Ontario Energy Board | Commission de l'énergie de l'Ontario

BY EMAIL AND WEB POSTING

OCTOBER 18, 2022

NOTICE OF PROPOSAL TO AMEND THE STANDARD SUPPLY SERVICE CODE AND THE REGULATED PRICE PLAN MANUAL

OEB FILE NO.: EB-2022-0160

To: All Licensed Electricity Distributors
All Licensed Electricity Retailers
All Licensed Unit Sub-Meter Providers
Independent Electricity System Operator
All Registered Participants in the September 13, 2022 Stakeholder Meeting
All Other Interested Parties

The Ontario Energy Board (OEB) is giving notice under section 70.2 of the *Ontario Energy Board Act, 1998* (OEB Act) of proposed amendments to the Standard Supply Service Code (SSSC) to implement a new optional ultra-low overnight (ULO) price plan for electricity consumers on the Regulated Price Plan (RPP). The OEB is also giving notice of related proposed amendments to the Regulated Price Plan Manual (Manual).

A. Background

On November 16, 2021, the Minister of Energy asked the OEB to "report back and advise on the design(s) of an optional enhanced time of use rate to further incent demand-shifting away from peak periods to lower-demand periods."

After a public consultation (EB-2022-0074), the OEB delivered its report to the Minister on March 31, 2022. The report recommended that the new optional plan comprise four time periods as shown below:

Price Period	Hours Applicable (Prevailing Time)	Price
On-Peak	Weekdays: 4 p.m. – 9 p.m.	10 times ULO price
Mid-Peak	Weekdays: 7 a.m. – 4 p.m. and 9 p.m. – 11 p.m.	Equal to standard TOU Mid-Peak price
Weekend Off-Peak	Weekends and Holidays: 7 a.m. – 11 p.m.	Equal to standard TOU Off-Peak price
Ultra-Low Overnight	Every day: 11 p.m. – 7 a.m.	Calculated so that the ULO price plan recovers the forecasted average supply cost

On August 10, 2022, the Ministry of Energy posted a notice on the Regulatory Registry and the Environmental Registry of proposed amendments to O. Reg. 95/05 (Classes of Consumers and Determination of Rates) under the OEB Act to implement the new pricing option. The notice explains that the amendments would require distributors to offer the new ULO price plan to RPP consumers no later than November 1, 2023; those distributors who are able to make it available earlier may do so as of May 1, 2023. The OEB would be required to set ULO prices for May 1, 2023 (normally RPP prices are set only once a year, every November 1).

The OEB will not finalize the ULO amendments to the SSSC and the Manual until such time as the amendments to O. Reg. 95/05 proposed by the Government are made.

B. Purpose of Proposed SSSC Amendments

The proposed amendments to the SSSC would require distributors to allow RPP consumers with smart meters to opt in to the new ULO price plan and would establish rules for how consumers can do so. Consistent with the Registry posting, distributors must make the ULO price plan available by November 1, 2023, and may, if they are able to, make it available earlier, but no earlier than May 1, 2023.

The proposed amendments build on the rules that were added to the SSSC in October 2020 to implement the Government's Customer Choice initiative, which enabled RPP consumers with smart meters to switch from standard TOU pricing to tiered pricing. In summary, distributors would need to process requests to switch to the new ULO option in the same way (and subject to the same deadlines) that they currently process requests to switch between standard TOU and tiered pricing. Standard TOU pricing would remain the default price plan for RPP consumers with smart meters.

Other proposed amendments include a requirement for bills for ULO customers to display electricity usage by each of the four ULO time periods, just as bills for standard TOU customers must break down usage by each of the three standard TOU time periods, as well as transitional rules meant to clarify the obligations of distributors during the phasing in of the new price option.

C. Summary of Proposed SSSC Amendments

The complete text of the proposed amendments is set out in Appendix A to this Notice, shown as changes against the current version of the SSSC. A summary of the key elements of the proposed amendments is provided below.

Eligibility

Under the proposed amendments to the SSSC, any RPP consumer with a smart meter would be eligible to select the new ULO price plan.

Transitional Rules

Consistent with the Government's regulatory posting, the proposed amendments to the SSSC would allow distributors to provide eligible customers with the option to elect to be charged on the basis of the ULO price plan for any billing period that begins on or after May 1, 2023. Distributors would be required to provide eligible customers with the option to elect the ULO price plan for any billing period that begins on or after November 1, 2023.

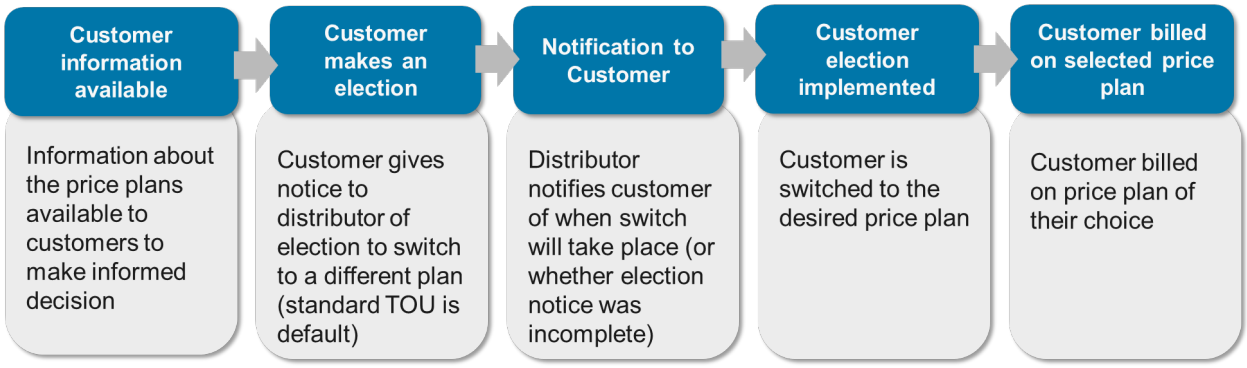
While the proposed amendments provide that distributors may implement the ULO price plan on or after May 1, 2023, the transitional provisions would indicate that those distributors implementing the ULO price plan for the mandatory November 1, 2023 deadline would not have to comply with relevant consumer notification, information, and notice of election provisions until October 13, 2023.

Distributors implementing the ULO price plan before November 1, 2023, would be required to comply with the outlined consumer notification, information and notice of election provisions on the date they begin providing their eligible customers the option to elect to be charged on the basis of that pricing plan.

Existing Customer Choice Rules to be Continued

In 2020, the OEB amended the SSSC in order to implement the Customer Choice initiative, which provided customers with eligible time-of-use meters the option to elect to be charged on the basis of the tiered pricing plan instead of the standard TOU pricing

plan. The SSSC amendments established new rules that govern each stage of the consumer election process, which is outlined in the chart below.



The rules implemented in 2020 regarding the Customer Choice initiative included, for example:

- The form and content of the notice to be provided by consumers electing to be charged tiered prices
- Requirements for distributors to abide by certain timelines when implementing a consumer's election to be charged tiered prices
- Requirements for distributors to abide by certain timelines when notifying the consumers of when the election will take place or that the notice of election was incomplete and reasons why it cannot be processed
- The form and delivery method of consumer notifications
- Requirements for distributors to keep records of notices of election, notifications to consumers, and other communications with consumers regarding price plan elections

The amendments proposed would build on the existing Customer Choice architecture and apply the same rules regarding the consumer election process to elections made by consumers to be charged on the basis of the ULO price plan.

For example, the same deadlines for implementing consumer notices of election in place for tiered price plan elections would apply to ULO price plan elections. Distributors would be required to inform consumers of their option to be charged on the basis of the ULO price plan, tiered price plan, or standard TOU price plan when opening new accounts or when switching from spot market pricing to RPP pricing.

No Limits on Frequency of Switching Between Price Plans

At the September 13, 2022 stakeholder meeting, the OEB was asked to consider introducing a limit on the number of times an RPP consumer could switch back and forth between the various price options. At this time the proposed SSSC amendments do not include such a limit.

By way of background, when the Customer Choice amendments to the SSSC were proposed in 2020, the OEB explained that it in order to provide maximum flexibility to consumers, it would not introduce a cap on the number of times a consumer could switch back and forth between standard TOU prices and tiered prices, but would monitor the issue over time. The OEB issued a report on December 6, 2021, *Frequency of Regulated Price Plan Switching Under Customer Choice*, that measured the frequency of customers switching between standard TOU and tiered price plans within the first 12 months after the introduction of Customer Choice in 2020. The OEB found that only 4% of customers switched price plans more than once. As such, the OEB continues to believe there is no need to impose any limits on the frequency of switching and will allow maximum flexibility for consumers who, for whatever reason, wish to be charged on the basis of a different price plan. The OEB will continue to monitor the issue.

Bill Display

The proposed amendments would require distributors to provide bills to RPP consumers on the ULO price plan that indicate, as separate items, the volume of electricity being billed at each of the four price periods, labelled as “overnight”, “off-peak”, “mid-peak” and “on-peak”.

Housekeeping Amendments

A few minor housekeeping amendments are proposed (including the removal of an outdated statutory reference in section 3.2.4), none of which would change the substance of the rules.

D. Summary of Proposed Amendments to the RPP Manual

The RPP Manual, which is referenced in the SSSC and which sets out the methodology for the OEB to set RPP prices, must be updated to reflect the new ULO price option. The proposed amendments would describe the methodology for setting prices for the ULO price plan, consistent with the OEB’s March 2022 report to the Minister.

In addition, housekeeping amendments are proposed to reflect other recent regulatory changes that have been made, namely the new requirement under O. Reg. 95/05 to set

RPP prices annually for November 1 of each year, and the new regulation under the *Electricity Act, 1998*, O. Reg. 735/20 (Amounts under Section 25.34 of the Act) which specifies that certain renewable generation contract costs can be funded in whole or in part by the Province rather than through the global adjustment.

E. Other Matters

Consumer Information

It will be critical that consumers have access to information to assist them in understanding and assessing their pricing options. As with the introduction of Customer Choice in 2020, the OEB expects distributors to make materials available to support decision-making by their customers. In 2020, the OEB developed communication materials, including an update to the OEB's online bill calculator, that distributors may use if they wish or that distributors may use to assist them in developing their own materials. The OEB will, by spring 2023, update those materials to reflect the new ULO price option. The OEB will also revise the template election form that distributors may adapt and use if they wish.

Changes to Consumer-Facing Materials for Retailers

The OEB intends to make changes to the OEB-approved price comparison templates that retailers are required to provide to low-volume consumers, in order to compare the retail price to standard TOU prices, tiered prices and ULO prices. Changes to other consumer-facing materials currently required to be used by electricity retailers may also be implemented.

Deferral Account

At the September 13, 2022, stakeholder meeting, some distributors asked whether the OEB would allow them to track costs associated with implementing the ULO price plan in a deferral account. The OEB will allow the tracking of the revenue requirement impacts of material implementation costs. A generic accounting order will be issued in the near term. As with any other deferral account, disposition of any amounts recorded would be subject to OEB review in accordance with the usual practice.

F. Coming into Force

The OEB proposes that the amendments to the SSSC and RPP Manual would come into force on January 1, 2023.

G. Anticipated Costs and Benefits

In developing these operational rules, the OEB has sought to minimize implementation costs for distributors by building on the existing rules that were put in place for Customer Choice in 2020, while at the same time ensuring that the election process is clear, easy and speedy for consumers and that consumers have access to the information they need to choose the price plan that is right for them. The OEB believes the proposed amendments strike an appropriate balance in that regard.

H. Cost Awards

In decisions dated August 15, 2022 and September 9, 2022, the OEB determined that the following stakeholders are eligible for cost awards in relation to the OEB's consultation on enabling customer choice, to be recovered from all rate-regulated licensed electricity distributors based on the number of customers they serve:

- Association of Major Power Consumers in Ontario (AMPCO)
- Building Owners and Managers Association, Greater Toronto (BOMA)
- Canadian Manufacturers & Exporters (CME)
- Consumers Council of Canada (CCC)
- Electric Vehicle Society (EVS)
- Environmental Defence
- London Property Management Association (LPMA)
- Low-income Energy Network (LIEN)
- Ontario Chamber of Commerce (OCC)
- Pollution Probe
- Quinte Manufacturers Association (QMA)
- School Energy Coalition (SEC)
- Three Fires Group Inc.
- Vulnerable Energy Consumers Coalition (VECC)

These stakeholders are eligible to claim costs in connection with the preparation of written comments on the proposed amendments to the SSSC and RPP Manual, to a maximum of 5 hours.

I. Invitation to Comment

Written comments on the proposed amendments will be due no later than **Tuesday, November 8, 2022**.

Stakeholders are responsible for ensuring that any documents they file with the OEB **do not include personal information** (as that phrase is defined in the *Freedom of*

Information and Protection of Privacy Act), unless filed in accordance with rule 9A of the OEB's Rules of Practice and Procedure.

Please quote file number, **EB-2022-0160** for all materials filed and submit them in searchable/unrestricted PDF format with a digital signature through the OEB's online filing portal.

- Filings should clearly state the sender's name, postal address, telephone number and e-mail address.
- Please use the document naming conventions and document submission standards outlined in the Regulatory Electronic Submission System (RESS) Document Guidelines found at the File documents online page on the OEB's website.
- Stakeholders are encouraged to use RESS. Those who have not yet set up an account, or require assistance using the online filing portal can contact registrar@oeb.ca for assistance.
- Cost claims are filed through the OEB's online filing portal. Please visit the File documents online page of the OEB's website for more information. All participants shall download a copy of their submitted cost claim and serve it on all required parties as per the Practice Direction on Cost Awards.

All communications should be directed to the attention of the Registrar and be received by end of business, 4:45 p.m., on the required date.

Email: registrar@oeb.ca
Tel: 1-877-632-2727 (Toll-free)

This Notice and all written comments received by the OEB in response to it will be posted on the OEB's Engage With Us website.

If you have any questions regarding this Notice, please contact RPP.Price.Design@OEB.ca. The OEB's toll-free number is 1-888-632-6273.

DATED October 18, 2022

ONTARIO ENERGY BOARD

Nancy Marconi

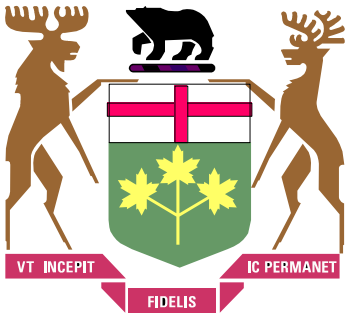
Digitally signed by Nancy Marconi
Date: 2022.10.18 10:36:52 -04'00'

Nancy Marconi
Registrar

APPENDIX
PROPOSED AMENDMENTS TO THE STANDARD SUPPLY SERVICE CODE (SSSC)

OCTOBER 18, 2022

(Comparison Version of the SSSC Attached)



Ontario

Ontario Energy Board

Standard Supply Service Code for Electricity Distributors

Revised [XXXX, XXXX]~~October 13, 2020~~

(Replacing version issued on ~~March 1~~October 13, 2020)

Table of Contents

1 GENERAL AND ADMINISTRATIVE PROVISIONS

1.1 Purpose of this Code

1.1.1 This Code establishes the manner in which a distributor must provide standard supply service to meet its obligation to sell electricity under section 29 of the Electricity Act or to give effect to rates determined by the Board under section 79.16 of the Act.

1.1.2 This Code provides for four~~three~~ regimes applicable to the commodity price for electricity provided as standard supply service:

(a) spot market-based pricing for non-RPP consumers and electing spot consumers (section 3.2);

(b) ~~the Board's regulated price plan contemplated in section 79.16 of the Act~~ tiered pricing for RPP consumers with conventional meters, and for RPP consumers with eligible time-of-use meters who have elected to be charged on the basis of this regulated price plan in accordance with section 3.5 (section 3.3); ~~and~~

(c) standard time-of-use pricing ~~the Board's regulated price plan contemplated in section 79.16 of the Act~~ for RPP consumers with eligible time-of-use meters (section 3.4); and~~.~~

(d) ultra-low overnight time-of-use pricing for RPP consumers with eligible time-of-use meters who have elected to be charged on the basis of this regulated price plan in accordance with section 3.5 (section 3.4A).

1.2 Definitions

1.2.1 In this Code, unless the context otherwise requires:

"Accounting Procedures Handbook" means the document approved by the Board that sets out principles, requirements, procedures and practices for preparing and maintaining electric utility accounting records and financial information;

"Act" means the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Schedule B;

"Board" means the Ontario Energy Board;

"business day" means any day other than a Saturday or a holiday;

"Code" means this Standard Supply Service Code;

"consumer-specific information" means information relating to a specific consumer obtained by any person through the process of selling or offering to sell electricity to the consumer, and includes information obtained without the consent of such consumer;

"conventional meter" means a meter other than an eligible time-of-use meter;

"Distribution System Code" means the code issued by the Board which, among other things, establishes the obligations of a distributor with respect to the services and terms of service to be offered to customers and retailers and provides minimum technical operating standards of distribution systems;

"electing spot consumer" means a consumer that is, in accordance with the regulations, eligible to pay the commodity price for electricity determined by the Board under section 79.16 of the Act but that has, in accordance with section 79.16(4) of the Act and the regulations, elected to pay the commodity price for electricity referred to in section 3.2.1A or 3.2.2;

"Electricity Act" means the *Electricity Act, 1998*, S.O. 1998, c. 15, Schedule A

"Electricity Distribution Rate Handbook" means the document approved by the Board that sets out the methodology for calculating rates and other charges for electrical distribution service;

"eligible low-income customer" has the same meaning as in the Distribution System Code;~~.~~

"eligible time-of-use meter" means an interval meter or a meter that measures and records electricity use during each of the periods of the day referred to in sections 3.4.1 and 3.4A.1 cumulatively over a meter reading period;

"final RPP variance settlement amount" means the amount charged or credited to an RPP consumer in accordance with section 3.7;

"first term commencement date" means April 1, 2005 or such later date as may be prescribed by regulation as the date on which rates determined by the Board under section 79.16 of the Act take effect;

"holiday" means a holiday described in section 88 of the *Legislation Act, 2006,* S.O. 2006, c. 21, Sched. F as well as the August Civic Holiday;

"IESO" means the Independent Electricity System Operator continued under the Electricity Act;

"interval meter" means a meter that measures and records electricity use on at least an hourly basis;

"non-RPP consumer" means a consumer that is not an RPP consumer;

"regulation" means a regulation made under the Act or the Electricity Act;

"Retail Settlement Code" means the code issued by the Board which, among other things, establishes a distributor's obligations and responsibilities associated with financial settlement among retailers and customers and provides for tracking and facilitating customer transfers among competitive retailers;

"RPP consumer" means a consumer that pays the commodity price for electricity referred to in section 3.3, ~~or~~ 3.4 or 3.4A;

"RPP Manual" means the document adopted by the Board which sets out the manner in which the Board will determine prices and other matters for the purposes of or in relation to sections 3.3 to 3.7;

"second term commencement date" means the date on which a change in the initial value of any of $RPCM_{T1}$, $RPCM_{T2}$, $RPEM_{OFF}$, $RPEM_{MID}$, or $RPEM_{ON}$ referred to in section 3.3 or 3.4 comes into effect, which date shall not be earlier than the date that is twelve months from the first term commencement date;

~~"~~"spot market price"~~"~~ means, for a given hour, the Hourly Ontario Energy Price established by the IESO for that hour;

"standard supply service" means the manner in which a distributor must fulfill its obligation to sell electricity under section 29 of the Electricity Act or to give effect to rates determined by the Board under section 79.16 of the Act as set out in this Code;

"standard supply service customer" means a person to whom a distributor provides standard supply service; and

"third party" with respect to a distributor, means any person other than the distributor.

1.3 Interpretation and Determinations by the Board

1.3.1 Unless otherwise defined in this Code, words and phrases shall have the meanings ascribed to them in the Act or the Electricity Act, as the case may be. Where a word or phrase is defined in this Code, the Act or the Electricity Act, other parts of speech and grammatical forms of the word or phrase have a corresponding meaning. Headings are for convenience only and shall not affect the interpretation of this Code. Words importing the singular include the plural and vice versa. Words importing a gender include any gender. Words importing a person include: (i) an individual; (ii) a company, sole proprietorship, partnership, trust, joint venture, association, corporation or other private or public body corporate; and (iii) any government, government agency or body, regulatory agency or body or other body politic or collegiate. A reference to a person includes that person's successors and permitted assigns. A reference to a body, whether statutory or not, that ceases to exist or whose functions are transferred to another body is a reference to the body that replaces it or that substantially succeeds to its powers or functions. A reference to a document (including a statutory instrument) or a provision of a document includes any amendment or supplement to, or any replacement of, that document or that provision of that document. The expression "“including”" means including without limitation.

1.3.2 [Revoked by amendment, effective October 8, 2015.]

1.3.3 [Revoked by amendment, effective October 8, 2015.]

1.3.4 If the time for doing any act or omitting to do any act under this Code expires on a day that is not a business day, the act may be done or may be omitted to be done on the next day that is a business day.

1.3.5 Any matter under this Code requiring a determination by the Board:

(a) shall be determined by the Board in accordance with all applicable provisions of the Act and the regulations; and

(b) may, subject to the Act, be determined without a hearing, or through an oral, written or electronic hearing, at the Board’s discretion.

1.4 To Whom this Code Applies

1.4.1 Except to the extent provided in a distributor"s licence, another code issued by the Board or an order of the Board, this Code applies to all licensed distributors.

1.5 Hierarchy of Codes

1.5.1 The order of hierarchy of codes, subject to any specific conditions of a distributor's licence, is as follows:

1. Affiliate Relationships Code for Electricity Distributors and Transmitters
2. Distribution System Code
3. Retail Settlement Code
4. Standard Supply Service Code

1.6 Coming into Force

1.6.1 This Code shall come into effect as of the first term commencement date and as of that date replaces the Standard Supply Service Code for Electricity Distributors issued by the Board on December 8, 1999.

1.6.2 [intentionally left blank]

1.6.3 The amendments to sections 1.2.1, 3.2.6, 3.3.2, 3.3.3 and 3.3.4 and the addition of sections 3.2.1A and 3.2.1B come into force on the date on which they are published on the Board's website after having been made by the Board.

1.6.4 The amendments to section 2.6.2 come into force on April 1, 2011. The further revisions to sections 2.6.2(a) to (e) and 2.6.2A come into force on October 1, 2011.

1.6.5 The amendments to sections 1.2 (definitions of "eligible low-income customer", "Emergency Financial Assistance" and "Social Service Agency and Government Agency"), 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 2.6.2A, 2.6.2B and 2.6.2C come into force on October 1, 2011.

1.6.6 The amendments to section 3.9 come into force on March 15, 2017.

1.6.7 The amendments to sections 1.1.2(b), 1.2.1 (definition of "mandatory TOU date"), 3.2.4, 3.2.5, 3.2.6, 3.3 (heading), 3.3.1, 3.3.2, 3.4 (heading), 3.5, 3.6, 3.8.1, 3.8.2, and 3.8.4 made on September 8, 2020 come into force on October 13, 2020.

1.6.8 The amendments to sections 1.1, 1.2, 1.7, 3.1, 3.2, 3.4, 3.5, 3.7, 3.8 and 3.9 made on [XXXX], and the addition of sections 3.4A and 3.4B, come into force on January 1, 2023.

1.7 Application of Standard Supply Service Prices

1.7.1 This Code applies with respect to electricity used on and after the first term commencement date.

1.7.2 Where, in accordance with regulations made under the Act, an RPP consumer ceases to be eligible to pay the commodity price for electricity determined by the Board under section 79.16 of the Act but remains a standard supply service customer, the distributor shall charge that person the commodity price for electricity determined in accordance with section 3.2 for electricity used by that person on and after the day on which that person becomes a non-RPP consumer.

1.7.3 Where, in relation to an RPP consumer, the Board changes:

(a) the value of any of $RPCM_{T1}$, $RPCM_{T2}$, $RPEM_{OFF}$, $RPEM_{MID}$, ~~or~~ $RPEM_{ON}$, ULO_{NIGHT}, ULO_{OFF}, ULO_{MID} or ULO_{ON} referred to in section 3.3, ~~or~~ 3.4 or 3.4A;

(b) a tier threshold referred to in section 3.3.2; or

(c) the hours of the day comprising any of the periods referred to in section 3.4.2(c) or 3.4A.2(d),

the distributor shall charge that RPP consumer the commodity price for electricity that reflects that change for electricity used by that person on and after the day on which the change comes into effect.

1.7.4 For the purposes of determining the volume of electricity used by a standard supply service customer on and after the day referred to in section 1.7.1, 1.7.2 or 1.7.3, if the distributor's billing period includes that day, the distributor may reasonably estimate the volume of electricity used by that standard supply service customer during the billing period that is to be allocated to the portion of the billing period before that day and the volume of electricity to be allocated to the portion of the billing period that is on and after that day.

1.7.5 A distributor shall allocate total losses (as defined in the Retail Settlement Code) to a standard supply service customer in accordance with the Retail Settlement Code or the distributor's rate order, as applicable.

2 STANDARDS OF BUSINESS PRACTICE AND CONDUCT

2.1 Standard Supply Service Customers

2.1.1 In accordance with section 29 of the Electricity Act, in accordance with its licence and in accordance with the requirements of the Retail Settlement Code, a distributor shall provide standard supply service to any person connected to the distributor's distribution system:

(a) who has not advised the distributor in writing that such person does not wish to purchase electricity from the distributor;

(b) who requests the distributor in writing to sell electricity to such person; or

(c) whose retailer is unable for any reason to sell electricity to such person.

2.1.2 In accordance with section 29 of the Electricity Act, and in accordance with the requirements of the Retail Settlement Code, a distributor shall discontinue standard supply service to a person who is connected to the distributor's distribution system if:

(a) the person or a retailer acting on behalf of the person informs the distributor in writing that the person wishes to purchase electricity from the retailer; and

(b) the person or the retailer acting on behalf of the person provides the distributor with the following information:

i. the date after which the retailer is prepared to provide service to the person, subject to the final meter reading date; and

ii. other information necessary for implementing a change in service that may be required under the Retail Settlement Code or by the Board.

2.1.3 In accordance with section 29 of the *Electricity Act,* and in accordance with the requirements of the Retail Settlement Code, a distributor shall begin to provide standard supply service to a person who is connected to the distributor's distribution system and purchases electricity from a retailer if:

(a) the person or the retailer acting on behalf of the person informs the distributor in writing that the person wishes to purchase electricity from the distributor;

(b) the person or the retailer acting on behalf of the person informs the distributor that the retailer is unable to sell electricity to the person; and

(c) the person or the retailer acting on behalf of the person provides the distributor with the following information:

i. the date after which service will no longer be provided by the retailer, subject to the final meter reading date; and

ii. other information necessary for implementing a change in service that may be required under the Retail Settlement Code or by the Board.

2.1.4 If a request under section 2.1.2 or 2.1.3 is made to a distributor directly by the person, the distributor shall notify such person's retailer in writing of the request in accordance with the Retail Settlement Code.

2.1.5 Nothing in this section 2 shall affect the obligation of a distributor to provide standard supply service to a transitional consumer (as defined in the Retail Settlement Code).

2.2 Fulfillment of the Standard Supply Service Obligation

2.2.1 A distributor shall provide standard supply service for one hundred per cent (100%) of the electricity used by a standard supply service customer.

2.2.2 A distributor shall obtain the electricity required to fulfill its standard supply service obligation through the IESO-administered markets, from an embedded retail generator (as defined in the Retail Settlement Code) located within the distributor's licensed service area in accordance with the Retail Settlement Code or, in the case of an embedded distributor (as defined in the Retail Settlement Code), from the embedded distributor's host distributor (as defined in the Retail Settlement Code).

2.3 Separation of Accounts

2.3.1 A distributor shall maintain separate accounts for expenditures related to its standard supply service obligation, and shall do so in accordance with the Distribution System Code and the Accounting Procedures Handbook.

2.4 Confidentiality of Information

2.4.1 A distributor shall maintain the confidentiality of consumer-specific information in accordance with its licence.

2.5 Credit Risk Mitigation Measures

2.5.1 A distributor may mitigate the risk of non-payment from standard supply service customers in accordance with the Distribution System Code.

2.5.2 A distributor may disconnect a standard supply service customer for nonpayment of standard supply service in accordance with section 31 of the Electricity Act and with the Distribution System Code.

2.6 Billing

2.6.1 A distributor shall ensure that bills submitted to standard supply service customers comply with the Act, the regulations, this Code, any other codes issued by the Board and any order of the Board.

2.6.2 A distributor shall offer to all non-seasonal residential customers and general service < 50kW customers receiving standard supply an equal monthly payment plan option.

The above equal monthly payment plan option shall meet the following minimum requirements:

(a) a distributor may only refuse to provide an equal monthly payment plan option to a non-seasonal residential customer that is in arrears on payment to the distributor for electricity charges, as defined in the Distribution System Code, and that has not entered into an arrears payment agreement with the distributor;

(b) a distributor may only refuse to provide an equal monthly payment plan option to a general service < 50kW customer that:

i) has fewer than 12 months' billing history;

ii) is in arrears on payment to the distributor for the electricity charges, as defined in the Distribution System Code, or whose participation in the equal monthly payment plan in the past 12 months was cancelled due to non-payment; or

iii) has a consumption pattern that is not sufficiently predictable to be estimated on an annual basis with any reasonable degree of accuracy;

(c) a distributor shall communicate the availability of an equal monthly payment plan to eligible customers at least twice in each 12 month period through the customer's preferred method of communication, if known, or otherwise by mail or any other means determined to be appropriate by the distributor;

(d) a distributor shall offer to a residential customer requesting an equal monthly payment plan a pre-authorized automatic monthly payment option whereby amounts due each month are automatically withdrawn from the customer's account with a financial institution;

(e) a distributor may cancel the equal monthly payment plan if the customer misses more than one monthly payment under the equal monthly payment plan within an equal payment year;

(f) subject to paragraph 2.6.2(g), the equal monthly payment plan shall provide for annual reconciliation of the plan as follows:

i) while a customer may join an equal monthly payment plan at any time during the calendar year, the distributor is only required to reconcile all of its equal monthly payment plans once during the calendar year and not on the 12th month anniversary since each individual customer joined the plan;

ii) in the first year of an equal monthly payment plan and where the customer has been on the plan for less than 12 months, the customer may receive a reconciliation earlier than the 12th month anniversary, as a result of subparagraph i);

iii) while a distributor is only required to reconcile equal monthly payment plans on an annual basis, a distributor shall review its equal monthly payment plans quarterly or semi-annually and adjust the equal monthly payment amounts in the event of material changes in a customer's electricity consumption or a customer's electricity charges as defined in section 2.6.2A(a);

iv) despite subparagraph iii), a distributor may adjust the equal monthly payment amounts at any time in the event of material changes in a customer's electricity consumption or a customer's electricity charges as defined in section 2.6.2A(a) or for any other reason with the customer's consent;

v) where the annual reconciliation demonstrates that funds are owing to the customer in an amount that is less than the customer's average monthly billing amount, the distributor shall credit the amount to the customer's account;

vi) where the annual reconciliation demonstrates that funds are owing to the customer in an amount that is equal to or exceeds the customer's average monthly billing amount, the distributor shall credit the amount to the customer's account and advise the customer that the customer may contact the distributor within 10 days of the date of the bill to request a refund of the overpayment by cheque instead and the distributor shall make payment within 11 days of the customer's request;

vii) where the annual reconciliation demonstrates that funds are owing by the customer in an amount that is less than the customer's average monthly billing amount, the distributor may collect the full amount owed by a corresponding charge on the bill issued to the customer in the 12th month of the equal monthly payment plan; and

viii) where the annual reconciliation demonstrates that funds are owing by the customer in an amount that is equal to or exceeds the customer's average monthly billing, the distributor shall roll over the balance due to the following year's equal monthly payment plan and recover the balance over the first 11 months of the following year's equal monthly billing plan; and

(g) where a customer leaves the equal monthly payment plan for any reason, the distributor shall conduct a reconciliation and shall include any funds owing by or to the customer as a charge or credit on the next regularly scheduled bill issued to the customer.

2.6.2A For the purposes of section 2.6.2:

(a) A customer's average monthly billing amount shall be calculated by taking the aggregate of the total electricity charges billed to the customer in the preceding 12 months, and dividing that value by 12. If the customer has been receiving service from the distributor for less than 12 months, the customer's average monthly billing amount shall be based on a reasonable estimate made by the distributor. For the purposes of this section, "electricity charges" has the same meaning as in section 2.6.6.3 of the Distribution System Code.

(b) Despite paragraph (a), the distributor may adjust the average monthly billing amount calculated under that paragraph upward or downward if, in the distributor's reasonable opinion (based on, for example, a Board-approved rate change, or an estimate provided by the consumer), the amount calculated is likely to be materially different than the consumer's actual average monthly billing amount over the next 12 months.

(c) The equalized monthly payment amount shall include all "electricity charges" as defined in section 2.6.6.3 of the Distribution System Code.

2.6.2B [Revoked by amendment, effective March 1, 2020.]

2.6.2C [Revoked by amendment, effective March 1, 2020.]

2.6.3 Except as may be permitted or directed by the Board, a distributor shall not include on or with a bill submitted to a standard supply service customer any marketing information or promotional materials of or relating to a third party and that relate to electricity supply.

2.7 Disclosure to Consumers

2.7.1 A distributor shall disclose information to consumers in accordance with applicable law and any standard established by the Board.

3 RATES

3.1 Rates Generally

3.1.1 A distributor shall ensure that it charges a standard supply service customer at rates that are determined, approved or fixed by the Board under section 78 or section 79.16 of the Act (as may be applicable) or that are prescribed by applicable law, and otherwise in accordance with any applicable rate order, and that consist of:

(a) the commodity price for electricity, determined in accordance with section 3.2, 3.3, ~~or~~ 3.4 or 3.4A (as the case may be);

(b) a final RPP variance settlement amount, where applicable, determined in accordance with section 3.7;

(c) an administrative charge that allows the distributor to recover its cost of providing standard supply service, determined in accordance with the methodology prescribed in the Electricity Distribution Rate Handbook;

(d) such charges or credits as may be set out in the distributor's rate order; and

(e) such charges or credits as may be prescribed by applicable law.

3.2 Spot Market Plan for Non-RPP Consumers and Electing Spot Consumers

3.2.1 The commodity price for electricity payable by a non-RPP consumer that has a conventional meter shall be the weighted average hourly spot market price, for the period over which the non-RPP consumer is being billed, determined in accordance with the Retail Settlement Code, with such adjustment as may be made by the IESO in accordance with the Electricity Act and the regulations.

3.2.1A The commodity price for electricity payable by an electing spot consumer referred to in section 8(1)(a) of Ontario Regulation 95/05 (Classes of Consumers and Determination of Rates) that has a conventional meter shall be the weighted average hourly spot market price, for the period over which the electing spot consumer is being billed, determined in accordance with the Retail Settlement Code, with such adjustment as may be made by the IESO in accordance with the Electricity Act and the regulations.

3.2.1B A distributor shall charge an electing spot consumer in accordance with section 3.2.1A only upon being requested to do so in writing by the electing spot

consumer. In such a case, the distributor shall charge the electing spot consumer in accordance with section 3.2.1A for electricity consumed after an actual read of the electing spot consumer's meter by the distributor.

3.2.2 The commodity price for electricity payable by a non-RPP consumer or an electing spot consumer that has an interval meter or another eligible time-of-use meter that is capable of providing data on at least an hourly basis shall be the spot market price determined in accordance with the Retail Settlement Code, with such adjustment as may be made by the IESO in accordance with the Electricity Act and the regulations.

3.2.3 A distributor shall charge an electing spot consumer in accordance with section 3.2.2 only upon being requested to do so in writing by the electing spot consumer and only where the electing spot consumer has an interval meter or another eligible time-of-use meter that is capable of providing data on at least an hourly basis. In such a case, the distributor shall charge the electing spot consumer in accordance with section 3.2.2 for electricity consumed after an actual read of the electing spot consumer's meter by the distributor.

3.2.4 Where a consumer had given written notice to a distributor ~~under section 79.4(2) of the Act~~ and was paying the commodity price for electricity referred to in section 3.2.2 on the day preceding the first term commencement date, that consumer shall be deemed to be an electing spot consumer and shall continue to be charged the commodity price for electricity referred to in section 3.2.2 until such time as the consumer gives notice under section 3.2.6.

3.2.5 [Revoked effective October 13, 2020.]

3.2.6 Where an electing spot consumer that is being charged the commodity price for electricity under section 3.2.2 notifies a distributor in writing that it no longer wishes to be charged in accordance with that section, the distributor shall charge the electing spot consumer in accordance with section 3.4 for electricity consumed after an actual read of the electing spot consumer's meter by the distributor, unless the consumer elects under section 3.5 to be charged in accordance with section 3.3 or 3.4A.

3.3 Regulated Price Plan (Tiered Pricing)

3.3.1 The commodity prices for electricity payable by an RPP consumer that has a conventional meter, or by an RPP consumer that has an eligible time-of-use

meter but has elected to be charged on the basis of this section in accordance with section 3.5, shall be:

(a) $RPCM_{T1}$/kilowatt hour for electricity used during a billing period up to and including the tier threshold; and

(b) $RPCM_{T2}$/kilowatt hour for electricity used during a billing period in excess of the tier threshold.

3.3.2 For the purposes of section 3.3.1:

(a) $RPCM_{T1}$ (regulated price for tier 1) and $RPCM_{T2}$ (regulated price for tier 2) shall be monetary values as set by the Board from time to time in accordance with the RPP Manual, provided that no change to the initial values of $RPCM_{T1}$ and $RPCM_{T2}$ set by the Board shall come into effect prior to the second term commencement date;

(b) $RPCM_{T1}$ shall be no higher than $RPCM_{T2}$;

(c) subject to section 3.3.4, the tier threshold for an RPP consumer that falls within the residential class (including by virtue of the application of section 3.3.3) shall be the number of kilowatt hours per month as set by the Board from time to time and which may be different for electricity use that occurs in the period November 1 to April 30 and for electricity use that occurs in the period May 1 to October 31; and

(d) ~~and~~ subject to section 3.3.4, the tier threshold for an RPP consumer that does not fall within the residential class shall initially be 750 kilowatt hours per month or such other number of kilowatt hours per month as the Board may from time to time determine in accordance with the RPP Manual, provided that no change in the initial tier threshold shall have effect prior to the second term commencement date.

3.3.3 For the purposes of section 3.3.2(c), an RPP consumer referred to in section 3.3.4, other than a property defined in the *Condominium Act, 1998* that is comprised predominantly of units that are used for non-residential purposes, shall be deemed to fall within the residential class.

3.3.4 The tier threshold for an RPP consumer who has an account with a distributor that:

(a) relates to a property defined in the *Condominium Act, 1998*, a residential complex as defined in the *Residential Tenancies Act, 2006* or a property that includes one or more dwellings and that is owned or leased by a cooperative as defined in the *Co-operative Corporations Act*; and

(b) relates to more than one unit in the property or complex,

shall be determined by multiplying the number of units to which the account relates in the property or complex by the applicable tier threshold referred to in section 3.3.2(c) or 3.3.2(d). The number of units to which an account relates in a property or complex shall be deemed to be one unless a declaration attesting to the number of units and signed by the RPP consumer is or has been received by the distributor.

3.3.5 On each bill submitted to an RPP consumer that is being charged the commodity price for electricity under section 3.3.1, a distributor must show as separate items the volume of electricity billed at $RPCM_{T1}$ and the volume of electricity billed at $RPCM_{T2}$.

3.3.6 In relation to an RPP consumer that is being charged the commodity price for electricity under section 3.3.1, a distributor whose billing cycle is not monthly may reasonably estimate the volume of electricity used by that RPP consumer that is to be allocated to each month in the distributor's billing period.

3.4 Regulated Price Plan (Standard Time-of-Use Pricing)

3.4.1 Subject to section 3.5, the commodity prices for electricity payable by an RPP consumer that has an eligible time-of-use meter shall be:

(a) $RPEM_{OFF}$/kilowatt hour for electricity used during a billing period during an off-peak period;

(b) $RPEM_{MID}$/kilowatt hour for electricity used during a billing period during a mid-peak period; and

(c) $RPEM_{ON}$/per kilowatt hour for electricity used during a billing period during an on-peak period.

3.4.2 For the purposes of section 3.4.1:

(a) $RPEM_{OFF}$ (regulated price for eligible time-of-use meters during off-peak periods), $RPEM_{MID}$ (regulated price for eligible time-of-use meters during mid-peak periods) and $RPEM_{ON}$ (regulated price for eligible time-of-use

meters during on-peak periods) shall be monetary values as set by the Board from time to time in accordance with the RPP Manual, provided that no change to the initial values of $RPEM_{OFF}$, $RPEM_{MID}$ and $RPEM_{ON}$ set by the Board shall come into effect prior to the second term commencement date;

(b) $RPEM_{ON}$ shall be no lower than $RPEM_{MID}$ and $RPEM_{MID}$ shall be no lower than $RPEM_{OFF}$;

(c) each of the off-peak period, mid-peak period and on-peak period shall mean any period during a day, expressed as running from a specified hour to another specified hour, designated as such by the Board in accordance with the RPP Manual and which may be different for electricity use that occurs in the period May 1 to October 31 and for electricity use that occurs in the period November 1 to April 30; and

(d) the hours of the day to which an off-peak, mid-peak and on-peak period apply shall be applied by a distributor on the basis of:

i. central standard time or eastern standard time (as applicable to the distributor's licensed service area); or

ii. daylight savings time,

whichever is then prevailing in the Province of Ontario.

3.4.3 On each bill submitted to an RPP consumer that is being charged the commodity price for electricity under section 3.4.1, a distributor must show as separate items the volume of electricity billed at $RPEM_{OFF}$, the volume of electricity billed at $RPEM_{MID}$ and the volume of electricity billed at $RPEM_{ON}$. A distributor must also show, on the applicable separate line, the corresponding term "off-peak", "mid-peak" or "on peak".

3.4A Regulated Price Plan (Ultra-Low Overnight Time-of-Use Pricing)

3.4A.1 The commodity prices for electricity payable by an RPP consumer that has an eligible time-of-use meter and has elected to be charged on the basis of this section in accordance with section 3.5 shall be:

(a) ULO_{NIGHT}/kilowatt hour for electricity used between 11:00 p.m. and 7:00 a.m. in any day of the year or, subject to the regulations, such other period as the Board may determine in accordance with the RPP Manual;

(b) ULO_{OFF}/kilowatt hour for electricity used during a billing period during an off-peak period;

(c) ULO_{MID}/per kilowatt hour for electricity used during a billing period during a mid-peak period; and

(d) ULO_{ON}/per kilowatt hour for electricity used during a billing period during an on-peak period.

3.4A.2 For the purposes of section 3.4A.1:

(a) ULO_{NIGHT} (regulated price during overnight periods), ULO_{OFF} (regulated price during off-peak periods), ULO_{MID} (regulated price during mid-peak periods) and ULO_{ON} (regulated price during on-peak periods) shall be monetary values as set by the Board from time to time in accordance with the RPP Manual;

(b) ULO_{ON} shall be no lower than ULO_{MID}; ULO_{MID} shall be no lower than ULO_{OFF}; and ULO_{OFF} shall be no lower than ULO_{NIGHT};

(c) each of the off-peak period, mid-peak period and on-peak period shall mean any period during a day, expressed as running from a specified hour to another specified hour, designated as such by the Board in accordance with the RPP Manual and which may be different for electricity use that occurs in the period May 1 to October 31 and for electricity use that occurs in the period November 1 to April 30; and

(d) the hours of the day to which an off-peak, mid-peak, on-peak and overnight period apply shall be applied by a distributor on the basis of:

i. central standard time or eastern standard time (as applicable to the distributor's licensed service area); or

ii. daylight savings time,

whichever is then prevailing in the Province of Ontario.

3.4A.3 On each bill submitted to an RPP consumer that is being charged the commodity price for electricity under section 3.4A.1, a distributor must show as separate items the volume of electricity billed at ULO_{NIGHT}, the volume of electricity billed at ULO_{OFF}, the volume of electricity billed at ULO_{MID} and the

volume of electricity billed at ULO_{ON}. A distributor must also show, on the applicable separate line, the corresponding term “overnight”, “off-peak”, “mid-peak” or “on-peak”.

3.4B Ultra-Low Overnight Time-of-Use Pricing: Transitional Matters

3.4B.1 A distributor shall provide its eligible customers the option to elect under section 3.5 to be charged on the basis of ultra-low overnight time-of-use pricing for any billing period that begins on or after November 1, 2023.

3.4B.2 A distributor may provide its eligible customers the option to elect under section 3.5 to be charged on the basis of ultra-low overnight time-of-use pricing for any billing period that begins on or after May 1, 2023.

3.4B.3 Unless section 3.4B.2 applies, a distributor is not required to comply with section 3.5 in respect of ultra-low overnight time-of-use pricing until October 13, 2023. For greater certainty, in that case, the distributor is not required to apply a customer’s election to be charged on the basis of ultra-low overnight time-of-use pricing to a billing period that begins before November 1, 2023. Where section 3.4B.2 applies, a distributor shall comply with section 3.5 in respect of ultra-low overnight time-of-use pricing as of the date it begins providing its eligible customers the option to elect to be charged on the basis of that pricing plan.

3.4B.3 For the purposes of this section 3.4B, an “eligible customer” is an RPP consumer with an eligible time-of-use meter.

3.5 RPP Consumer Opt-out of Standard Time-of-Use Pricing

3.5.1 Where a distributor receives a notice from an RPP consumer that has an eligible time-of-use meter that the RPP consumer is electing to be charged tiered prices under section 3.3 or ultra-low overnight time-of-use prices under section 3.4A instead of standard time-of-use prices under section 3.4, the distributor shall process and give effect to the RPP consumer’s election, in accordance with the rules set out in sections 3.5.2 to 3.5.7.

3.5.2 A distributor shall make available on its website a form for the notice referred to in section 3.5.1 and provide it directly to any consumer that requests it. The form of notice shall require only such information as is reasonably necessary for the distributor to process the election, and shall comply with any form of notice as may be approved by the Board. The distributor shall accept notices of election by e-mail and mail, and may also allow the notice of election to be completed online

or by telephone, provided that where the notice of election is completed by telephone the call must be recorded.

3.5.3 Where a distributor receives a notice referred to in section 3.5.1 that is incomplete or otherwise deficient, the distributor shall notify the consumer within 10 business days of receipt of the notice that the election cannot be processed and the reason it cannot be processed.

3.5.4 Where a distributor receives a notice referred to in section 3.5.1 that is not incomplete or otherwise deficient, the distributor shall begin charging the RPP consumer tiered prices under section 3.3, or ultra-low overnight time-of-use prices under section 3.4A, as the case may be:

(a) at the beginning of the first billing period for that RPP consumer after the notice of election is received, if

(i) it is received at least 10 business days before the beginning of that billing period; or

(ii) it is received less than 10 business days before the beginning of that billing period but it is practicable for the distributor to begin charging the consumer tiered prices or ultra-low overnight time-of-use prices, as the case may be, at the beginning of that billing period; or

(b) at the beginning of the second billing period for that RPP consumer after the notice of election is received, if it is received less than 10 business days before the beginning of the first billing period and it is not practicable for the distributor to begin charging the consumer tiered prices or ultra-low overnight time-of-use prices, as the case may be, at the beginning of the first billing period.~~;~~

~~provided, however, that no election shall be applied to a billing period that begins before November 1, 2020.~~

3.5.5 Within 10 business days of receiving a notice referred to in section 3.5.1 that is not incomplete or otherwise deficient, a distributor shall notify the RPP consumer as to when the distributor will begin charging the consumer tiered prices under section 3.3, or ultra-low overnight time-of-use prices under section 3.4A, as the case may be. This notification shall specify:

(a) the calendar date on which the RPP consumer will start to be charged tiered prices or ultra-low overnight time-of-use prices, as the case may be, or

(b) if it is not practicable to specify the calendar date, the notification shall refer to the applicable billing period, in which case the distributor shall also provide or refer the RPP consumer to information that explains how the RPP consumer can ascertain when that billing period will begin.

3.5.6 A notification under section 3.5.3 or 3.5.5 shall comply with any form as may be approved by the Board. The notification shall be delivered by the RPP consumer's preferred method of communication, if known, or otherwise by mail or any other means determined to be appropriate by the distributor. Where the notification is given by telephone the call must be recorded.

3.5.7 For the purposes of sections 3.5.3, 3.5.4, 3.5.5 and 3.5.9, the computation of time begins on the day the notice is received by the distributor, even if it is received on a day that is not a business day or outside of the distributor's normal business hours on a business day.

3.5.8 A distributor shall inform a consumer that has an eligible time-of-use meter of the option to be charged either tiered prices under section 3.3, ~~or~~ standard time-of-use prices under section 3.4 or ultra-low overnight time-of-use prices under section 3.4A and provide the consumer an opportunity to elect one of those options, before:

(a) opening a new account for an RPP consumer; or

(b) charging prices under section 3.3, ~~or~~ 3.4 or 3.4A to an electing spot consumer that notifies the distributor under section 3.2.6 that the consumer no longer wishes to be charged spot market prices under section 3.2.2.

For greater certainty, where a landlord makes a blanket election in respect of one or more rental properties that are subject to an agreement between the landlord and the distributor under section 2.8.3A of the Distribution System Code, the distributor is not required to notify the landlord of the option to be charged either tiered prices, ultra-low overnight time-of-use prices or standard time-of-use prices or to provide the landlord an opportunity to make an election each time responsibility for paying for continued service to a rental property covered by the blanket election is assumed by the landlord. The distributor shall ensure that the first bill issued to the consumer after the account is opened, or the first bill issued to the consumer after the last bill issued to the consumer under spot market prices under section 3.2.2, reflects the price structure chosen by the consumer, or if none is chosen, reflects standard time-of-use prices.

Sections 3.5.2 to 3.5.7 do not apply in respect of an election under this section 3.5.8.

3.5.9 Where a non-residential consumer that has an eligible time-of-use meter is reassigned, pursuant to section 2.5 of the Distribution System Code, to a rate class that is eligible to pay the commodity price for electricity determined by the Board under section 79.16 of the Act, the distributor shall inform the consumer of the option to be charged either tiered prices under section 3.3, ~~or~~ standard time-of-use prices under section 3.4 or ultra-low overnight time-of-use prices under section 3.4A and provide the consumer an opportunity to elect one of those options. If the consumer elects to be charged tiered prices or ultra-low overnight time-of-use prices, the election is subject to the timeline set out in section 3.5.4, with such modifications as the context may require. For greater certainty, if the consumer does not elect to be charged tiered prices or ultra-low overnight time-of-use prices, the consumer shall be placed on standard time-of-use prices at the time of reassignment.

3.5.10 A distributor shall allow an RPP consumer that is being charged tiered prices under section 3.3 or ultra-low overnight time-of-use prices under section 3.4A as a result of an election under this section 3.5 to elect at any time to switch to the other price plan or to standard time-of-use ~~be charged time-of-use~~ prices under section 3.4. Sections 3.5.1 to 3.5.7 apply, with such modifications as the context may require, to this latter election.

3.5.11 A distributor shall keep the following records for two years, and make them available to the Board upon request:

(a) copies of all notices of election received under section 3.5.1, including recordings of calls where the notice of election was completed by telephone;
(b) copies of notifications sent to consumers under sections 3.5.3 and 3.5.5; including recordings of calls where the notification was done by telephone; and
(c) a record of all other communications with individual consumers about electing to be charged prices under section 3.3, ~~or~~ 3.4 or 3.4A.

3.5.12 A distributor shall provide to consumers or otherwise make available such information in respect of the option to elect to be charged tiered prices under section 3.3 or ultra-low overnight time-of-use prices under section 3.4A rather than standard time-of-use prices under section 3.4 as may be approved or directed by the Board.

3.5.13 A distributor shall rely on the Smart Metering Entity for the provision of consumption amounts for billing purposes in respect of all residential consumers or general service < 50kW consumers that are being charged tiered prices under section 3.3 as a result of an election under this section 3.5.

3.6 [Revoked effective October 13, 2020.]

3.7 Final RPP Variance Settlement Amounts for RPP Consumers Leaving Regulated Price Plan

3.7.1 Where a distributor:

(a) is advised that an RPP consumer that is being charged a commodity price for electricity in accordance with section 3.3, ~~or~~ 3.4 or 3.4A will be cancelling its account with the distributor and will be moving out of the province of Ontario;

(b) receives a notice referred to in section 2.1.2 from or in relation to an RPP consumer that was, on the date of the notice, being charged a commodity price for electricity in accordance with section 3.3, ~~or~~ 3.4 or 3.4A;

(c) receives a request referred to in section 3.2.3 from or in relation to an electing spot consumer that was, on the date of the request, being charged a commodity price for electricity in accordance with section 3.3, ~~or~~ 3.4 or 3.4A, or

(d) determines that an RPP consumer ceases to be eligible to pay the commodity price for electricity determined by the Board under section 79.16 of the Act,

the distributor shall charge or credit the RPP consumer or electing spot consumer a final RPP variance settlement amount calculated on the basis of historical consumption in accordance with the methodology established by the Board in the RPP Manual.

3.7.2 Where a distributor is required by section 3.7.1 to charge or credit a consumer with a final RPP variance settlement amount, the distributor must show the monetary value of the final RPP variance settlement amount as a separate item on the consumer's bill. The separate item shall be labelled as "RPP settlement" and shall be shown directly under the items referred to in section 3.3.5, ~~or~~ 3.4.3 or 3.4A.3, as applicable.

3.7.3 Section 3.7.1 and 3.7.2 shall not come into effect until the date that is three months after the first term commencement date.

3.7.4 Where a distributor has charged or credited an RPP consumer with a final RPP variance settlement amount under section 3.7.1(b), the distributor shall pay or credit (where the final RPP variance settlement amount was a charge) or charge (where the final RPP variance settlement amount was a credit) the same amount to the consumer if:

(a) the distributor is notified by the consumer or by a retailer on behalf of the consumer that:

i. the consumer was a customer of the retailer identified in the notice prior to the date on which the consumer's account with the distributor was opened; and

ii. the consumer remains a customer of that retailer;

(b) the notice referred to in paragraph (a) is received by the distributor within three months of the date on which the consumer's account with the distributor was opened; and

(c) where the notice was provided by the consumer, the retailer identified by the consumer has confirmed the information contained in the notice referred to in paragraph (a).

3.8 Notification to RPP Consumers

3.8.1 A distributor shall post on its website notice of any change made by the Board in:

(a) the value of any of $RPCM_{T1}$, $RPCM_{T2}$, $RPEM_{OFF}$, $RPEM_{MID}$, ~~or~~ $RPEM_{ON}$, ULO_{NIGHT}, ULO_{OFF}, ULO_{MID}, or ULO_{ON} referred to in section 3.3, ~~or~~ 3.4 or 3.4A;

(b) a tier threshold referred to in section 3.3.2; or

(c) the hours of the day comprising any of the periods referred to in section

3.4.2(c) or 3.4A.2(d).

Such notice shall be posted not less than 15 days prior to the date on which the change will take effect.

3.8.2 A distributor shall:

(a) as soon as practicable after the first term commencement date if it has not already done so, notify all RPP consumers within its licensed service area of the initial values of $RPCM_{T1}$, $RPCM_{T2}$, $RPEM_{OFF}$, $RPEM_{MID}$, or $RPEM_{ON}$ referred to in section 3.3 or 3.4 by means of bill messages or bill inserts; and

(b) as soon as practicable upon receiving notice from the Board of a change referred to in section 3.8.1, notify all RPP consumers within its licensed service area of the change by means of bill messages or bill inserts.

3.8.3 The notices referred to in sections 3.8.1 and 3.8.2 shall be prepared in accordance with the directions, if any, issued by the Board.

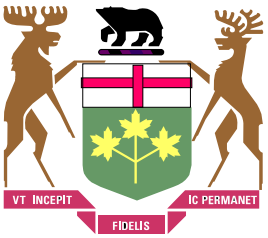
3.8.4 [Revoked effective October 13, 2020.]

3.9 Pilot Projects

3.9.1 Where a distributor implements a Board-approved pilot project relating to eligible time-of-use meters, the distributor may charge an RPP consumer that has an eligible time-of-use meter and that is participating in the pilot project the commodity price for electricity referred to in either section 3.3, ~~or~~ 3.4 or 3.4A or any other commodity price that the Board approves as part of the pilot project.

APPENDIX
PROPOSED AMENDMENTS TO
REGULATED PRICE PLAN (RPP) MANUAL

OCTOBER 18, 2022



Ontario

Regulated Price Plan

Manual

Ontario Energy Board

Issued XXXX~~October 13~~, ~~2020~~

(Replacing version issued on ~~February 16~~October 13, 20~~16~~20)

NOTE TO READERS:

On ~~October 13, 2020~~XXXX, revisions were made to the Manual to reflect the following regulatory changes:

(a) On November 16, 2021, the Minister of Energy issued a letter[1] requiring the OEB to examine, report back and advise on a time-of-use price plan that would further incentivize regulated price plan (RPP) consumers to demand-shift away from peak periods to lower demand periods. The objectives of the price plan, which the letter stated the OEB should consider when preparing its advice, included incenting electricity usage behaviour that will benefit the electricity system under anticipated increased electrification and providing value for customers with consideration for overall ratepayer impacts.

The OEB responded to the Minister with a report entitled "Design of an Optional Enhanced Time-of-Use Price"[2] that reflected stakeholder feedback collected during meetings and through written comments on the proposed price plan's design. The Report identified a single price plan option – now termed the ultra-low overnight TOU price plan – that was designed to provide the desired demand-shifting incentives, while also recovering the same average RPP price incurred by RPP consumers on standard TOU and tiered price plans.

Ontario Regulation 95/05 (Classes of Consumers and Determination of Rates) under the *Ontario Energy Board Act, 1998* now provides customers on the RPP with the option to be charged on the basis of the new ultra-low overnight price plan, and requires the Ontario Energy Board (OEB) to set prices for that new plan for May 1, 2023;

(b) The same Regulation now requires the OEB to set RPP prices once annually, for November 1 of every year (other than the one-time May 1, 2023 price-setting that introduces the new ultra-low overnight price plan);

[1] Minister's Letter

[2] Report to the Minister, "Design of an Optional Enhanced Time-of-Use Price", March 2022

(c) A new regulation under the *Electricity Act, 1998*, Ontario Regulation 735/20 (Amounts under Section 25.34 of the Act) now specifies that certain renewable generation contract costs can be funded in whole or in part by the Province of Ontario, rather than being funded by electricity ratepayers through the global adjustment.

~~(a) revisions to reflect the repeal, in 2017, of subsection 79.16(3) of the *Ontario Energy Board Act, 1998*, which required the OEB, when setting Regulated Price Plan prices, to "take into account balances in variance accounts established under section 25.33 of the *Electricity Act, 1998* and make adjustments with a view to eliminating those balances within 12 months or such shorter time periods as the Minister may direct"; the Manual now provides that although 12 months is the default period for eliminating variances, the Ontario Energy Board may in special circumstances choose a longer period of time;~~

~~(a) the Manual now specifies to a second decimal place (0.85) the target ratio between the upper and lower tier prices; and~~

~~(a) minor housekeeping edits to reflect: (i) the cessation of the Debt Retirement Charge; (ii) other changes in regulation; and (iii) changes to O. Reg. 95/05 (Classes of Consumers and Determination of Rates) and the Standard Supply Service Code that, as of November 1, 2020, allow Regulated Price Plan consumers who would otherwise be charged on the basis of time-of-use prices to elect instead to be charged on the basis of tiered prices.~~

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1. INTRODUCTION

About this Manual

Under amendments to the *Ontario Energy Board Act, 1998* (the Act) contained in the *Electricity Restructuring Act, 2004*, the Ontario Energy Board (the OEB) is mandated to develop a regulated price plan (the RPP). The RPP replaced the electricity commodity pricing regime that went into effect on April 1, 2004, and took effect on April 1, 2005, for eligible consumers.[3]

This Regulated Price Plan (RPP) Manual (the Manual) was initially prepared by the OEB within the context of a larger regulatory proceeding (designated as RP-2004-0205) in which interested parties assisted the OEB in developing the elements of the RPP.

This Manual describes the processes and methodologies that the OEB uses to support its responsibilities with respect to setting prices under the RPP. The Manual is updated from time to time to reflect changes to those processes and methodologies and other relevant developments.

Implementation of the RPP by licensed distributors is addressed primarily in the OEB's Standard Supply Service Code. The Standard Supply Service Code also contemplates that various elements of the RPP, including prices, will be determined in accordance with this Manual.

Related documents and OEB decisions that describe processes and actions that other parties use to fulfill their responsibilities under or in relation to the RPP include:

Ontario Energy Board Instruments

- Retail Settlement Code (the RSC)**;**
- Standard Supply Service Code (the SSS Code);
- Rate Orders; and
- Licences.

Independent Electricity System Operator (the IESO) Instruments

- Ontario Market Rules.

[3] Consumers eligible for the RPP are identified in O. Reg. 95/05 (Classes of Consumers and Determination of Rates) (the RPP Regulation).

Three other documents relate to the process for setting the RPP price, as described in this Manual:

- Ontario Wholesale Electricity Market Price Forecast, which contains the market price forecast used in the RPP price-setting process.
- Regulated Price Plan Price Report, which describes the data sources for the forecasts and the application of the methodology in this Manual to arrive at the prices for the RPP.
- The RPP Regulation, which sets out who is eligible for the RPP and prescribes rules regarding the manner in which the OEB determines rates for purposes of the RPP.

This Manual consists of six chapters as follows:

- Chapter 1. Introduction
- Chapter 2. Methodology for Calculating the RPP Supply Cost
- Chapter 3. Methodology and Timing for Setting RPP Prices
- Chapter 4. Methodology and Timing for Variance Tracking
- Chapter 5. Timing for RPP Price Adjustments or Price Structure Changes
- Chapter 6. Methodology for Determining Final RPP Variance Settlement Amounts

Purpose

The purpose of this Manual is to define and explain the methodologies and internal processes that the OEB uses in determining electricity commodity prices that are charged to RPP consumers.

This Manual includes processes for calculating and setting the RPP prices, including separate prices for consumers with eligible TOU ~~time-of-use~~ (or smart) meters that are charged on the basis of ~~a~~one of two optional TOU ~~time-of-use~~ pricing structures (i.e., standard TOU or ultra-low overnight TOU) and for consumers that are charged on the basis of a tiered pricing structure (including consumers with conventional meters and consumers with eligible ~~time-of-use~~TOU meters that opt out of ~~time-of-use~~TOU pricing in accordance with the Standard Supply Service Code); for monitoring and truing up variances between the forecast RPP price and the actual cost of RPP supply; for resetting the RPP price; and for calculating the final RPP variance settlement amount for consumers leaving the RPP.

In keeping with legislation, the RPP prices set by the OEB are intended to reflect the cost of supply over time.

Authority for the OEB to Set RPP Prices

Section 79.16 of the Act assigns the OEB responsibility for determining electricity commodity prices for eligible consumers. Consumer eligibility for RPP prices is determined by the RPP Regulation. The RPP Regulation requires the OEB to forecast the cost of electricity used by these consumers and to ensure that the prices reflect that cost[4]. As required by the RPP Regulation, ~~the initial RPP commodity prices determined by the OEB under both the tiered structure and the time-of-use structures were set to remain in effect for a period of at least 12 months. Subsequently, the OEB has reviewed and, where required, changed the RPP commodity prices every six months as discussed in Chapter 3.~~ the OEB sets RPP prices once per year, to take effect on November 1 of each year.[5]

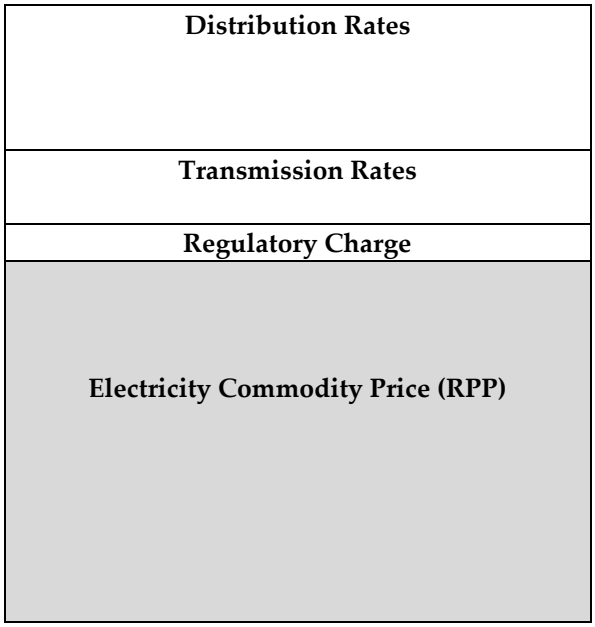
Total Prices Paid by Consumers

The electricity commodity prices under the RPP comprise only one element of the total price paid by consumers taking RPP supply. Figure 1 shows the other elements that comprise the final retail consumer bill. The height of the bars in the diagram is roughly proportional to each element's relative share of the total retail electricity bill. There is also a brief description of each component of the consumer bill following the diagram.

~~[4] The Act formerly required the OEB, when setting RPP prices, to "take into account balances in variance accounts established under section 25.33 of the *Electricity Act, 1998* and make adjustments with a view to eliminating those balances within 12 months or such shorter time periods as the Minister may direct", but that provision was repealed in 2017.~~

[5] Under the RPP Regulation, prices may be set for a period of less than a year where the Minister directs the OEB to do so, or where the ratio of the balance in the RPP variance account (described below) to the supply cost forecast exceeds 0.04. The RPP Regulation also requires the OEB to set the initial prices for the new ultra-low overnight TOU price plan effective May 1, 2023.

Figure 1: Retail Electricity Price under the Regulated Price Plan[6]



Electricity commodity price: This charge is for the electricity consumers use, which they buy either from their distributor at the RPP price or through a licensed electricity retailer at a contract price.

Regulatory charge: Regulatory charges are the costs of administering the wholesale electricity system and maintaining the reliability of the provincial grid.

Transmission charge: This component covers the costs of delivering electricity from the generating stations to the distributor along the high-voltage transmission system (also called the transmission grid). Transmission costs vary with the amount of electricity used.

Distribution charge: This component covers the costs distributors incur in delivering electricity to the consumer's home or business. It includes fixed costs that do not change with the amount of electricity used. It also includes the costs of building and maintaining infrastructure, such as wires and hydro poles, which vary with the amount of electricity used.

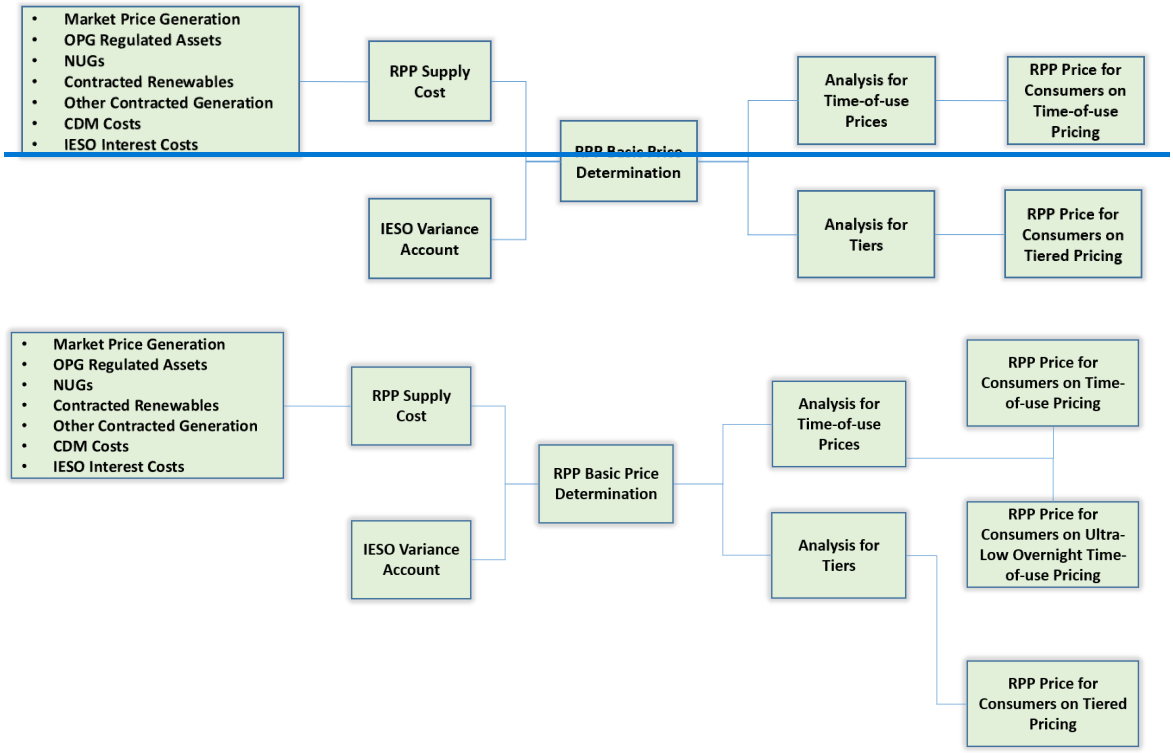
[6] Effective November 1, 2019, the Ontario Electricity Rebate (OER) under the *Ontario Rebate for Electricity Consumers Act, 2016* was included to provide relief for RPP consumers, among others, in the form of a reduction in the total pre-tax amount of the bill.

Process for RPP Price Determinations

Figure 2 below illustrates the process for setting RPP prices and the decisions to be made in that process. The RPP supply cost and the accumulated variance between actual and forecast costs (carried by the IESO) both contribute to the base RPP price, which is set to recover the full costs of supply. The remainder of the process is also based on forecasts of prices and of consumption patterns. For consumers with eligible ~~time-of-use~~TOU meters that are being charged on the basis of either standard ~~time-of-use~~TOU or ultra-low overnight TOU prices, the next step is to analyze the pattern of prices in order to determine what the ~~pattern of~~ price~~s~~ levels[7] ~~should be. , both in terms of the three price levels (on-peak, mid-peak and off-peak) and in terms of the daily times of application of these prices. These differ seasonally.~~ For consumers that are not being charged on the basis of ~~time-of-use~~TOU prices, the next step is to analyze the tier structure of their prices. From the tier structure is derived the RPP prices that such consumers will pay.

[7] For standard TOU prices, the three price levels are on-peak, mid-peak and off-peak. For ultra-low overnight TOU prices, the four price levels are ultra-low overnight, mid-peak, on-peak and weekend off-peak.

Figure 2: Process for RPP Price



This Manual is organized according to this basic process. Chapter 2 describes the computation of the RPP supply cost. Chapter 3 explains the methodology used for setting RPP prices. Chapter 4 describes tracking and monitoring the IESO's variance account. Chapter 5 deals with the timing of price adjustments and price structure changes. Chapter 6 describes the methodology to be used for determining the final RPP variance settlement amounts for consumers that leave the RPP. Appendix A describes the equations used to determine the cost variance component of the process shown in Figure 2.

Using this Manual

The processes and methodologies in this Manual relate to activities of the OEB and, for one particular function, to distributors with final RPP variance settlement responsibilities for RPP consumers. The OEB uses these methodologies and processes to assist in determining electricity commodity prices for the RPP and to support the calculation of final RPP variance settlement amounts for consumers leaving the RPP. This Manual also serves as a guide to interested parties in understanding how the OEB determines prices for the ~~Regulated Price Plan~~ RPP.

Roles of Participants

This Manual describes the roles of various participants in or related to the RPP process, but does not directly place obligations on them. However, other instruments (such as the SSS Code) refer to this Manual with respect to some obligations, particularly the determination of the final RPP variance settlement amount for consumers leaving RPP supply. Requirements placed directly on participants are contained in legislation, regulations, licences, codes and the Market Rules, as applicable. The majority of RPP requirements and obligations for electricity distributors are set out in the SSS Code.

Roles of electricity distributors

Distributors are the point of contact, both physical and financial, for most consumers in Ontario's electricity system. They provide distribution service which allows electricity to be delivered to the place of consumption. Under section 29 of the *Electricity Act, 1998* (the "Electricity Act"), a distributor is also required to sell electricity to every person connected to the distributor's system, except those consumers that opt to purchase electricity from a competitive retailer. Other roles include:

- Meter reading;
- Billing;
- Electricity supplier for consumers taking RPP supply; ~~and~~
- Informing consumers with eligible TOU meters about their RPP options and giving effect to the consumer's choice; and
- Electricity supplier for consumers not eligible for RPP supply and not taking supply from a competitive retailer.

Roles of the Independent Electricity System Operator (IESO)

The IESO's main roles are to plan the electricity system, procure resources, administer the wholesale electricity market in Ontario and to direct the operation of the IESO-controlled grid, scheduling and dispatching the electricity system to maintain safe and reliable electricity supply. The IESO settles the wholesale market with all wholesale market participants, both buyers and sellers. The other main responsibilities of the IESO are forecasting electricity demand and supply adequacy and contracting for supply or demand management. The IESO roles with respect to the RPP are:

- to include the global adjustment in its monthly settlements;[8]
- to hold in a variance account the amounts due to differences between actual electricity commodity prices and the forecast-based RPP prices; and

[8] The global adjustment was formerly also referred to as the "Provincial Benefit.".~~.~~

- to provide the OEB with information as may be required by the OEB for purposes of the determination of RPP prices and the final RPP variance settlement amount.[9]

Roles of Ontario Electricity Financial Corporation (OEFC)

The Ontario Electricity Financial Corporation ("OEFC") is responsible for holding and defeasing that part of the former Ontario Hydro's debt that was not assigned to the successor operating companies. In conjunction with that responsibility, OEFC became the counterparty to the non-utility generator (NUG) contracts signed by the former Ontario Hydro. As such, it is the metered market participant for the NUGs.[10] ~~OEFC's role with respect to the RPP is to provide the OEB with information as may be required by the OEB for purposes of the determination of RPP prices.~~ For purposes of the determination of RPP prices, the OEB obtains information related to NUG contracts managed by the OEFC from the IESO.

Prices

This Manual describes the methodology that the OEB uses to determine commodity prices for RPP consumers, but does not contain the prices themselves. RPP prices, as determined from time to time, are posted on the OEB's website**.**

Definitions

The following defined terms are used in this Manual.

"Act" means the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Schedule B;

"OEB" means the Ontario Energy Board;

"consumer credit balance" means a balance in the variance account carried by the IESO for RPP consumers that will be credited to RPP consumers;

"consumer debit balance" means a balance in the variance account carried by the IESO for RPP consumers that is owed to the IESO by RPP consumers;

[9] ~~Among others, section 23 of the Electricity Act states that "The IESO shall provide the OEB, the IESO and the Market Surveillance Panel with such information as the OEB, IESO or Panel may require from time to time."~~

[10] OEFC is also the counterparty to contracts in relation to two additional generation facilities in respect of which contingency support payments to Ontario Power Generation (OPG) are made through the global adjustment. ~~-~~See O. Reg. 427/04 (Payments to the Financial Corporation re Section 78.2 of the Act) made under the Act, as amended effective January 1, 2009.

"conventional meter" means a meter other than an eligible time-of-use meter;

"Electricity Act" means the *Electricity Act, 1998*, S.O. 1998, c. 15, Schedule A;

"eligible time-of-use meter" means an interval meter or a meter that measures and records electricity use during each of the periods of the day referred to in sections 3.4.1 and 3.4A.1 of the SSS Code cumulatively over a meter reading period;

"final RPP variance settlement amount" means the amount charged or credited to an RPP consumer in accordance with section 3.7 of the SSS Code;

"global adjustment" or "GA" means the adjustment referred to in section 25.33 of the Electricity Act and made in accordance with regulations made under that section;

"IESO" means the Independent Electricity System Operator;

"Market Rules" means the rules made under section 32 of the Electricity Act;

"non-RPP consumer" means a consumer that is not an RPP consumer;

"Retail Settlement Code" or "RSC" means the code issued by the OEB which, among other things, establishes a distributor's obligations and responsibilities associated with financial settlement among retailers and customers and provides for tracking and facilitating customer transfers among competitive retailers;

"RPP consumer" means a consumer that pays the commodity price for electricity referred to in section 3.3, ~~or~~ 3.4 or 3.4A of the SSS Code;

"spot market price" means, for a given hour, the Hourly Ontario Energy Price established by the IESO for that hour; and

"Standard Supply Service Code" or "SSS Code" means the code issued by the OEB and in effect at the relevant time which, among other things, establishes the manner in which a distributor must meet its obligation to sell electricity under section 29 of the Electricity Act.

Except as defined above, words defined in the Act, the Electricity Act or any regulations made under those Acts have the same meaning when used in this Manual.

2. Methodology for Calculating the RPP Supply Cost

Introduction

This chapter describes and explains the methodology for computing the forecast RPP supply cost on which RPP prices are based. The methodology relies on forecast information that includes the results of a one-year Ontario market price forecast from a production cost model that produces forecasts of hourly prices and supply from specific generators.

The contents of this chapter are:

- Overview of the Ontario electricity market structure;
- Overall methodology for forecasting the RPP supply cost; and
- Computation of the RPP supply cost.

Currently, the production cost model used for forecasting purposes is maintained and run by a consultant under contract to the OEB.

Overview of the Ontario Electricity Market Structure

The RPP is part of the structure for the Ontario electricity market created by the *Electricity Restructuring Act, 2004*.

There are principally four streams of generation sources for the RPP as identified in Figure 2: OPG's nuclear and hydroelectric facilities; the NUG facilities; generation facilities under contract (including renewables); and imports. They are priced differently, and their pricing affects the RPP supply cost. This chapter details the methodology for the forecast of each of these cost elements and their integration into the RPP supply cost.

In the Ontario electricity market, most of the generation supply is determined by contract, or regulation by the OEB.

Overall Methodology for Forecasting the RPP Supply Cost

The supply cost of electricity provided to RPP consumers is determined in accordance with the rules established by legislation. The cost of electricity to wholesale customers is the amount they pay under the Market Rules (that is, the cost of their electricity at the hourly Ontario energy price or HOEP) plus, at the end of each month, an adjustment amount referred to as the global adjustment or GA.

In the Ontario electricity market, certain contracted or regulated generators receive a final price that is different from the hourly market price as determined by the IESO. The IESO keeps track of these differences and adjusts the bills for all wholesale market participants to reflect them. The difference is included in the global adjustment. The global adjustment is then passed through to all consumers of electricity.

The RPP supply cost is the cost of electricity supply for RPP consumers under the Market Rules, adjusted by cost factors relating to each of the other streams of supply and by certain costs that the IESO incurs to carry the RPP-related variance accounts. The costs of these streams are apportioned to RPP consumers in accordance with their share of total provincial electricity demand.

Equation 1 below shows the calculation of the RPP supply cost.

Equation 1

$$C_{RPP} = M + \alpha\,[(A - B) + (C - D) + (E - F) + G] + H, \text{ where}$$

- C_{RPP} is the RPP supply cost;
- M is the amount that the RPP supply would have cost under the Market Rules;
- α is the RPP proportion of the total global adjustment costs;[11]

[11] The expression in square brackets is the global adjustment. "G" in the expression in square brackets integrates two separate components of the global adjustment formula (G and H) as set out in O. Reg. 429/04 (Adjustments under Section 25.33 of the Act) made under the Electricity Act.

Prior to January 1, 2011, the global adjustment was allocated to RPP supply costs according to the share of total Ontario load represented by RPP consumers, denoted here as α.

O. Reg. 429/04 has been amended to revise how global adjustment costs are allocated to consumers. O. Reg. 429/04 defines two classes of consumers: Class A, comprised of consumers whose maximum hourly demand for electricity in a month is at least 5 MW (consumers with a demand of between 1 MW and 5 MW may opt in to Class A, as may consumers in certain industries with a demand of at least 500 kW); and Class B consumers, comprised of all other consumers, including RPP consumers.

Therefore, as of January 1, 2011, α is defined as follows:

$$\alpha = (RPP_d / \text{Class } B_d) \times 1/(1-\beta), \text{ where}$$

β = the proportion of Global Adjustment costs attributed to Class A consumers;
RPP_d = the total load of RPP consumers;
Class B_d = the total load of Class B consumers.

- A is the amount paid to prescribed generators in respect of the output of their prescribed generation facilities;[12]
- B is the amount those generators would have received under the Market Rules;
- C is principally the amount paid to the OEFC with respect to its payments under contracts with the non-utility generators (NUGs);
- D is principally the amount that would have been received under the Market Rules for electricity and ancillary services supplied by those NUGs;
- E is the amount paid to the IESO with respect to its payments under certain contracts with renewable generators;
- F is the amount that would have been received under the Market Rules for electricity and ancillary services supplied by those renewable generators;
- G is (a) the amount paid by the IESO for its other procurement contracts for generation (both conventional and certain renewable) or for demand response or conservation and demand management ("CDM"), and (b) the sum of any amounts approved by the OEB for conservation and demand management programs approved by the OEB that are payable by the IESO to distributors;[13]and
- H is the interest paid to or earned by the IESO in relation to the RPP variance account.

The forecast per unit cost of the RPP supply is C_{RPP} divided by the total forecast energy demand of RPP consumers. RPP prices are based on that forecast per unit cost. For that per unit cost forecast, all the terms in Equation 1 must be forecast. The remainder of this chapter describes the methodology for forecasting these terms, the average per unit cost of RPP, and the methodology for setting the base RPP price.

In developing this methodology, the OEB took into consideration the use of the forecast and the relative value of increased precision. Deviations of actual from forecast RPP price are, under the Act and the Electricity Act, accumulated by the IESO in a variance account and collected from or remitted to consumers taking RPP supply through future price adjustments. Since there will inevitably be deviations (positive and negative) from the forecast, an increase in precision of the forecast only reduces the size of the variance.

[12] These are generators and generation facilities designated by regulation and whose output is subject (in whole or in part) to a rate set by the OEB. Currently, these are OPG's baseload nuclear and hydro facilities identified in O. Reg. 53/05 (Payments under Section 78.1 of the Act) made under the Act.

[13] As discussed below, these amounts relate to electricity distributor CDM programs administered by the IESO. Recovery of these amounts through the global adjustment is contemplated in section 78.5 of the Act and in O. Reg. 429/04 (Adjustments under Section 25.33 of the Act) made under the Electricity Act effective January 1, 2011.

Given that some forecast inaccuracy is inevitable due to the large number of variables, the OEB has chosen to use reasonable approximations for some calculations, rather than to aim for greater precision at higher, unjustifiable costs.

Computation of the RPP Supply Cost

Broadly speaking, the steps involved in forecasting the RPP supply cost are:

1. Forecast wholesale electricity market prices;
2. Forecast the load shape for RPP consumers;
3. Forecast the quantities in Equation 1; and
4. Forecast RPP Supply Cost = Total of Equation 1.

The methodology for forecasting the RPP supply cost describes each term or group of terms in Equation 1 and the methodology for forecasting them.

Cost of Supply Under Market Rules

This section covers the first term of Equation 1:

$$C_{RPP} = \boldsymbol{M} + \alpha\,[(A - B) + (C - D) + (E - F) + G] + H.$$

The cost of supply under the Market Rules depends on when any particular supply offer is accepted, dispatched and delivered to the grid to meet the last unit of instantaneous Ontario load on the grid. Peak period prices, representing higher marginal cost supply sources, are higher than off-peak period prices. The differences are large enough that ignoring them can introduce errors into the forecast of total RPP supply cost.

The pattern of electricity demand over time is called the load shape. If RPP consumers as a group had a load shape that is close to the overall load shape of the Ontario market as a whole (the system load shape), then a reasonable approximation of their total cost would be to assume that the average market price for this supply is equal to the overall system load-weighted average market price, and the market-based RPP supply cost would then simply be the total energy demand of the RPP consumers times the overall system load-weighted average hourly price.

However, different classes of consumers in Ontario have noticeably different load shapes. Industrial consumers tend to have much flatter load shapes; that is, they tend to use electricity much more evenly over the course of a day and over the seasons. Residential and small commercial consumers, who are the majority of the RPP-eligible consumers, have a load shape with a larger fraction of their demand occurring at peak times (winter mornings and late afternoons, and summer afternoons), as they use electricity for lighting, cooking, heating and air-conditioning.

Prior to obtaining more accurate hourly load data, RPP prices were initially established based on an approximation widely used called the Net System Load Shape, or NSLS. Each distributor's NSLS is its total load shape minus the load of consumers with interval meters whose hourly usage is recorded. The system-wide NSLS had previously been developed from a representative sample of net system load shapes from distributors across the province. However, the NSLS is no longer used by the OEB. Instead, the forecast load shape of RPP consumers is based on historic hourly RPP consumer load data.

The value of M in Equation 1 is therefore the cost at market price of the total demand of the RPP consumers, computed using the weighted average load shape. The computation is performed using the production cost model's forecast of hourly prices multiplied by the forecast of hourly demand of RPP consumers. The forecast of hourly demand is obtained by applying the load shape to the total RPP demand forecast.

Cost Adjustment Term for Prescribed Generation Facilities

This section covers the second term of Equation 1:

$$C_{RPP} = M + \alpha\,[\boldsymbol{(A - B)} + (C - D) + (E - F) + G] + H$$

The dollar amount that the prescribed generators would receive under the Market Rules (quantity B in Equation 1) for their prescribed generation facilities is approximated by their hourly generation multiplied by the Ontario market prices during those hours.[14] Forecasts of both of these variables are available from the production cost model. For the purpose of setting the RPP price and monitoring variances from it, this calculation produces a monthly aggregated forecast of payments under the Market Rules for generation from prescribed generation facilities.

The amount paid to the prescribed generators (quantity A in Equation 1) is the regulated price established by the OEB under section 78.1 of the Act. The production cost model provides forecasts of the outputs of the prescribed generation facilities. Quantity A can therefore be forecasted by calculating the average price per MWh for the prescribed generation facilities times their total output per month in MWh that is subject to the regulated price.

Cost Adjustment Term for NUGs and Other Generation Under Contract with OEFC

This section describes the calculation of the third term of Equation 1:

$$C_{RPP} = M + \alpha\,[(A - B) + \boldsymbol{(C - D)} + (E - F) + G] + H$$

[14] Generators are actually paid by the IESO on the basis of five-minute market clearing prices.

The amount that the NUGs would receive under the Market Rules, quantity D in Equation 1, is their hourly production times the hourly energy price. These quantities are available from the production cost model as an aggregate for the NUGs as a whole.

The amount that the NUGs receive under their contracts, quantity C in Equation 1, is not publicly available information, although it is known that most of the contracts provide for on-peak and off-peak prices. The OEB initially obtained from the agency responsible for administering the NUG contracts (at the time, the OEFC) a forecast of average on-peak and off-peak prices for these generators and average output on a monthly basis. However, the IESO has since that time begun to publish monthly aggregate payments to the NUGs (back to September 2007). Although the details of these payments (amounts by recipient, volumes, etc.) are not public, the published information is now used as the basis for forecasting payments in future months.

Cost Adjustment Term for Certain Renewable Generation Under Contract with the IESO

This section describes the calculation of the fourth term of Equation 1:

$$C_{RPP} = M + \alpha\,[(A - B) + (C - D) + \boldsymbol{(E - F)} + G] + H$$

Quantities E and F in the above formula refer to certain renewable generators paid by the IESO under contract; notably, renewable generators contracted under Phase I and Phase II of the Renewable Energy Supply (RES) Request for Proposals issued by the IESO. While the IESO has contracts with other renewable generators (such as under the former Renewable Energy Standard Offer Program or RESOP and the current Feed-in Tariff or FIT program), payments under these contracts are included as part of quantity G in Equation 1, in keeping with the manner in which they are treated for purposes of the regulation that governs the calculation of the global adjustment.[15]

Computing the amount that would be payable to the RES generators under the Market Rules, quantity F in Equation 1, requires knowing the quantity of electricity generated per hour and the hourly market price. The quantity of electricity generated in turn is a function of the size and type of the generator.

The size and generation type of these successful renewable energy projects are known, as are the weighted average prices under the contracts. The production cost model produces forecasts of their hourly output, drawing on available information on the technical capability of these types of generators (wind, biomass, small hydro) and wind regimes in Ontario and on information from the IESO.

[15] O. Reg. 429/04 (Adjustments under Section 25.33 of the Act) made under the Electricity Act.

Ontario Regulation 735/20 (Amounts under Section 25.34 of the Act), under the Electricity Act, specifies the renewable contract costs that can be funded by the Province of Ontario, rather than being funded by ratepayers through the GA. The Province has discretion regarding the level of funding it will provide, and the OEB relies on any updates provided by the Province with respect to this funding amount, to calculate Quantity E.

Cost Adjustment Term for Other Contracts with the IESO and for OEB-approved CDM Programs

This section describes the calculation of the fifth term of Equation 1:

$$C_{RPP} = M + \alpha\,[(A - B) + (C - D) + (E - F) + \boldsymbol{G}] + H$$

Currently included in G are the following:

i. generation facilities procured under the 2005 "Clean Energy Supply" ~~RFP~~ Request for Proposals (including the Greenfield Energy Centre and St. Clair Power gas-fired facilities);

ii. the "refurbishment" contract with Bruce Power;

iii. the so-called "early mover" clean energy supply contracts;

iv. contracts issued under the former RESOP program;

v. certain other generation contracts (including those awarded through the Combined Heat and Power ~~(CHP) RFP~~Request for Proposals and the contract for supply from the Portlands gas-fired facility);

vi. various contracts for the supply of demand response or conservation and demand-side management;

vii. contracts issued under the FIT program; and

viii. amounts for CDM programs administered by the IESO.

Generation Contracts

The contribution of generation under contract to the IESO to quantity G in Equation 1 depends on the size, type and technical capability of the generators, on market conditions, and on their contracts with the IESO. Only the contractual compensation contributes to quantity G.

In terms of information that is not publicly available, the OEB obtains from the IESO information at an appropriate level of detail for purposes of enabling the OEB to forecast the contribution of contracted generation to quantity G in Equation 1. With this and other relevant information (such as the forecast of market prices where applicable), the OEB is able to forecast the contribution of the generation under contract to the IESO to quantity G in Equation 1.

The Bruce generation facility is subject to a contract effective January 1, 2016, that provides a payment per megawatt hour for all output from its generation site.

Other Procurement Contracts

The amounts paid by the IESO for these other procurement contracts are forecast as accurately as reasonable given information that is available from public sources as well as information provided to the OEB by the IESO. The IESO provides forecast information on the total amount under contract for demand response and for ~~conservation and demand management~~CDM, which is the contribution of these contracts to quantity G in Equation 1.[16]

The OEB estimates the contribution of demand response contracts to quantity G in Equation 1.

Amounts for CDM Programs

The contribution of CDM programs administered by the IESO to quantity G is estimated based on information from public sources as well as information provided to the OEB by the IESO.

Cost for IESO Variance Account

This section describes the calculation of the sixth term of Equation 1:

$$C_{RPP} = M + \alpha\,[(A - B) + (C - D) + (E - F) + G] + \boldsymbol{H}$$

The IESO incurs direct costs to carry the RPP-related variance account. The IESO must pay interest on any negative variances. The IESO also credits the variance account with interest earned on any positive balances. Interest amounts can be forecast using the

[16] Some costs incurred by the IESO in relation to CDM ~~conservation and demand management~~ are not recovered through the global adjustment, such as overhead costs that are recovered through the IESO's fees and are therefore not captured in determining the RPP supply cost.

forecast of variance over the year and an assumption of the interest rates the IESO would earn or pay, given its credit rating.

The IESO does not currently allocate any other specific operating costs to the administration of its RPP-related variance account.

Total RPP Supply Cost

The total RPP supply cost is calculated as the cost of the supply needed to meet the demand from RPP consumers, determined using Equation 1.

3. Methodology and Timing for Setting RPP Prices

Introduction

The diagram in Chapter 1 indicates that setting the base RPP prices integrates two price components. The forward-looking component is based on a forecast of the RPP supply cost, which is calculated as detailed in Chapter 2 of this Manual. The backward-looking component is set to recover the accumulated variance in the IESO variance account. Appendix A describes the equations used to determine the variance component. These two components are then added together to produce the average RPP price, which is referred to as RPA. This chapter explains the processes for calculating and integrating these two components of the base RPP prices. This chapter also describes the process and methodology for setting the tiered prices and seasonal price tiers for consumers that are not being charged on the basis of ~~time-of-use~~TOU prices, and ~~time-of-use~~TOU pricing periods ~~(on-peak, off-peak and mid-peak)~~for those consumers with eligible ~~time-of-use~~TOU (or smart) meters that are being charged on the basis of either standard ~~time-of-use~~TOU or ultra-low overnight TOU prices.[17]

The contents of this chapter are:

- Timing for RPP price setting;
- Setting the price component to recover the RPP supply cost;
- Setting the price component to true-up the RPP supply cost variance;
- Setting the average RPP price;
- Setting the prices for RPP consumers with conventional meters;
- Setting the prices and times of application for RPP consumers with eligible ~~time-of-use~~TOU meters; and
- Price true-ups for extraordinary circumstances.

Timing for RPP Price Setting

As required by the RPP Regulation, ~~the initial~~ RPP prices ~~were~~ are set ~~to be effective for no less than 12 months~~once a year, for the period November 1 to October 31.[18]

[17] For standard RPP TOU prices, the three price periods are on-peak, mid-peak and off-peak. For ultra-low overnight RPP TOU prices, the four price periods are ultra-low overnight, mid-peak, on-peak and weekend off-peak.

[18] Under the RPP Regulation, prices may be set for a period of less than a year where the Minister directs the OEB to do so, or where the ratio of the balance in the RPP variance account (described below) to the supply cost forecast exceeds 0.04. The RPP Regulation also requires the OEB to set the initial prices for the new ultra-low overnight TOU price plan effective May 1, 2023.

~~Subsequently, the OEB has reviewed and, as required, reset the RPP prices every six months.~~

The price resetting determines how much of a price change is needed to recover both the forecast RPP supply cost and the accumulated variance in the IESO variance account. The default recovery period for the variance account is the next 12 months. The OEB may in special circumstances decide to recover the accumulated variance over a period longer than 12 months.

Setting the Price Component to Recover the RPP Supply Cost

The first step in the computation of the RPP price is the computation of the forecast RPP supply cost, as described in Chapter 2. The average RPP supply cost is simply the total forecast RPP supply cost for the forecast year divided by the total forecast energy demand of RPP consumers for the year. This price component is not set at the average RPP supply cost; however, it is adjusted to take account of random effects on the costs.

Correcting for the Asymmetry in Probabilistic Modeling

The actual RPP supply cost is subject to random variation from a number of factors. These factors include, among others, the availability of generation from the prescribed generation facilities,[19] the availability of generation from resources under contract to the IESO, the level of demand from consumers taking RPP supply (which varies with the weather), and the load shape of that demand.

By their nature, the probability distributions of some of these variables are asymmetric. For example, if the assumed capacity factor of a generator is 80%, then there is more possible downside (to 0%) than upside (to 100%). Some other variables have similarly skewed distributions.

Based on the above, probabilistic modeling of the variance of actual from forecast RPP supply cost shows that there is a higher probability that the actual RPP supply cost will be above its expected value than below it. This raises the probability that such variance will trigger the need for multiple mid-plan price adjustments. A stochastic adjustment is calculated using a probabilistic simulation of the system (Monte Carlo technique) to determine the size of the variance given assumptions about the level of price and the distributions of the variables that drive market price determination. The stochastic adjustment has remained relatively constant since the RPP was introduced, adding about $1/MWh to the RPP price.

[19] As noted earlier, this refers to those of OPG's regulated nuclear and hydroelectric generation assets that are identified in O. Reg. 53/05 (Payments under Section 78.1 of the Act).

Setting the Price Component to True-Up RPP Supply Cost Variance

The total RPP supply cost variance is the difference between the actual RPP supply cost in a year and the amount collected from RPP consumers during that year. This amount is accumulated and held by the IESO in a variance account, and is tracked and monitored monthly by the OEB as described in Chapter 4 of this Manual.

The variance is forecast for each month of the RPP year. At the end of each month there will therefore be a *forecast* and an *actual* variance amount. The difference between these is called the *unexpected* variance for the month.

The RPP price is normally designed so the expected cumulative variance is zero at the end of the RPP year. For any shorter period, the forecast cumulative variance will not be zero, since the variance is expected to display a seasonal pattern. Consumer debit variances are expected to accumulate in lower-volume (spring and ~~summer~~ fall) seasons and consumer credit variances are expected to accumulate in the generally higher-volume (winter and summer) seasons. Only when there is an unexpected cumulative consumer credit or debit balance at the time of a price resetting will it mean that the price should be trued up to recover that deviation; that is, the relevant amount for the true-up is not the *actual* accumulated variance, but the accumulated difference between the *actual* variance and the *expected* variance. In other words, the amount to be trued up is limited to the *unexpected* variance.

Normally, this accumulated unexpected variance is to be recovered over the 12 months following the date of the price setting. The component of the RPP price for recovery of this accumulated unexpected variance is therefore the total of the accumulated unexpected variance divided by the forecast energy demand of RPP consumers over the succeeding 12 months. In special circumstances, the OEB may decide to set the RPP price with a view to recovering the variance over a period longer than 12 months, i.e., to defer the recovery of a portion of the variance until after the 12-month RPP price-setting period.[20] In determining whether special circumstances exist, the OEB will be guided by its statutory objectives, and particularly the objective to protect consumers with respect to prices.

Setting the Average RPP Price

The average RPP price is therefore the sum of these two components:

1. The *prospective* recovery of the forecast RPP supply cost; and

[20] Previously, subsection 79.16(3) of the OEB Act required the OEB to set prices "within 12 months or such shorter time periods as the Minister may direct"; in 2017, that provision was repealed.

2. The *retrospective* recovery of the cumulative *unexpected* variance.

This average RPP price is denoted as RPA.

The next steps in the price-setting process determine the prices to be charged to each group of RPP consumers; (i) those that are charged on the basis of either standard TOU or ultra-low overnight ~~time-of-use~~TOU prices; and (ii) those that are charged on the basis of tiered prices.

Setting the Tiered Prices

For RPP consumers that are not on ~~time-of-use~~ TOU pricing, the OEB has established a tiered pricing structure. The tier structure includes both the levels of the prices in the two tiers — $RPCM_{T1}$ (the price for consumption at or below the tier threshold) and $RPCM_{T2}$ (the price for consumption above the tier threshold) — and the threshold level of consumption at which the consumer's price will move from the lower to the higher tier.

The tier prices, $RPCM_{T1}$ and $RPCM_{T2}$, are the same for all RPP consumers. However, the tier thresholds are not the same at all times, as stated in section 3.3.2 of the SSS ~~c~~Code.

The tier prices must be calculated so that the expected average price, calculated on a "tier load weighted" basis, equals the average RPP price, RPA.

Given the tier threshold, the amount of electricity expected to be priced at each tier can be estimated. For that estimation, the OEB uses information showing how much electricity consumers purchase in each month at each of the tiers. That calculation assumes that the tier thresholds are the same for all RPP consumers.

The OEB then calculates the tier prices by targeting a ratio of 0.85 between the upper and lower tier prices. This ratio of 0.85 was selected when the OEB initially set RPP prices based on the then-existing tiered price structure established by the government (the prices at that time were 4.7 cents for consumption at or below the tier and 5.5 cents for consumption above the tier). For the actual calculation, the OEB uses information on monthly consumption volumes.

This Manual now addresses the threshold for *residential* consumers. Since November 1, 2005, and as contemplated in section 3.3.2 of the SSS Code, the threshold has changed seasonally, with two six-month seasons starting on November 1 and May 1. The tier thresholds for residential consumers have normally been set at 1000 kWh per month in the winter season (November 1 to April 30) and 600 kWh per month in the summer season (May 1 to October 31). These thresholds were selected based on information regarding the amount of electricity that consumers use in each of the heating and non-heating months.

For *non-residential* consumers, the threshold has been fixed at 750 kWh per month all year round. Although section 3.3.2 of the SSS Code contemplates that the OEB may vary that threshold, to date it has not done so.

Setting the Standard TOU~~Time-of-Use~~ Prices

This section explains the methodology for computing the prices for RPP consumers with eligible ~~time-of-use~~TOU (or smart) meters that have not elected to be charged on the basis of either ultra-low overnight TOU prices or tiered prices.[21]

~~Time-of-use~~Standard TOU prices are set to make the forecast average price charged to consumers that are being billed on the basis of those prices equal to RPA, the average RPP price. The basic methodology for determining ~~the~~ standard TOU~~time-of-use~~ prices, the values of $RPEM_{OFF}$ (price during an off-peak period), $RPEM_{MID}$ (price during a mid-peak period), and $RPEM_{ON}$ (price during an on-peak period) is to use data from the forecast cost of RPP supply and the forecast demand for such consumers to determine a set of prices that reflects their supply cost and that averages to RPA.

Standard TOU~~Time-of-use~~ prices differ according to the season and time of day. The level of these prices is connected to the times when these prices apply because the cost of supplying electricity varies according to when it is supplied.

Objectives and Choices

Setting standard TOU ~~time-of-use~~ prices requires more steps and more decisions than setting tiered prices. The complexity arises from the requirement to set more prices and the time periods when these prices will apply.

One of the objectives of having ~~time-of-use~~ TOU meters is to give consumers more precise price signals and incentives to respond to those price signals. Consumers that are billed on the basis of standard TOU~~time-of-use~~ prices see prices that differ during the day, reflecting relative costs of generation at different times and allowing consumers to benefit by shifting or changing their consumption in response. Similar to ~~the~~ tiered prices, standard TOU~~time-of-use~~ prices are fixed in advance in order to limit the consumer's

[21] As of November 1, 2020, RPP consumers who would otherwise be charged on the basis of TOU ~~time-of-use~~ prices may elect instead to be charged on the basis of tiered prices by giving notice to their distributor: see subsection 6(4) of the RPP Regulation and section 3.5 of the Standard Supply Service Code.

exposure to supply price volatility and ~~to~~ provide all RPP consumers with predictable prices.

The objectives for the standard ~~time of use~~TOU pricing system include:

- Set prices to recover the full cost of RPP supply, on a forecast basis, from the consumers who pay the prices;
- Set the price structure to reflect current and future RPP supply costs;
- Set the price structure to support the achievement of efficient electricity system operation and investment;
- Set both prices and the price structure to give consumers incentives and opportunities to reduce their electricity bills by shifting their time of electricity use and reducing their peak demand;
- Create a price structure that is easily understood by consumers; and
- Provide fair, stable and predictable commodity prices to consumers.

These objectives guide the choices to be made to determine the prices. Some choices are reflected in the SSS Code. The most important of these are that there are three price levels and that there may be two seasons. The choices not articulated in the SSS Code include:

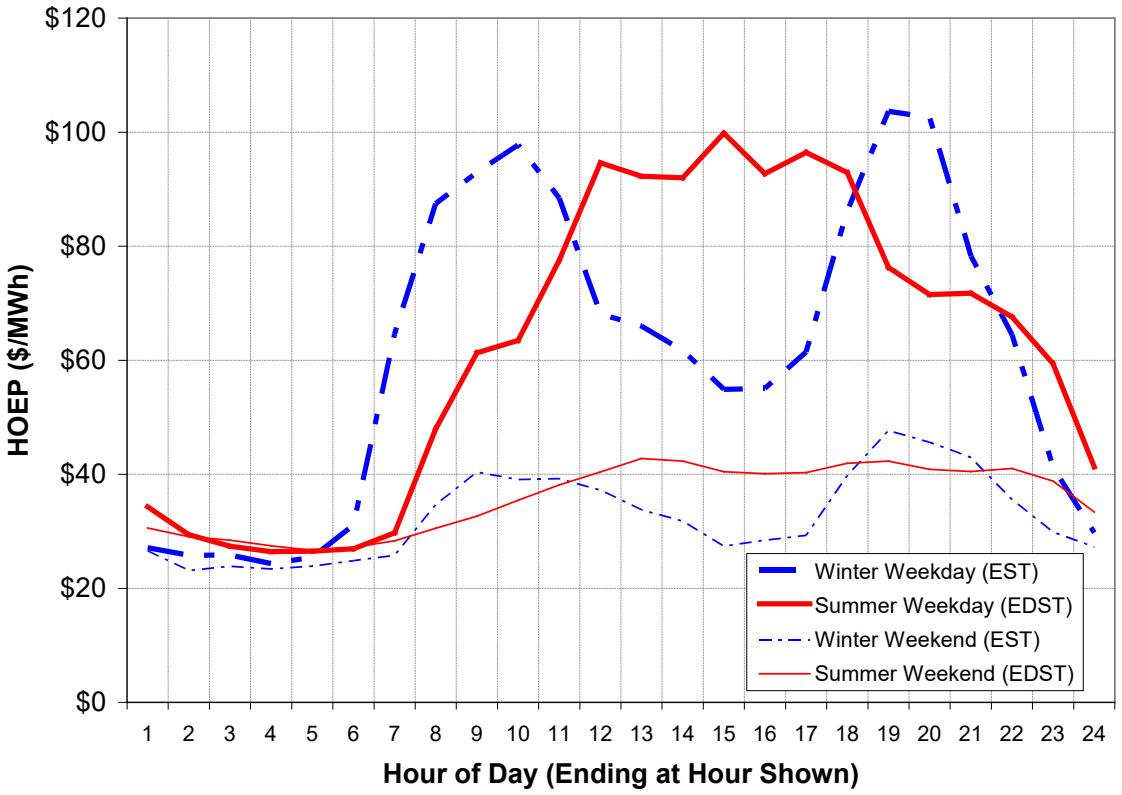
- The times of day at which the three price levels ($RPEM_{OFF}$, $RPEM_{MID}$, and $RPEM_{ON}$) apply:
  - Whether the times will differ in different *seasons* (and if so, how)
  - Whether the times will differ by *day* of the week (weekday vs. weekend); and
- The three price levels ($RPEM_{OFF}$, $RPEM_{MID}$, and $RPEM_{ON}$).

Determination of the Number of Standard TOU~~Time of Use~~ Periods

The number of standard TOU~~time of use~~ periods should be chosen to further the objective of making the prices reflect the changes in supply costs over time in the Ontario electricity market. Since the prices are based on forecasts, the pattern of seasonal prices can also be based on forecasts. The number of standard TOU~~time of use~~ periods was initially determined by the OEB based on the forecast of hourly HOEP, by season, for the first year of the RPP, as described in the initial version of this Manual:

> Figure 4 below shows the forecast of hourly HOEP, by season, for the first year of the RPP. Prices are the forecast HOEP for the hour of day ending at the hour shown on the horizontal axis. The price points are plotted in the middle of the hourly intervals shown and reflect the average HOEP during that interval. Note that the hours and the average HOEP for the summer season in Figure 4 have been adjusted for daylight savings time (i.e., times are given in Eastern Daylight Savings Time for the summer season and in Eastern Standard Time for the winter season).

Figure 4: Forecast Seasonal HOEP



Source: Navigant Consulting

The chart shows some consistency and some difference in the daily patterns of forecast prices in the two seasons.

Winter prices show a pronounced daily peak in the early evening hours, corresponding to residential and commercial lighting and space heating uses, and to residential appliance use. The winter evening peak price lasts from roughly 5 p.m. to 9 p.m. There is an almost equal peak period in the early morning hours, again reflecting commercial and residential lighting and space heating, and residential appliance use. The morning peak period lasts from about 7 a.m. to 11 a.m. While the highest prices in the morning are not as high as the highest evening peak prices, they are noticeably higher than those in the middle of the day. Winter therefore shows a noticeable daily double peak pattern.

In the *summer*, prices start to rise at about the same time as they do in the winter, about 7 a.m., but the most pronounced peak period is spread out over the afternoon, lasting from about 11 a.m. to 5 p.m. This corresponds to residential and commercial air-conditioning use on the hottest summer days. Accordingly,

summer has a single daily peak period. The summer peak prices are close to those of the winter peak, though the averages are somewhat lower.

The pattern of off-peak prices is quite stable for both seasons. Demand falls off sharply after about 11 p.m., and picks up sharply at about 7 a.m.

These data also distinguish between *weekdays, weekends and holidays*. Weekends and holidays have much lower and much flatter forecast hourly prices because the overall demand is lower and the prices are therefore lower. Because the prices tend to be lower for whole weekends, the entire weekend can be defined as an off-peak period.

The choice of periods for different prices should reflect these patterns of market price, but need not directly replicate them. A price that varies too frequently would jeopardize the RPP goal of price stability.

The data indicate a consistent pattern of low, medium and high prices at specific times of the day and season. The data therefore support a three-price pattern.

A standard TOU~~time-of-use~~ pricing structure that comprises three price periods remains appropriate at this time. The OEB's decision to allocate global adjustment costs non-uniformly across the three price periods (see below) can help mitigate the effects of price convergence between the price periods for RPP price-setting purposes.

Times of Application of Prices

The next issue is exactly what times to choose to apply the three prices. The standard TOU~~time-of-use~~ price periods were also initially determined by the OEB based on the forecast of hourly HOEP, by season, for the first year of the RPP. Subsequent HOEP data shows similar patterns of daily and seasonal variation. All of the weekday prices ramp up rapidly at about 7 a.m., making that time the natural choice for the end of the off-peak period in both summer and winter. Prices ramp down in mid-evening in both winter and summer.

Over time, the OEB has made certain changes to the time at which the off-peak period commences on weekday evenings in both winter and summer. In accordance with an amendment to the RPP Regulation,[22] effective May 1, 2011, the evening off-peak period must commence no later than 7 p.m.

These considerations mean that the peak periods (both mid-peak and on-peak) should be from 7 a.m. to mid-evening (7 p.m.) on weekdays in both winter and summer. Off-peak

[22] This amendment was made by O. Reg. 494/10, which came into force on January 1, 2011.

weekday periods are therefore from mid-evening (7 p.m.) to midnight and midnight to 7 a.m.

The on-peak periods should reflect the times of distinctly higher prices. Winter has both morning and evening on-peak periods. The morning on-peak period lasts from about 7 a.m. to 11 a.m. or noon**,** and the evening from 5 p.m. to 8 p.m. or 9 p.m**.** Prices fall off to the mid-peak levels after 9 p.m., and stay there until they fall again after 10 p.m. or 11 p.m. A reasonable on-peak period for *winter weekday* mornings is therefore 7 a.m. to 11 a.m. Having regard to the amendment to the RPP Regulation referred to above, the *winter weekday* evening on-peak period should run from 5 p.m. to 7 p.m.

In the *summer*, the on-peak period for *weekdays* is from 11 a.m. to 5 p.m. Weekend hours have much the same daily pattern as weekday hours, except that prices tend to be flatter throughout the period from 7 a.m. to 10 p.m. Giving *weekends and holidays* only off-peak prices would better reflect their cost conditions.

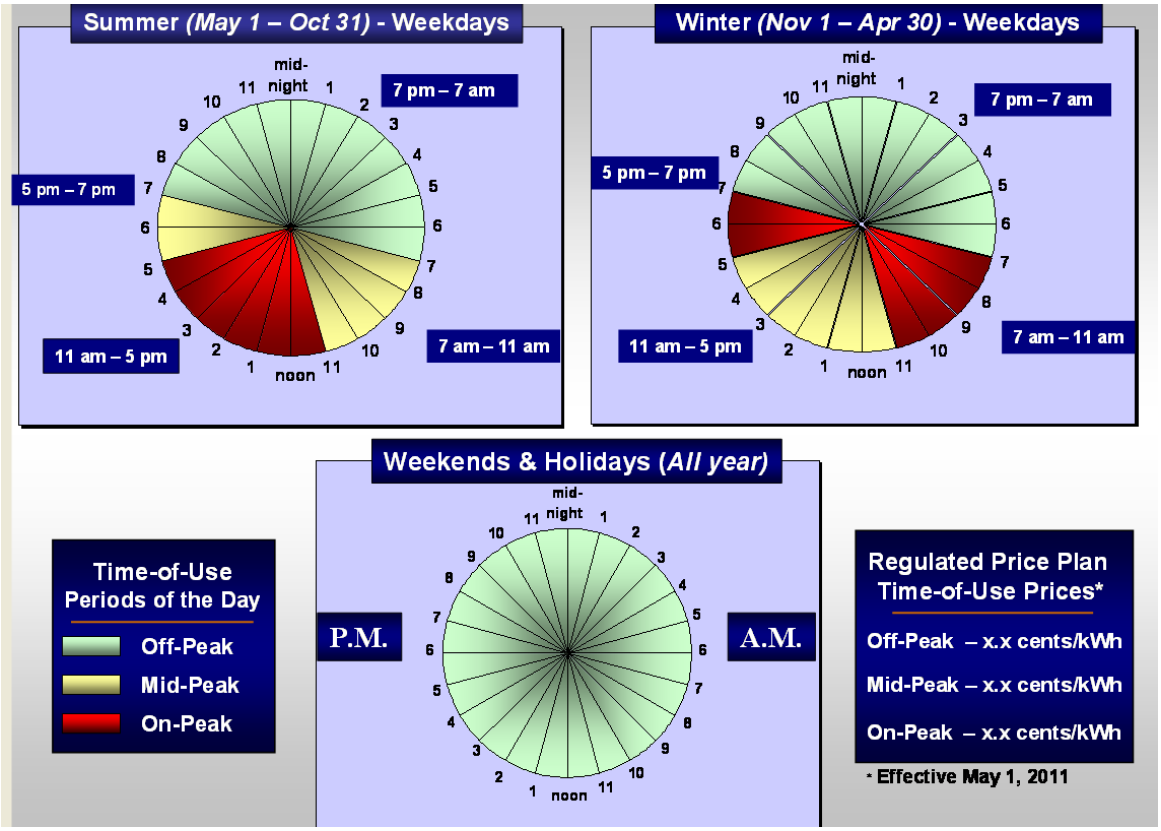
Taking these factors into consideration, the time periods for standard TOU~~time-of-use (TOU)~~ price application are defined as follows and as illustrated in Figure 5.

- *Off-peak* period (priced at RPEM$_{OFF}$):
  - *Winter and summer weekdays*: 7 p.m. to midnight and midnight to 7 a.m.
  - *Winter and summer weekends and holidays*: 24 hours (all day)
- *Mid-peak* period (priced at RPEM$_{MID}$)
  - *Winter weekdays (November 1 to April 30)*: 11 a.m. to 5 p.m.
  - *Summer weekdays (May 1 to October 31)*: 7 a.m. to 11 a.m. and 5 p.m. to 7 p.m.
- *On-peak* period (priced at RPEM$_{ON}$)
  - *Winter weekdays*: 7 a.m. to 11 a.m. and 5 p.m. to 7 p.m.
  - *Summer weekdays*: 11 a.m. to 5 p.m.

Times in the summer are local or daylight savings time.

For the purpose of RPP standard TOU ~~time-of-use~~ pricing, a holiday means: *New Year's Day, Family Day, Good Friday, Christmas Day, Boxing Day, Victoria Day, Canada Day, Civic Holiday, Labour Day, and Thanksgiving Day*. When any such holiday falls on a weekend (Saturday or Sunday), the next weekday following (that is not also a holiday) is to be treated as the holiday for standard ~~RPP~~ TOU ~~time-of-use~~ pricing purposes.

Figure 5: Times of Price Application (Effective May 1, 2011)



Establishing Prices

A basic requirement for standard TOU prices is that they must recover all of the expected costs of the supply; that is, they must average to RPA. They also should reflect the relative costs during the periods when they are being applied. Initially, the OEB allocated GA costs uniformly on a per kilowatt-hour basis across all standard TOU supply. This allocation increased standard off-peak TOU prices proportionally more than on-peak prices, contributing to greater convergence between the three standard TOU pricing periods. The OEB therefore determined that, commencing with prices set in the fall of 2009, the GA costs will be allocated to the standard TOU period when they are generated (in other words, GA costs associated with peak supply costs are recovered through standard peak TOU prices and similarly for off-peak and mid-peak supply costs and prices).

In addition, the load shape of consumers that are charged on the basis of standard TOU~~time of use~~ prices – and therefore the cost of supplying them – will change as they react to the prices themselves; the higher the differential between each of the on-peak, mid-peak and off-peak prices the more consumers can be expected to shift electricity usage.

For the calculations necessary to arrive at ~~the~~ standard TOU prices, it was initially assumed that consumers charged on the basis of those prices have the same load profile as those that are charged on the basis of ~~the~~ tiered prices. However, in 2008, enough data was available from ~~time-of-use~~TOU meters to begin using a load shape specific to consumers being charged on the basis of standard TOU prices.

To begin the calculation, the load profile of consumers on standard TOU~~time-of-use~~ pricing is used to calculate the supply cost for those consumers. This amount is analogous to the RPP supply cost of total demand of participating RPP consumers or quantity M in Equation 1 of Chapter 2. Then this amount is adjusted by the other components of Equation 1. This amount is the RPP supply cost for consumers on standard TOU~~time-of-use~~ pricing which must be recovered by the three prices. [23]

The key to setting these three prices is that they should reflect system value at their times of application, including the specific GA costs associated with each of the standard TOU periods. Standard TOU prices are based on forecasts, as are ~~the~~ tiered prices. To determine standard TOU prices, the production cost model price forecast is analyzed to determine average price levels during the different times of application referred to in Figure 5. Then the process can set prices or price ratios to reflect costs. The OEB may supplement the supply cost model forecast with an econometric model based on Ontario market data. This model may be used to determine an initial set of standard TOU prices which are subsequently adjusted so that these prices recover forecasted supply costs, including GA costs associated with specific standard TOU periods.

After any two of the prices are set, the third price is determined. Forecast prices are required to fully recover the costs of supply, including the specific GA costs associated with peak supply. It is calculated as the price that will meet the forecast supply costs, given the load shape. The price so determined may or may not be fully reflective of the average forecast price in the production cost model during the on-peak hours. Some adjustment may be needed to the other prices to produce a set of three prices that meets the objectives of the standard TOU~~time-of-use~~ pricing structure, as set out above.

The ratio of the prices has therefore been set in a way that reflects the relative forecast costs from the production cost model for the period for which the prices are being set.

An analysis of the forecast data for the first year of the RPP suggested that these prices would occur in the ratio of roughly 1:2:3. This is the relationship that appears in the average forecast prices from those forecasts. That is, the forecast price at the *mid-peak* times, corresponding to $RPEM_{MID}$, is roughly twice that at the *off-peak* times, corresponding

[23] Currently, the prices are set so that their load-weighted average is equal to RPA.

to RPEMOFF, and the forecast price at *on-peak* times, corresponding to RPEMON, is roughly three times RPEMOFF.

In subsequent years, standard TOU price forecasts tended to converge, primarily the result of GA costs becoming a greater percentage of total supply costs and being allocated uniformly. In response to this trend and as noted earlier, since November 1, 2009, the OEB has allocated GA costs non-uniformly according to when these costs are generated, i.e., during peak, mid-peak or off-peak hours. Subsequent price settings show that this type of GA cost allocation has offset some of the convergence trend.

Setting the Ultra-Low Overnight TOU Prices

The ultra-low overnight TOU price plan is designed to provide demand-shifting incentives, while also recovering the same RPA incurred by RPP consumers on standard TOU and tiered price plans. Consistent with the OEB's March 2022 Report to the Minister,[24] the plan comprises four price periods. The OEB will set the prices for each period in accordance with the guidelines presented in Table 1.

Table 1: Ultra-low Overnight TOU Price Plan Price Ratios and Price Periods

Price Period	Hours Applicable (Prevailing Time)	Price
On-peak (ULOON)	Weekdays: 4 p.m. – 9 p.m.	Approximately 10 times greater than the Ultra-low Overnight TOU price
Mid-peak (ULOMID)	Weekdays: 7 a.m. – 4 p.m. and 9 p.m. – 11 p.m.	Equal to standard TOU Mid-peak price
Weekend Off-peak (ULOOFF)	Weekends and Holidays: 7 a.m. – 11 p.m.[25]	Equal to standard TOU Off-peak price
Ultra-low Overnight (ULONIGHT)	Every day: 11 p.m. – 7 a.m.	Calculated so that the Ultra-low Overnight TOU price plan recovers the RPA

[24] Report to the Minister, "Design of an Optional Enhanced Time-of-Use Price", March 2022.
[25] As is the case for standard TOU pricing, for the purpose of ultra-low overnight TOU pricing, a holiday means: New Year's Day, Family Day, Good Friday, Christmas Day, Boxing Day, Victoria Day, Canada Day, Civic Holiday, Labour Day, Thanksgiving Day, and, if any of those days falls on a Saturday or Sunday, the weekday next following that day that is not one of those days: section 1 of the RPP Regulation.

Consistent with the approach taken to develop standard TOU and tiered prices, setting ultra-low overnight TOU prices necessitates calculating the consumption pattern of the consumers on, or expected to join, the price plan. The OEB will base its initial load shape calculation on best available information and will continue to refine its load shape assumptions as additional data on the consumption patterns of customers on the ultra-low overnight TOU price plan is collected.

Unlike standard TOU and tiered prices, ultra-low overnight TOU prices are not subject to seasonal variation. That is, the price periods provided in Table 1 are in effect year-round; they do not change in the summer and winter as do standard TOU and tiered prices.

Price True-Ups for Extraordinary Circumstances

Under some extraordinary circumstances, large unexpected variances (deviations) could accumulate in a short time. This could occur as a result of some major unanticipated event, such as a prolonged unexpected outage of a large generator. As described in Chapter 4 of this Manual, deviations of actual from forecast variances are tracked and monitored monthly. It might be desirable, under such extraordinary circumstances, to take prompt action to bring prices back towards cost to avoid the possibility of accruing undesirably large deviations and, as a result, unusually high price adjustments at the next scheduled RPP price adjustment date.[26]

In general, it would be expected that such action would not be taken on the basis of one or two months' experience, but rather would be considered on a quarterly basis. Quarterly analysis smooths the more extreme variations of monthly results, and should therefore avoid making changes in reaction to a relatively short-term extreme event that does not recur.

For similar reasons, an interim true-up of this kind should only occur when there has been an extraordinary accumulation of deviations from the expected variance, as indicated by the unexpected variance exceeding a trigger value. Considerations in setting the trigger value include the impact on the consumer bill and the probability of such a high unexpected variance occurring.

The trigger value was determined by the OEB in the initial version of this Manual based on the analysis below:

[26] To be clear, where in the course of setting RPP prices, the OEB decides to defer the recovery of a portion of the accumulated variance beyond the 12-month price-setting period, the remaining variance is not "unexpected" and is not factored in when considering whether the trigger value has been met under the true-up mechanism described here.

> Assuming roughly 4 million RPP consumers, the average cost per customer of a $40 million unexpected variance is about $10. That would have a bill impact of under $1 per month, if collected over 12 months. Variance modeling shows that an unexpected variance of about $40 million a month occurs less than 10% of the time. Choosing a trigger value of $160 million would produce an impact of approximately $40 per customer, and a bill impact of about $3.40 per month. Variance modeling suggests that random events would produce an unexpected variance of that magnitude in a single quarter less frequently than once in five years.

Based on these parameters, the initial *trigger value* was set at $160 million – about 4% of the total RPP cost in its first year. If the trigger were set today using these same proportions, the trigger would be about $2650 million.

In 2021 the RPP Regulation was amended to codify the 4% trigger. Specifically, section 6.1 (2) stipulates that the OEB may consider resetting RPP prices if the value of the unexpected variance divided by the RPP supply cost estimate is greater than 0.04 (or 4%).

When a significant *unexpected* variance, informed by reference to the 4% trigger value, accumulates over a quarter that does not conclude with a scheduled ~~semi-~~annual true-up and rebasing, the OEB will evaluate whether a price true-up should be implemented in the form of an RPP price adjustment to begin to recover that variance. It is important to clarify that only the unexpected portion of the variance would be included in the RPP price adjustment at that time.

The price true-up will be calculated as the total unexpected variance divided by the total forecast RPP demand over the next 12 months.

This extraordinary case is the only time that a change in the RPP price is based solely on the need to recover accumulated deviations of the variance from the expected variance (i.e., only retrospective). All ordinary or scheduled RPP price adjustments are based on recovery of both the forecast RPP supply cost and the past accumulated deviations (i.e., both retrospective and prospective).

4. Methodology and Timing for Variance Tracking

Introduction

This chapter sets out the methodology and timing for tracking and monitoring the monthly balances[27] in the IESO variance account, carried for RPP consumers. The monthly variance balance held by the IESO is the difference between the actual RPP supply cost for the month and the revenues collected from RPP consumers for that month.

The *actual* monthly variance account balance is compared against the *expected* monthly variance account balance. This chapter describes the methodology and timing for the calculation of the forecast variance and for tracking deviations of actual from forecast variance. Chapter 3 describes the uses of this information for price rebasing and price true-ups.

The contents of this chapter are:

- Monthly Variances;
- Variance Forecasting;
- Variance Monitoring; and
- Frequency of Variance Monitoring.

Monthly Variances

For all RPP consumers, the RPP prices are set in advance for an entire forecast year. The prices reflect a forecast of average RPP supply cost for the forecast year, adjusted to collect any outstanding variance balance at the beginning of the period. The default time period to bring the expected annual cumulative variance balance as close as technically possible to zero is 12 months. As described in Chapter 3, special circumstances may warrant deferring the recovery of a portion of the variance beyond this 12-month price-setting period).[28] In these limited circumstances, the expected variance may be forecast to be something other than zero at the end of 12 months.

The actual RPP supply cost in each month can be expected to vary in a systematic way from the forecast average monthly RPP supply cost. This is because both price and demand conditions vary over the year. For example, in the shoulder months, market

[27] This discussion is in terms of monthly variances because that is the frequency with which the IESO accumulates variance data.

[28] Due to the need to round RPP prices to a tenth of cent, it is not possible to bring the expected variance balance to exactly zero when prices are adjusted.

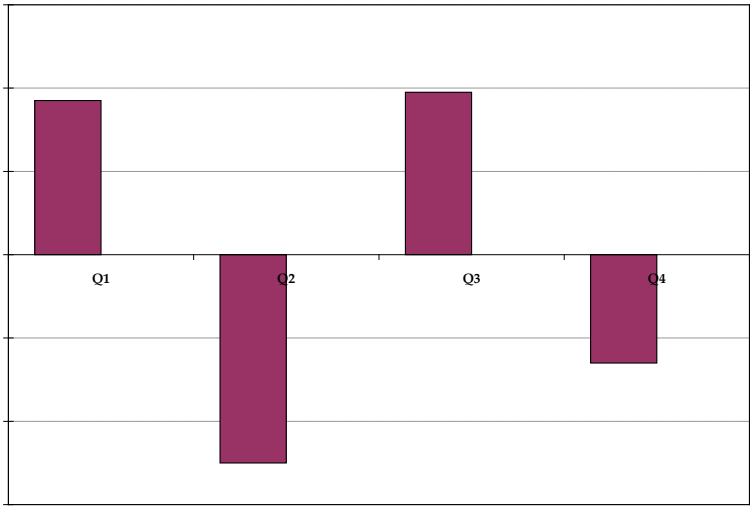
prices will tend to be lower than the annual average, producing a monthly RPP supply cost that is lower than its annual average. In the peak demand months, the market can be expected to produce a monthly RPP supply cost that is higher than its annual average.

These considerations lead naturally to the expectation that, in lower-price months, a consumer credit balance can be expected to accumulate in the variance account; in higher-price months, a consumer debit balance can be expected to accumulate in the variance account. Although the average RPP price or RPA is normally chosen to produce a zero expected value of the cumulative variance over the year, the expected value of the variance in each month is not zero.

In addition to the normal seasonal trends in consumption patterns discussed above, the residential seasonal tier thresholds also need to be taken into account. While there is only technically a single average RPP price (or RPA), the residential threshold is higher in winter (1000 kWh) than in summer (600 kWh). This means that the average price most tiered price RPP consumers pay will be lower in winter than in summer, since they will have less consumption at the higher tiered price in the winter. Thus, variance clearance will vary from summer to winter.

The expected monthly variances can be aggregated into expected quarterly variances, with each quarter representing three months of RPP supply. Figure 6 provides an illustrative example of the possible expected quarterly variances over a single RPP year.

Figure 6: Illustrative Expected Quarterly Variances



The *actual* RPP supply costs are not expected to exactly match the *forecast* RPP supply costs, in any given month or quarter, nor are *actual* RPP revenues expected to exactly match *forecast* RPP revenues. These differences will create an "unexpected" variance. The term unexpected is used to differentiate this from expected variances that can be forecast

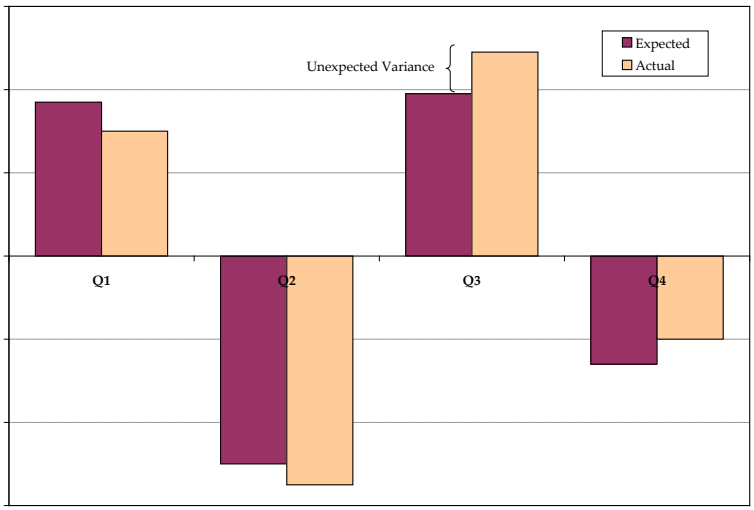
based on expected monthly and seasonal consumption and supply cost patterns. The unexpected variance in a given period is simply the difference between the actual RPP revenue and the actual RPP supply cost less the expected variance for the period.

In mathematical terms, the unexpected variance for a given period can be defined as follows:

Unexpected Variance = Actual RPP Revenue - Actual RPP Supply Cost - Expected Variance

This is illustrated in Figure 7. In the illustration, the actual variance in the third quarter is greater than the expected variance and the difference between the actual variance and the expected variance is the unexpected variance.

Figure 7: Illustrative Unexpected Quarterly Variances



For the purpose of considering changes in the RPP price, the size of the variance must be monitored. Variances must be trued up so that the actual cost of RPP supply is recovered over time. However, in monitoring the monthly variance, the quantity to be monitored is not the actual variance itself but the unexpected variance in that month. The unexpected variance can be summed over the periods in the year to determine the cumulative unexpected variance. At the end of the year, the cumulative unexpected variance and any expected variance will be trued up in the next RPP period.

Variance Forecasting

The methodology for setting RPA requires modeling variances of the actual RPP supply cost from the forecast RPP supply cost. For that purpose, a probabilistic model is constructed which models the events that can produce variances from the forecast RPP supply cost, given assumptions about the probability distribution of the key driving

variables. The model results are then used to establish the expected value of the variance. This variance model is the basis for the forecast of expected monthly variances.

A monthly variance forecast is produced ~~every six months~~annually each time that RPP prices are reset because variance modeling is done at that time. The variance forecast uses monthly forecasts of the variables driving the monthly RPP supply cost. These variables include electricity demand and generation availability. These factors are taken at their values from the production cost model, either as inputs to or outputs from that model. The variance model also takes account of the historical volatility of HOEP. These values are then used to produce forecasts of the monthly variance.

Variance Monitoring

Two variance totals are calculated and monitored. The first is the cumulative actual variance, as seen in the variance account of the IESO. That amount is the cumulative difference between the actual RPP supply cost and the revenues collected from RPP consumers. It is the amount that must ultimately be collected from consumers, if it is a consumer debit, or paid to them if it is a consumer credit.

However, as noted above, recovering that cumulative actual variance amount may not require any additional action. If the cumulative actual variance in any month is the amount forecasted for that month, it will be expected to be offset by variances in the opposite direction in the coming months to result in the expected variance at the end of twelve months from the time of price resetting.

For considering true-ups the relevant amount is therefore the unexpected variance. The monthly unexpected variance is monitored for information and to understand trends. The unexpected variance is also accumulated into a quarterly total (as illustrated in Figure 7). The quarterly cumulative unexpected variance is also monitored for its potential to trigger an extraordinary true-up, as described in Chapter 3.

The total cumulative unexpected variance is the amount to be trued up, as described in Chapter 3 of this Manual. Appendix A describes the equations used to determine the total cumulative unexpected variance.

Frequency of Variance Monitoring

The process described above occurs monthly. The actual cumulative variance is available on a monthly basis from the IESO, and the OEB performs the steps listed in this chapter to monitor its deviation from the forecast for that month.

Although the monitoring is monthly, the decision on price resetting and true-ups, as described in Chapter 3 of this Manual, is taken annuallyevery six months. There is also provision for a true-up as an extraordinary event if the quarterly unexpected variance exceeds a trigger level.

5. Timing for RPP Price Adjustments or Price Structure Changes

Introduction

This chapter sets out how long in advance new RPP prices or changes in RPP price structure will be determined by the OEB prior to the date on which the new prices or structure are to come into effect. This reflects the period of time that distributors will have to implement price level or price structure changes and can be considered as a notification period to distributors. The time periods discussed below are consistent with section 3.8 of the SSS Code, which contains provisions that require distributors to notify RPP consumers of RPP price or price structure changes.

New RPP prices are computed ~~at six-month intervals~~annually and are the result of an integrated consideration of re-basing and true-ups. Price changes become effective ~~at the beginning of a calendar month~~on November 1 of each year.

The contents of this chapter are:

- Timing of Notification of Price or Price Structure Change; and
- Timing of Implementation by Distributors.

Timing of Notification of Price or Price Structure Change

Most RPP price changes will adjust only the RPP price level(s). For such changes, distributors expect a minimum of about 30 days of lead-time before customers can be billed based on the new RPP price. Since distributors do not start to send out bills to consumers based on the new price until about 15 days after its implementation, the 30-day distributor lead-time is achieved by setting the new prices at least 15 days before the beginning of the month in which the new prices are to be implemented. New prices are therefore set (and distributors are thus informed) generally 15 days before distributors begin charging those new prices to consumers. This applies to changes in any RPP price, namely, to changes to any of $RPCM_{T1}$, $RPCM_{T2}$, $RPEM_{OFF}$, $RPEM_{MID}$, ~~and~~ $RPEM_{ON}$, ULO_{NIGHT}, ULO_{OFF}, ULO_{MID}, and ULO_{ON}. This also applies to price changes that are intended to true-up prices as a result of extraordinary circumstances, as described in Chapter 3.

Changes to the RPP price structure include changes to tier thresholds[29] and any other change affecting an RPP element other than the price level(s). For changes to the RPP price

[29] This does not include the normal seasonal change in the residential tier threshold (600 kWh per month in the summer and 1000 kWh per month in the winter).

structure, distributors expect 90 days of lead-time, or 75 days before the changes are to be implemented. Therefore, structural changes are targeted to be determined by the OEB (and distributors are thus informed) at least 75 days before their implementation date.

Timing of Implementation by Distributors

Distributors will charge RPP consumers based on new RPP prices or a new RPP price structure for consumption on and after the first day of the month of implementation. For some RPP consumers, the first day of the month will not correspond to a meter reading, so the SSS Code permits distributors to pro-rate for the billing period within which the price or price structure change takes effect. The method to be used by distributors for proration is set out in the SSS Code.

6. METHODOLOGY FOR DETERMINING FINAL RPP VARIANCE SETTLEMENT AMOUNTS

Introduction

This chapter explains the methodology to be used by distributors to compute final settlement variance amounts for RPP consumers leaving the ~~regulated price plan~~RPP. This is the methodology referred to in section 3.7.1 of the SSS Code.

As shown in Figure 2 of Chapter 1, the IESO carries a variance account representing the accumulated difference between the actual RPP supply cost and the revenues collected from RPP consumers. Consumers who do not leave the RPP will pay or receive the benefit of the accumulated variance over the next 12 months through the component of the RPP price that reflects past variances,[30] as described in Chapter 3 of this Manual. However, once consumers leave RPP supply,[31] they no longer pay RPP prices and therefore no longer pay or receive the benefit of their share of past cumulative variances. For that reason, these consumers will be responsible for a final RPP variance settlement when they leave RPP supply since the RPP price determination assumed that they would have remained on RPP for the full 12 months.

The final RPP variance settlement amount could be positive or negative. In other words, depending on the status of the variance account held by the IESO, the consumer could either receive a payment (i.e., credit) or be required to make a payment (i.e., debit).

The contents of this chapter are:

- Determination of Final RPP Variance Settlement Amount and Rate; and
- Final RPP Variance Settlement Amount Calculation.

[30] RPP consumers are also responsible for paying any interest costs incurred by the IESO in relation to the variance account. A consumer leaving the RPP is also responsible for a share of these interest costs. Equation 2 takes into account that such costs are reported monthly to the OEB and are added to the variance that is reported to the OEB by the IESO each month.

[31] That is, move out of Ontario, switch to the spot market option or to a competitive retailer, or cease to be eligible for the RPP.

Determination of Final RPP Variance Settlement Amount and Rate

The variance amount that is the basis for the final RPP variance settlement is the cumulative variance held by the IESO, referred to in Equation 2 below as CV_t. That cumulative total is the total variance of the actual RPP supply cost from the revenues collected from RPP consumers. It is therefore the amount that will be collected or credited in the future from or to consumers remaining on RPP supply. It will be collected from or credited to them in the future through the RPP prices they pay. When consumers leave RPP supply, they will not be paying RPP prices and therefore will no longer be paying or receiving the benefit of any of that cumulative variance. The amount the individual consumer would be responsible for or entitled to will therefore be estimated, and recovered or paid, by the distributor at the time of leaving RPP supply.

To facilitate this variance account settlement procedure, the IESO reports monthly to the OEB on the accumulated balance in the IESO's RPP variance account. In addition, the IESO reports the accrued interest on the RPP variance account. The OEB converts the sum of these amounts into a per kWh variance recovery amount (referred to in Equation 2 below as V_{FS}) for final settlement by dividing the total accumulated variance by the actual total RPP consumption in the preceding 12 months. The per kWh variance amount is communicated by the OEB to the distributors to use in final settlement and is also made public on the OEB's web-site. This communication and web-site posting is done on or around the 15th of each month.

The calculation of this per kWh variance amount is given in Equation 2 below:

Equation 2

$$V_{FS} = CV_t / D_{12}$$

Where V_{FS} = the variance amount for final RPP settlement, per kWh

CV_t = cumulative variance total in the IESO account at the end of month t; and

D_{12} = the total consumption from RPP consumers over the 12 months before (and including) month t.

V_{FS} expresses the cumulative variance on a per unit basis for the most recent 12 months prior to leaving the RPP, and is an approximation of the rate at which any RPP consumer would make payments towards the cumulative variance.

For consumers that remain on RPP, the expected portion of the cumulative variance will be recovered through RPP prices over the remainder of the RPP term and the unexpected portion of the cumulative variance will be recovered when prices are trued up. The

amount per kWh that will be recovered is the cumulative variance divided by the forecast of total RPP consumption over the year.

Final RPP Variance Settlement Amount Calculation

The final variance settlement process collects or credits an appropriate amount from a consumer leaving RPP supply. The amount to be collected or credited in relation to a given consumer is V_{FS} times that consumer's actual consumption over a specified period of time (the "Final Settlement Consumption Period"). The Final Settlement Consumption Period to be used depends on how long the consumer was on RPP supply before leaving the RPP:

(a) For a consumer that was on RPP supply for a continuous period of 12 months or more, the Final Settlement Consumption Period is the 12 months preceding the consumer's departure from the RPP.

(b) For a consumer that was on RPP supply for a continuous period of less than 12 months, the Final Settlement Consumption Period is the actual period during which the consumer was continuously on RPP supply prior to the consumer's departure from the RPP.

If a distributor does not have a precise total for the consumer's actual consumption over the applicable Final Settlement Consumption Period, the distributor must reasonably estimate the consumer's consumption over that period. This must be done by using actual meter readings to the maximum extent possible and interpolating to get an estimate of what the meter reading would have been on the date that corresponds with the beginning of the applicable Final Settlement Consumption Period.

Where the consumer that departs the RPP has been a customer of the distributor for less than 12 months, the distributor shall, for the purposes of determining the Final Settlement Consumption Period, take into account the length of the customer's continuous RPP supply in another service area immediately prior to opening of the customer's account if that information is known to the distributor.

A distributor must collect or credit this final RPP variance settlement amount from each consumer leaving RPP supply under the conditions described in section 3.7.1 of the SSS Code. For this amount then to be properly credited to or debited from the IESO variance account, it must be reported to the IESO under procedures established by the IESO.

APPENDIX A: TRUE-UP EQUATIONS

This appendix describes the equations used to determine the cost variance component of the process shown in Figure 2 on page 1.

The actual variance is always calculated as a cumulative total:

(1) $CV_{t+1} = CV_t + V_t$,

Where CV_{t+1} = actual cumulative variance in time t + 1,
CV_t = actual cumulative variance in time t, and
V_t = actual variance in time t as reported by the IESO.

The cumulative forecast variance is also always calculated as a cumulative total:

(2) $FCV_{t+1} = FCV_t + FV_t$,

Where FCV_{t+1} = forecast cumulative variance in time t + 1,
FCV_t = forecast cumulative variance in time t
FV_t = forecast variance in time t.

Then the unexpected variance in time t is

$UV_t = FV_t - V_t$

Where UV_t = the unexpected variance in time t.

The cumulative unexpected variance is

$UCV_{t+1} = UCV_t + UV_t$

Where UCV_{t+1} is the cumulative unexpected variance in time t+1.

The amount to be trued up is then always the cumulative unexpected variance at the time of true-up~~, or UCV_6 for a true up at six months~~. As discussed in Chapter 3, the OEB may in special circumstances decide to set RPP prices with a view to recovering the variance over a period longer than 12 months (i.e., to defer the recovery of a portion of the variance until after the 12-month RPP price-setting period).