

# **Standard Supply Service Code Implementation**

## **Discussion Paper for Stakeholder Workshop**

**prepared by Board Staff**

**ONTARIO ENERGY BOARD**

**February 11, 2000**

## Table of Contents

<b>1.</b>	<b>Introduction and Background</b> .....	<b>1</b>
<b>2.</b>	<b>Purpose of this Document</b> .....	<b>1</b>
<b>3.</b>	<b>Pricing of SSS</b> .....	<b>2</b>
<b>3.1</b>	<b>Definition of the 50kW Peak Demand Level</b> .....	<b>2</b>
<b>3.2</b>	<b>Details of the Spot Price Forecast for the Fixed SSS Price for Small Volume Customers</b> .....	<b>3</b>
<b>3.3</b>	<b>Spot Price Pass-through for Large Volume (&gt;50kW) Customers</b> .....	<b>4</b>
<b>4.</b>	<b>Direct Procurement of Power For SSS by Distributors</b> .....	<b>5</b>
<b>4.1</b>	<b>Definition and Administration of the Purchase Power Variance/Deferral Account (PPVA)</b> .....	<b>7</b>
<b>4.2</b>	<b>Calculation and Recording of PPVA Carrying Costs</b> .....	<b>7</b>
<b>4.3</b>	<b>Interest Rate Used in the Calculation of PPVA Carrying Costs</b> .....	<b>7</b>
<b>4.4</b>	<b>Trigger Mechanism for PPVA Disposition</b> .....	<b>7</b>
<b>4.5</b>	<b>Settlement of PPVA costs on Customer Exit</b> .....	<b>8</b>
<b>4.6</b>	<b>Mechanics of the True-Up</b> .....	<b>8</b>
<b>4.7</b>	<b>Annual Clearance of PPVA Account</b> .....	<b>8</b>
<b>4.8</b>	<b>Roll Forward True-Up versus One-Time Adjustment</b> .....	<b>8</b>
<b>4.9</b>	<b>Coordination of the Annual True-Up with the Market Power Mitigation Rebate</b> .....	<b>9</b>
<b>5.</b>	<b>Procurement of Power for SSS Using Third Party Supply</b> .....	<b>9</b>
<b>5.1</b>	<b>Minimum Contract Features</b> .....	<b>9</b>
<b>5.2</b>	<b>Requirement for Review of Contract Pricing and Rate Review</b> .....	<b>9</b>
<b>5.3</b>	<b>Rate Benchmarking</b> .....	<b>9</b>
<b>6.</b>	<b>SSS Service Charges</b> .....	<b>11</b>
<b>6.1</b>	<b>Calculation of SSS Standard Administrative Charge</b> .....	<b>11</b>

## **1. Introduction and Background**

On October 18, 1999, the Ontario Energy Board issued its *Decision with Reasons in the Matter of a Proposed Standard Supply Service Code for Electricity Distributors* (the “Decision”). To complete the proceeding, the Decision identified a number of implementation issues that would require further development in the form of guidelines and filing requirements. Upon Board approval, these requirements will be incorporated into the Board’s Distribution Rate Handbook.

Paragraph 4.2.2 of the Decision states:

*The Board Panel’s comments herein regarding implementation of SSS pricing, procurement and rates will form direction to Board staff in the development of guidelines and filing requirements for the Board’s approval of SSS rates. The Board Panel anticipates that stakeholders will be consulted prior to finalization, and the resultant requirements and methodologies will be incorporated into the Board’s rate setting process for SSS.*

More specific requirements to complete the process are found in Paragraph 4.2.3 of the Decision. These requirements include:

- Detailed methodology for the pricing and procurement of standard supply;
- Specific rules relating to the distributors’ true-ups;
- Administration of the PPVA;
- Methodology for setting the rate to be charged by third parties delivering standard supply;
- Mechanism to determine that third party SSS rates are just and reasonable; and
- Minimum contract requirements to be imposed by utilities on third party providers.

Board staff launched this implementation process at a November 10, 1999 Information Session on the *Standard Supply Service Code* (the “Code”). Staff then prepared a draft Issues List which was sent to stakeholders for commentary on December 13, 1999. Staff has received and taken into consideration comments on the completeness of the issues list.

## **2. Purpose of this Document**

The purpose of this paper is to provide the basis for discussion of implementation issues leading towards the development of final guidelines. It follows the numbering/heading system presented in the draft Issues List and for each issue, outlines the following:

- the Board’s Decision or guidance on the issue;
- a statement of the issue; and

- options for implementation.

### **3. Pricing of SSS**

#### **3.1 Definition of the 50kW Peak Demand Level**

3.1.1 The Decision [Findings Paragraph 3.1.10] states, in part:

*Section 2.5.2 of the Draft Code should accordingly be amended to read:*

*[Section 2.5.2] The price for electrical energy provided to large volume consumers with a peak demand of greater than 50 kW, under standard supply service shall be the weighted average hourly spot market price for electricity, for the period over which the customer is billed, weighted according to the hourly consumption of the standard supply service as measured by a meter or estimated using a [load] profile methodology approved by the Board. The price for electrical energy provided to small volume/residential consumers with a peak demand of 50kW or less, under standard supply service shall be a fixed price, subject to terms established by the Board.*

3.1.2 Issues

- (i) There is a need for a definition of the “peak” demand which differentiates small volume/residential consumers on fixed pricing from large volume consumers using a pure spot price pass-through. Small volume/residential consumers, which represent the majority of LDC customers, use kilowatt-hour meters which do not record hourly demand data.
- (ii) There may be a need for a guideline to enable utilities to deal with customers who “straddle” or are very close to the 50kW level but want to qualify for the alternate; either fixed or variable pricing.
- (iii) There may be a need to consider interval metered customers with demand levels below the 50 kW level.

3.1.3 Options

- (i) Establish the non-coincident peak demand (NCP) as the measure for the 50kW differentiation level. The peak demand could be defined as the customer’s NCP demand over the previous calendar year. If annual historical data are not available, a reasonable usage estimate or data from any recent monthly period would be appropriate.
- (ii) A variation on this would be to examine the data on a monthly peak basis rather than

## SSS Code Implementation - Staff Discussion Paper for Stakeholder Workshop

---

annual.

- (iii) Other options would include using the coincident peak demand for a customer by class of customer.

3.1.4 The energy usage records should be reviewed periodically and re-classifications made as appropriate. The review standard could be annually. The LDC could review individual customer eligibility more frequently if a material change occurs.

3.1.5 To deal with customers at the threshold with interval meters, annual re-determination to reflect any changes in energy demand should be required.

3.1.6 Data Availability

- data is readily available for interval metered customers
- data can be estimated for kilowatt-hour metered customers using the Net System Load Shape methodology (NSLS)

3.1.7 The rules for reclassification of a customer would be incorporated into the Board's Distribution Rate Handbook.

### **3.2 Details of the Spot Price Forecast for the Fixed SSS Price for Small Volume Customers**

3.2.1 The Decision [Comments Paragraph 3.1.13] states:

*The utility SSS price will be based on the twelve months spot price, as forecasted by the IMO, times the utility specific net system load shape (the previous year's load shape, minus the aggregate interval metered load).*

3.2.2 Issues

- (i) There is a need to establish a forecast or reference price.
- (ii) The IMO considers it inappropriate to provide spot prices for rate making purposes given its role as the operator of the market.
- (iii) In recognition of the lack of forecast data, at least for the initial period prior to the availability of alternative forecasts, establishing one average price for an entire year may be preferable to attempting to reflect expected hourly, daily or seasonal pricing variability

even though forecasting error may be higher.

- (iv) The Board will establish the initial SSS reference price for Year One. Thereafter, the historical year's data base could be of assistance for the subsequent year's forecast.
- (v) Longer term, more reliable historical data will be available and forward market information may be available to enable the development of a more detailed price forecast, possibly reflecting seasonal, monthly or intra day variability. The implementation issues surrounding such a forecast would be addressed at that time (perhaps in conjunction with 2<sup>nd</sup> generation PBR rate setting).

### 3.2.3 Options

There are two main options which the Board could use:

- (i) Obtain independent forecasts; or
- (ii) Use a proxy price.

3.2.4 Before market opening, engaging independent price forecasters would present difficulties in light of the insufficient historical data.

3.2.5 An estimate of a proxy price could be made based on incremental generation costs, however this is defined.

3.2.6 One available proxy is the "Price Cap" of 3.8 cents per kWh established as a condition of OPGI's licence. Using this price as a basis may be reasonable given the fact that about 90% of the generation in Ontario's market in 2000 and 2001 will be produced by OPGI. There are, however, exclusions from the pricing provisions of OPGI's licence meaning that the average annual power price could rise above 3.8 cents per kWh in certain circumstances. This might be taken into account in the development of the SSS reference price forecast. It may be appropriate for the 3.8 cents per kWh "Price Cap" to be adjusted upwards by way of an adder to reflect the conservative nature of the 3.8 cent average price forecast. If an upward adjustment is warranted, the issue then becomes: how is the additional amount defined?

### 3.3 Spot Price Pass-through for Large Volume (>50kW) Customers

3.3.1 The Decision [Comments Paragraph 3.1.14] states:

*Large consumers with individual interval metering would be billed on hourly spot prices and actual hourly use over the billing period. Large consumers with demand meters*

*would be billed on hourly spot prices and actual usage. The hourly allocation of usage for these consumers would be based on a load profile to be approved by the Board (for example, the net system load shape).*

3.3.2 The settlement system matter is dealt with in the Retail Settlement Code which will soon be issued.

#### **4. Direct Procurement of Power For SSS by Distributors**

4.1.1 This section deals with the Decision's references to the creation of a PPVA and its clearance or disposition via the true-up mechanism. The principles set out in the Decision appear to limit the scope of the PPVA options since the Decision's findings direct that:

- The fixed reference price should be set and maintained for no less than one year and;
- At year-end, any balance in the PPVA must be rolled forward into the calculation of the next year's reference price.

The Decision's comments indicate:

- In-year true-ups of a PPVA balance might be permitted;
- Since a fixed reference price is mandated such true-ups would have to be made through the use of a one-time adjustment (credit or debit charges);
- In-year true-ups could not be done so frequently as to violate the principle of providing a fixed price to the consumer (e.g. true-ups may take into consideration seasonality factors such as seasonal price spikes);
- The use of a "trigger" mechanism, similar to that employed by regulated gas utilities might be advantageous; and
- The Decision appears to allow the settlement of an individual consumer's PPVA upon exiting the SSS option, including an exit from the LDC's service territory.

The following are some of the relevant paragraphs from the Decision on the PPVA. The sub-sections under this general heading all relate to the PPVA and clearance issues.

4.1.2 The Decision [Findings Paragraph 3.1.10] states:

*The Board finds that on balance, small volume/residential consumers should receive a "fixed" one year price for SSS with annual "true-ups" to reflect the actual average spot market price as a component of the next year fixed price. Large volume consumers should receive a spot price pass-through.*

- 4.1.3 The Decision [Comments Paragraph 3.2.14] states:

*One such [risk management] mechanism is a Purchase Power Variance/Deferral Account (PPVA) to account for differences between the forecast fixed reference price for small volume/residential and general service consumers and the actual spot market power cost of the utility for these customers.*

- 4.1.4 The Decision [Comments Paragraph 3.2.15] states:

*The PPVA balance could be cleared and the credit/debit taken into account and thereby allocated to customers at the time that the fixed SSS price is set for the subsequent “contract” period. In practice for a January price change, the amount of the credit/debit balance could, for example, be based on 9 months actual and three months forecast with any difference at year end forming the opening balance in the PPVA for the next year. This approach is similar to that utilized by Ontario gas utilities for “truing up” the Purchase Gas Variation Account, except that in the latter case the debit/credit is normally rebated or charged as a one time adjustment to system gas customers. There are some intergenerational inequities created by such a PPVA system since existing customers get the “true-up” in their next year’s contract price while SSS customers that have left the utility during the year avoid the true-up. This could skew the forward market if the true-up premium was significant.*

- 4.1.5 The Decision [Comments Paragraph 3.2.16] states:

*The Board Panel has considered whether administration of the PPVA could include quarterly adjustments based on the most recent year forward spot price forecast. This type of adjustment is an attempt to ensure that PPVA balances and true-ups at year end are minimized. Under this approach the distributor would apply in year to either clear the account and/or reset the reference price and rate if the forecast year end is felt to be too large. On balance the Board felt that the administrative complexities for 250 distributors may be too great and a fixed price period of one year with a true-up for the next year is more workable.*

#### **4.2 Definition and Administration of the Purchase Power Variance/Deferral Account (PPVA)**

- 4.2.1 There is a need for an appropriate accounting definition to be included in the Accounting Procedures Handbook. Board staff offers the following as a draft definition of the PPVA.

Definition of the Purchase Power Variance/Deferral Account (PPVA):



The PPVA shall record the difference between the cost of power billed to small volume/residential and general service consumers by SSS providers under Section 29 of *The Electricity Act, 1998* using a Board-approved fixed SSS reference price and the cost of power billed to the SSS provider by the IMO using the spot market cost of power for these same consumers. Entries in the PPVA shall be made in accordance with the Board's Accounting Procedures Handbook for Electric Distribution Utilities and will be co-ordinated with entries in the Retail Settlement Variance Account (RSVA).

#### **4.3 Calculation and Recording of PPVA Carrying Costs**

#### **4.4 Interest Rate Used in the Calculation of PPVA Carrying Costs**

4.4.1 The Decision [Comments Paragraph 3.8.1] states, in part:

*The Board Panel recommends that a Board-approved standard service charge for SSS shall be set for each utility in accordance with Section 2.5.3 of the Draft SSS Code. This charge shall cover the incremental costs of settlement of SSS accounts and the carrying costs of the balance in the PPVA if such an account is approved.*

4.4.2 Options

- (i) For consistency, the options should be limited to those outlined in the Retail Settlement Code. They will be added at a later date in the Draft SSS Guidelines.

#### **4.5 Trigger Mechanism for PPVA Disposition**

4.5.1 Issue

- (i) The PPVA balance may become large enough to warrant in-year true-ups via a one-time adjustment mechanism prior to year end to lessen the effects of the year-end true-up.

4.5.2 Options

- (i) For an in-year true-up, the Board could employ a trigger mechanism which would be based on the impact of the disposition of the PPVA on the customer's total bill. For example, if the PPVA balance is equal to, say, 10% of the typical/average customer's total bill, then an in-year true-up could be proposed to the Board.
- (ii) Another option could be a requirement for an automatic in-year true-up for all utilities based on a time period (e.g., quarterly).

#### **4.6 Settlement of PPVA costs on Customer Exit**

##### 4.6.1 Issues

- (i) Should the PPVA be settled with the customer upon the customer's SSS system exit?
- (ii) Standard rules need to be established and the methodology provided for in the Rate Handbook. For example, what information does the Board need to approve of the PPVA disposition mechanism? How is the calculation made? Can it be done in a timely manner? How can the Board verify that calculations are done in accordance with the rules?

##### 4.6.2 Options

- (i) A customer specific, one-time adjustment option for the PPVA could mitigate some of the issues. The information needed would be customer account data subsequent to the last true-up or since the customer entered SSS. Energy consumption, actual pricing, PPVA and thus, final PPVA billing could be calculated at the conclusion of any billing cycle for any small customer using NSLS hourly weights. The process would apply to customers entering and exiting the SSS system.

#### **4.7 Mechanics of the True-Up**

#### **4.8 Annual Clearance of PPVA Account**

#### **4.9 Roll Forward True-Up versus One-Time Adjustment**

##### 4.9.1 Issue

- (i) The key issue is developing the PPVA mechanisms, including the regulatory rules for clearance of the PPVA. Rules would be incorporated into the Rate Handbook. Mechanisms would need to be developed for timely dispositions that allow approval by the Board.

##### 4.9.2 There is a distinction between the two types of PPVA clearance.

- (i) The Roll Forward True-up effectively adjusts the next period's reference price. For SSS, this true-up would apply to any balances remaining in the PPVA at year-end and accordingly, would adjust the next year's "fixed" reference price.
- (ii) The One-Time Adjustment True-up clears the PPVA balance in-year and settles with customers as a charge or rebate. It could be performed more than once a year, if

necessary. The true-up would be used as an in-year smoothing mechanism to deal with PPVA balances that are deemed to be too large. It could include a trigger that would define how often the true-up is needed and when the true-up would occur.

#### **4.10 Coordination of the Annual True-Up with the Market Power Mitigation Rebate**

4.10.1 The Market Power rebate and PPVA clearance could have off-setting effects which would, collectively, lessen the impact of the true-up. The issue is about the timing of the rebate versus the timing of the PPVA. If they are timed together, the net impact of the PPVA could be mitigated.

### **5. Procurement of Power for SSS Using Third Party Supply**

#### **5.1 Minimum Contract Features**

#### **5.2 Requirement for Review of Contract Pricing and Rate Review**

#### **5.3 Rate Benchmarking**

5.3.1 Section 5 of this paper deals with the issues for LDCs who elect to procure their SSS requirements using third party arrangements as opposed to procuring directly from the spot market. The following are some relevant paragraphs from the Decision on this topic.

5.3.2 The Decision [Findings Paragraph 3.2.4] states, in part:

*In the Board's view if a third party supply is chosen [for power procurement], there must be adequate criteria to ensure that both the resulting rates are just and reasonable and, as a subset of that criterion, that the rates are no higher than if the distributor procured and sold the electricity directly.*

5.3.3 The Decision [Comments Paragraph 3.2.17] states:

*The Board panel expects that distributors that elect to fulfill their SSS obligation through an affiliate or third party contractor will ensure that the arrangements minimize risk to the utility and that the rates charged by the distributor for SSS are just and reasonable. In addition to the criteria set out in section 2.2.3 of the Draft SSS Code, the Board will need to be convinced that the rates charged for SSS are not higher by virtue of the arrangements underlying affiliate or third party procurement.*

5.3.4 The Decision [Comments Paragraph 3.2.18] states:

## SSS Code Implementation - Staff Discussion Paper for Stakeholder Workshop

---

*The Board Panel has also considered whether there should be rules for utilities to apply to affiliate and third party procurement of power for SSS consumers. In order to ensure that risk to the utility is managed and SSS rates are appropriate, the Board could require certain minimum features are incorporated in contracts including annual price re-determination and no limits on volume adjustments to allow for consumer mobility. In addition, the Board could find it appropriate to employ a benchmark comparison of utility SSS rates proposed by those utilities electing to use affiliate and /or third party procurement.*

### 5.3.5 Issues

- (i) Should there be some definition of pricing and other contract requirements to provide direction to LDCs wishing to pursue third party supply of SSS?
- (ii) Would guidelines from the Board assist industry and others in their assessment of how the Board might be satisfied that SSS rates are “not higher by virtue of the arrangements underlying affiliate or third party procurement” (other than an *ex-post* review)?
- (iii) How should the Board ensure that third party supply arrangements do not inhibit customer mobility (on and off SSS)?

### 5.3.6 Options

- (i) The standard could be the Board-approved reference price as there is no other comparative information base.
- (ii) The Board could review the proposed contract pricing terms in the context of the impact on end-user’s rates.
- (iii) The Board could set out standard minimum requirements for third party procurement of power for SSS consumers. The key requirement items may be:
  - assurance of an annual price re-determination mechanism;
  - no limitations on volume adjustments to allow for consumer mobility;
  - assurance that the utility bears no risk in the event of supplier failure; and
  - supply default to spot market SSS in event of supplier failure.
- (iv) In order to ensure that SSS rates are reasonable under proposed third party procurement arrangements, the Board may require a benchmark rate comparison.

## 6. SSS Service Charges

## **6.1 Calculation of SSS Standard Administrative Charge**

### 6.1.1 The Decision [Comments Paragraph 3.8.1] states:

*The Board Panel recommends that a Board-approved standard service charge for SSS shall be set for each utility in accordance with Section 2.5.3 of the Draft SSS Code. This charge shall cover the incremental costs of settlement of SSS accounts and the carrying costs of the balance in the PPVA if such an account is approved. The Board Panel expects that the Retail Settlement Task Force will consider this and a guideline on the level of this SSS charge will be incorporated into the SSS Guidelines for inclusion in the Rate Handbook.*

### 6.1.2 Issues

- (i) What should the charge specifically include or exclude?
- (ii) Are the costs incremental to the utilities' cost of procurement prior to market opening?

### 6.1.3 Options

- (i) The SSS Administration charge could include the incremental/marginal costs of providing SSS service. This could involve the LDC maintaining records of its SSS costs. The charge could be restricted to costs related to the procurement of SSS and servicing SSS customers. The costs would be incremental only and demonstrated to be legitimate SSS expenses.

### 6.1.4 The following are some examples of potential incremental SSS related costs:

- (i) Identifiable costs associated with the procurement of power and settlement of costs for SSS;
- (ii) Additional billing costs for SSS (for instance, special calculations required for the PPVA);
- (iii) Staff time related to SSS activities (e.g., on-going maintenance of SSS billing systems or the development of computer application modifications required to handle SSS accounting); and
- (iv) Carrying costs related to working capital required to bridge timing differences between IMO settlement and receipt of SSS customer payments, including the balance in the PPVA.

### 6.1.5 One alternative would be the implementation of a flat SSS Administrative charge used by all utilities. It might be a flat rate per customer based on the results of a study. The LDCs

## **SSS Code Implementation - Staff Discussion Paper for Stakeholder Workshop**

---

could be segmented perhaps as small, medium and large.