown as a percentage of the average emission rate of oxides of nitrogen of the system-wide source mix, as determined by the Independent Electricity Market Operator, displayed below the information prescribed in paragraphs 1, 2 and 3.
5. The average emission rate of sulfur dioxide for the differentiated electricity product, shown as a percentage of the average emission rate of sulfur dioxide of the system-wide source mix, as determined by the Independent Electricity Market Operator, displayed below the information prescribed in paragraphs 1, 2 and 3.
6. The average emission rate of carbon dioxide for the differentiated electricity product, shown as a percentage of the average emission rate of carbon dioxide of the system-wide source mix, as determined by the Independent Electricity Market Operator, displayed below the information prescribed in paragraphs 1, 2 and 3.

(3) A label with a four-column table, except those labels which display prospective source mix information, shall include the following:

1. The following statement displayed in the first column: “Electricity is generated from a variety of sources—each with different impacts on the environment, particularly in the air emissions it produces. In [*insert previous calendar year*], [*insert differentiated electricity product name*] was supplied from the mix of sources shown here. Ontario’s province-wide source mix is also shown as a comparison.”

2. If the differentiated electricity product is supplied to a consumer at a fixed amount per month or other period, then the statement in paragraph 1 shall be replaced with the following statement displayed in the first column:
 “Electricity is generated from a variety of sources—each with different impacts on the environment, particularly in the air emissions it produces. In [*insert previous calendar year*], [*insert differentiated electricity product name*] was supplied from the mix of sources shown here. Any electricity you used over [*insert the kilowatt-hour or Megawatt-hour per time period*] was supplied from the province-wide source mix.”
3. The certificate seller’s contact information.

Common requirements for the label

- 30.** (1) Each label prepared under this Regulation shall,
- (a) be printed in no smaller than an 8 point font;
 - (b) display emissions information for each of sulfur dioxide, oxides of nitrogen and carbon dioxide using a horizontal bar chart with three bars;
 - (c) display the title “Electricity Facts” at the top of the label;
 - (d) display a “0%” next to an electricity source if it is not used in a differentiated electricity product or the residual system mix;
 - (e) display a “<1%” next to an electricity source if it has a value of less than 0.5% and greater than 0%;
 - (f) display a percentage mark next to each percentage value; and
 - (g) be made available on the company website and without charge to any person upon request.
- (2) All information required to be contained in the label shall appear in one place without intervening material.

FEES

Fees

- 31.** (1) Subject to the approval of the Board, the Independent Electricity Market Operator shall establish a fee schedule to recover the costs of the establishment,

administration and operation of the tracking system from certificate sellers and from generators referred to in section 18.

(2) Subject to the approval of the Board, a distributor may charge a fee to a retailer for providing a label to the retailer's consumer to which the distributor issues a bill.

LIABILITY

No liability for the Independent Electricity Market Operator

32. The Independent Electricity Market Operator or any director, officer, employee or agent of the Independent Electricity Market Operator shall have no liability for the verification or validation of any information supplied to the tracking system, and in no event shall the Independent Electricity Market Operator or any director, officer, employee or agent of the Independent Electricity Market Operator be liable for any indirect or consequential losses, or any loss of profits or loss of opportunity, in any way arising from incorrect information having been provided to the tracking system by other persons.

REVOCATION

O. Reg 416/99 revoked

33. Ontario Regulation 416/99 is revoked.