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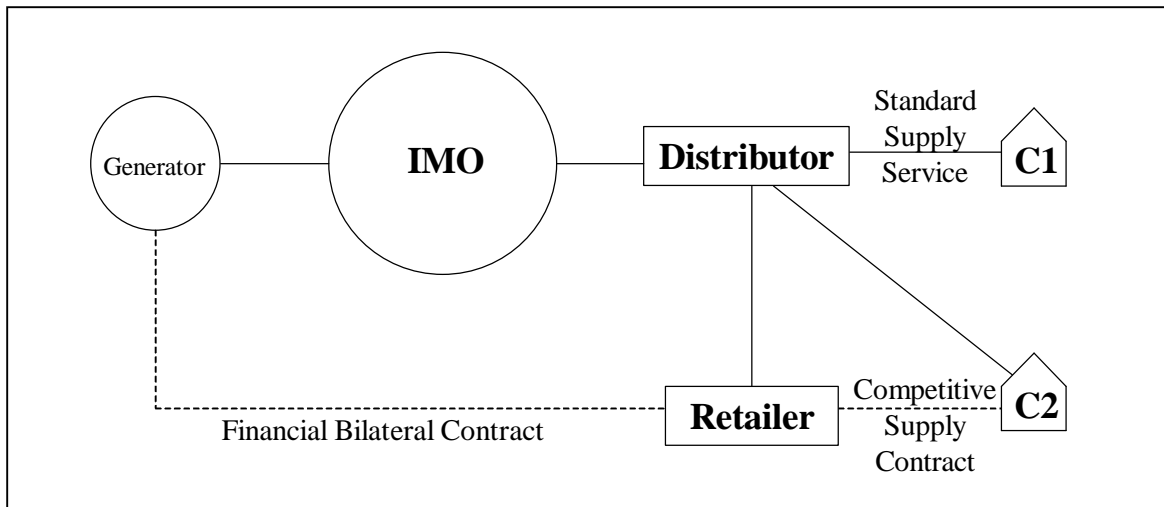
Draft Standard Supply Service Code - Staff Background Paper

The Ontario Energy Board (the Board) has circulated a draft of the Standard Supply Service Code (the Code) to give interested parties an opportunity to provide Board staff with input for the content of the Code. This letter reviews the design of the competitive electricity retail market, summarizes key aspects of the draft Code and Board staff rationale in developing these aspects of the Code.

Introduction to the Retail Market

The diagram below provides a simple illustration of how transactions are expected to occur in the competitive retail market. "C1" is a consumer on standard supply service; "C2" is a consumer with a competitive supply contract with an alternative retailer.

PROPOSED ONTARIO RETAIL MARKET



In the proposed retail market, the Independent Market Operator (IMO) dispatches load and delivers electrical energy through the grid system to every distributor. Each distributor accepts the electrical energy at their meter and delivers the electricity to end-use consumers who are connected to the distributor's distribution system.

The IMO charges each distributor for its load based on the hourly usage at the distributor's meter and the hourly wholesale spot price. The distributor in turn, calculates the energy charge for each of its customers based on hourly spot prices and a weighting mechanism, either a load profile for customers who have kilowatt-hour meters, or the actual hourly consumption for those customers who have interval meters. Where a consumer has chosen to buy electricity from an alternative retailer, the distributor still calculates the consumer's

electricity bill, but may direct it to the retailer for payment on behalf of the consumer, as illustrated with C2. The alternative retailer may be an independent retailer or the distributor's retail affiliate. Regardless of who supplies electricity to a consumer, the distributor must have the capability of calculating the wholesale spot market value of the electrical energy portion of that consumer's bill.

A retailer who receives the consumer's electricity bill from the distributor would be required to pay the distributor for the amount of electricity the consumer has used, priced by the distributor according to the weighted average of the wholesale spot price. However, the consumer pays its retailer in accordance with the competitive supply contract. A retailer also may have a contract with a generator to support the arrangement the retailer has with its customer. In the proposed retail market design, a distributor does not need to know anything about the contracts that a retailer has with its customers or with generators. The distributor is required to calculate the wholesale spot market value of the electrical energy that a consumer uses, regardless of whether a consumer is served by an alternative retailer or the distributor, and despite whatever other arrangements a retailer may have. Thus, the main issue in developing a standard supply service is determining how a distributor should be required to fulfill its obligation to sell electricity to consumers who do not have an alternative retailer, illustrated by C1, and what price a distributor should charge the consumer for that electrical energy.

Obligation to sell

Section 29 of the *Electricity Act, 1998* requires a distributor to sell electricity to every person connected to the distribution system, unless advised in writing that the person does not wish to purchase electricity from the distributor. A person may at any time request the distributor in writing to sell electricity to the person and the distributor shall comply with the request in accordance with its licence. If a retailer is unable to sell electricity to a person, the distributor is required to sell electricity to the person. Section 78(2) of the *Ontario Energy Board Act, 1998* (the "Act") states, "No distributor shall distribute electricity or meet its obligations under section 29 of the *Electricity Act, 1998* except in accordance with an order of the Board."

Board staff has proposed a draft Code that outlines the rules under which a distributor may fulfill its obligation to sell electricity. In developing the draft Code, staff considered the structure of the proposed retail market and the following principles:

1. Customers should have access to electricity through their current supplier at market-based prices;
2. Customers should not be locked in to the standard supply service, but should be free to move to and from the distributor's obligation to sell electricity in order to facilitate retail competition;
3. The provider of standard supply service should be indifferent with respect to whether a consumer switches to an alternative retailer;
4. Standard supply service is a regulated activity that should not cross-subsidize competitive activities;
5. A distributor should not bear any volume or price risks in providing standard supply service; and

6. Rules related to standard supply service should ensure that all retail market participants operate on a level playing field.

Staff believes that the adherence to these principles would protect consumers while allowing a competitive retail market to evolve.

These principles are embodied in key aspects of the draft Code, which includes the following characteristics:

- **Price** - Standard supply service customers pay a weighted average of the hourly wholesale spot price (a pure spot-price pass-through) for electrical energy, plus a regulated administrative charge that covers the distributor's cost of providing standard supply service.
- **Customer Mobility** - Terms of standard supply service do not preclude or inhibit a consumer from purchasing electricity from another retailer.
- **Distributor Purchases from the Spot Market** - A distributor that fulfills its obligation directly must purchase electricity directly from the spot market.
- **Risk Mitigation** - A distributor may require risk mitigation measures such as deposits and prepayment as part of the standard supply service; third parties may do so only with the approval of the distributor who has the obligation to provide standard supply service.
- **Requirements on Third Parties** - A distributor may fulfill its obligation through a third party, including an affiliate, so long as that third party is licensed to retail electricity, has the capability of fulfilling the distributor's obligation to provide standard supply service, and fulfills prudential requirements and other conditions required by the distributor.
- **Limitations on third parties** - A third party that provides standard supply service on behalf of a distributor shall not engage in marketing of electricity or gas in the distributor's licensed service territory, and may not retail electricity to consumers in the distributor's licensed service territory other than those being supplied electricity through standard supply service.
- **Billing and Marketing** - Bills to standard supply service customers shall not reference any retailer other than the distributor and shall not include any marketing information or promotional materials except those of the distributor.

Staff reasoning for proposing each of these aspects of the Code is summarized below.

Price

The draft Code proposes that standard supply service customers pay a weighted average of the hourly wholesale price for electrical energy (a spot price pass-through) plus a regulated administrative charge that covers the distributor's cost of providing standard supply service. Distributors would be required to calculate the weighted average price for electrical energy

over the billing period by multiplying the hourly spot market prices by a consumer's hourly consumption, or a profile for a consumer who does not have an interval meter.¹ As noted above, a distributor already will have to perform this calculation for every consumer, whether or not the consumer is on standard supply service or purchases from an alternative retailer. Thus, a distributor will be required to do no more than what it already has to do as part of the retail settlements system.

This approach was chosen over a fixed price regime and the smoothed spot price pass-through recommended by the Ontario Market Design Committee (MDC).

Board staff did not choose a fixed price mechanism for standard supply service. As noted by the MDC, a fixed price regime has undesirable characteristics. First, a fixed price standard supply service requires that distributors take a risk in procuring, or hiring a third party to procure, fixed price supply. If standard supply service customers are not locked in with a contract (the legislation states that customers should be free to choose alternative suppliers), distributors face a risk in forecasting the volume required and would be forced to purchase more electricity at a fixed price than is required for their standard supply service customer base.

Second, not every distributor may be able to purchase sufficient fixed price supply, and may be able to do so only at a high premium. This premium reflects the risk a supplier accepts in order to provide a fixed price supply of electricity, and raises the average price of electricity above the wholesale spot price. This differential in fixed price between distributors, the potential for unreliable supply and potentially high electricity prices are socially unacceptable.

Third, the regulatory burden of a fixed price regime is much greater than that of a spot price pass-through. The Board would be unable to oversee and approve the fixed price offered by each individual distributor to meet its standard supply service obligation. Under section 78(3) of the *Act*, the Board may make orders approving or fixing just and reasonable rates for the retailing of electricity in order to meet a distributor's obligations under section 29. In setting rates, section 78(5) allows the Board to apply the method or technique for fixing the applicant's rates to be set out in the licence. A fixed price regime creates a very large regulatory burden and would increase the cost of electricity to Ontario electricity consumers.

A standard supply service based on wholesale spot prices has many advantages. First and foremost, it provides Ontario consumers with the benefits of electricity competition. The benefits of competition include lower prices and product innovation. A spot price pass-through provides consumers with the benefit of lower prices, and allows retailers who can offer value-added services to do so. If consumers are willing to pay a premium for a fixed price product or a bundled service that includes telecommunication or cable services along with electricity for example, a retail market for those products should develop. If retailers can provide a lower price than the spot market, retailers can offer consumers that benefit as well.

¹ The Retail Technical Panel of the Ontario Market Design Committee has recommended an approach to calculating load profiles. The proposed methodology will be further developed by the Board as part of developing the Retail Settlements Code.

Second, a spot price pass-through benefits distributors as they do not have to assume any price risk inherent in forecasting fixed price supply requirements. A spot price pass-through ensures that every distributor will be able to obtain electricity and pass that price through to consumers with no price risk. If the wholesale market operates properly, all distributors should be able to obtain whatever supply is required. Thus, a spot price pass-through ensures supply with no volume or price risk.

Third, the regulatory burden of a spot price service is minimal. The key regulatory role of the Board is to monitor compliance with the Code and approve or provide guidelines for the administrative cost of providing electricity to consumers at the spot price. If the Board approves a profiling methodology and use of spot prices, each distributor can provide standard supply service without having to seek approval from the Board for the price level, supply portfolio or procurement process.

The Ontario Market Design Committee (MDC) recommended a smoothed spot price pass-through in the *Second Interim Report*. During the third quarter, the MDC revisited the issue and extensively analyzed the relative merits of a spot price pricing mechanism for standard supply service versus a fixed price regime. After much debate, the MDC reiterated its second quarter recommendation and described three different ways a smoothed spot price pass-through could be implemented. Under a smoothed spot price pass-through, a consumer ultimately pays the same as a pure spot price pass-through. The advantage of a smoothed spot price pass-through over a pure spot price pass-through is that spot price volatility is dampened through a forecasting mechanism and true-ups. The disadvantage is that a smoothed spot price pass-through requires a province-wide forecast of electricity prices and creates a more burdensome settlement system for distributors who have to track actual prices, compare these to the forecast, and be able to issue true-ups or credits to consumers on an on-going basis. If the Board were to adopt a smoothed spot price pass-through, either the Board or some other entity would have to produce a forecast and risk reputation when the forecast invariably would be wrong. The hazards of forecasting electricity prices and the additional cost of a settlement system to deal with the differences between a smoothed spot price and actual prices create disadvantages that led Board staff away from adopting a smoothing mechanism.

A pure spot price pass-through allows ease of implementation of standard supply service for both the Board and distributors. The key disadvantage of a pure spot price pass-through is the volatility that may be imposed on Ontario electricity consumers who traditionally have purchased electricity at a fixed price. However, in the draft Code, customers will not have to face the volatility of hourly electrical energy prices for three reasons.

First, the actual price paid by standard supply service customers each billing period will be a single price for that period, calculated as the weighted average price for electrical energy. Averaging over a monthly, bi-monthly or quarterly period significantly decreases the volatility of spot prices.

Second, volatility of electrical energy prices may be dampened on the final bill due to other parts of the bill that may be charged at a fixed price. The price of electrical energy is a fraction of the total cost that consumers pay for electricity. Charges for transmission, distribution, billing, metering and uplift do not depend on electricity prices, and may offset or dampen the volatility.

Third, proposed approaches for mitigating Ontario Hydro's market power may decrease the

volatility of spot prices.

In sum, Board staff believes that charging standard supply service customers the weighted average of the hourly spot price for electrical energy plus an administrative charge provides consumers with the benefits of competition, minimizes risk to distributors, allows a competitive retail market to develop if retailers can provide value-added services, and reduces regulatory burden.

Customer Mobility

The draft Code does not allow customers to be locked-in with long-term contracts or otherwise inhibited from choosing an alternative supplier. In keeping with the *Electricity Act, 1998*, any standard supply service customer who wishes to purchase electricity from another retailer may do so by simply informing a distributor in writing that the customer wishes to purchase electricity from the retailer and providing the information necessary for implementing a change in service. Similar requirements apply for any consumer who wishes to purchase electricity from the distributor instead of an alternative retailer. This mobility promotes retail competition by allowing customer choice. At the same time, due to a spot price pass-through mechanism, distributors do not incur volume risk as a result of the ability of consumers to switch on and off standard supply service.

Distributor Purchases from the Spot Market

The draft Code proposes that a distributor which chooses to fulfill its obligation directly must purchase electricity from the spot market. This requirement eliminates both price and volume risk that could be faced by distributors who are required to provide standard supply service because the cost of purchasing electricity is passed through directly to consumers. It also encourages a robust spot market up front in that distributors that fulfill their obligation directly will purchase from the spot market. Finally, it prevents distributors from competing against retailers for bilateral contracts that are required to develop competitive retail offerings.

Requiring distributors to purchase standard supply service electricity from the spot market makes distributors indifferent between whether or not they sell electricity to a consumer or the consumer takes supplies from an alternative retailer. Under the proposed retail market, each distributor will calculate the wholesale spot market cost of electrical energy for each consumer connected to the distributor's distribution system and direct that bill to the entity chosen by the consumer. Thus, under the draft Code, the only difference for a distributor with respect to whether a consumer receives standard supply service or purchases electricity from an alternative retailer is a matter of where the bill should be sent.² This indifference serves two purposes. First, it promotes competition because distributors have no incentive to keep consumers on standard supply service or prevent them from switching to a competitive retailer. Second, there is no price risk for the distributor since the price of electricity is simply passed-through to consumers.

² There also are issues associated with prudential requirements since retailers most likely would be liable to a distributor with respect to payment of a customer's bill.

There have been suggestions that if a distributor chooses to fulfill its obligation through a third party, that third party should not be required to purchase from the spot market. The draft Code does not prevent this so long as the third party meets the required qualifications and standard supply service customers are charged only their weighted average spot price plus the distributor's regulated administrative charge for electrical energy. If a third party can purchase electricity at a price lower than the spot market and make a margin, as has been argued, the Code does not prevent the third party from doing this. However, Board staff notes that any entity can purchase electricity futures and sell that electricity into the spot market to make a profit (or loss) regardless of whether the entity provides service to standard supply service customers.

Risk Mitigation Measures

Under the requirements of the draft Code, a consumer may transfer to standard supply service from an alternative retailer upon request. This flexibility may make the standard supply service the supplier of last resort. As such, there may be a higher proportion of bad credit customers. A distributor may require risk mitigation measures such as deposits and prepayment as part of the standard supply service. The draft Code allows distributors to use these measures to minimize the costs associated with non-payment. These risk mitigation measures, however, must be at the discretion of the distributor that is obligated to provide standard supply service. Third parties may use risk mitigation measures on standard supply service consumers only with the approval of the distributor who has the obligation to provide standard supply service.

Requirements for Third Parties

Section 70(9) of the *Act* states that a distributor may fulfill its obligation either directly, through an affiliate, or through another person with whom the distributor or an affiliate of the distributor has a contract. The draft Code allows a distributor to fulfill its standard supply service obligation through a third party, including an affiliate, so long as that third party is licensed to retail electricity, has the capability of fulfilling the distributor's obligation to provide standard supply service, and fulfills prudential requirements and other conditions required by the distributor or the Board.

The purpose of these requirements is to protect both consumers and distributors. A third party that is licensed to retail electricity is subject to consumer protection requirements, including confidentiality of information. Thus, requiring the third party to be a licensed retailer ensures that these consumer protection mechanisms apply to standard supply service customers. The capability and prudential requirements are meant to protect distributors from default by the third party. Prudential requirements are especially important if the third party intends to procure supply through bilateral contracts. In such a case, the distributor faces the risk that the third party will be unable to supply consumers for financial reasons (e.g., the bilateral contracts are for a price that exceeds the spot price) and defaults on its contractual obligations. The draft Code acknowledges that prudential requirements will vary on a case-by-case basis and allows distributors or the Board to set the requirements accordingly.

Limitations on Third Parties

The draft Code prohibits a third party that provides standard supply service on behalf of a distributor to engage in marketing of electricity or gas in the licensed service territory of the distributor, or retail electricity to consumers in the licensed service territory of the distributor other than those being supplied electricity through standard supply service.

The main purpose of this requirement is to ensure that customers are not transferred to a retailer without their consent. This fulfills the mandate of the White Paper that customers who do not choose to switch suppliers will not be required to do so. Currently, Ontario electricity consumers are provided electricity by their distributors. Distributors must provide electricity to those consumers who do not wish to switch suppliers. If a distributor is not going to provide this service directly, then it should ensure that consumers are receiving standard supply service from the distributor through a contractor as opposed to being serviced by a different retailer.

A second reason for limiting activities of third parties is to ensure confidentiality of consumer information. A provider of standard supply service will have access to valuable consumer information. This information could be used for marketing competitive products or negotiating with large consumers. Consumer information may be particularly valuable if the consumer is a large customer with variable load patterns who may be able to achieve significant savings by negotiating a contract with a competitive retailer for supply. If the same entity that provides a consumer with standard supply service had access to the consumer's specific information, the consumer may not be able to negotiate a suitable deal for itself as its specific information is a key negotiating tool. Allowing a retailer to have access to consumer information by virtue of providing standard supply service would put consumers at a significant competitive disadvantage.

A third reason is to ensure a level playing field. A third party who provides standard supply service would have access to valuable marketing information that would allow it to cross-sell other products; this information would be unavailable to other retailers in the distributor's service territory unless requested by each consumer, potentially resulting in an unlevel playing field and inhibiting competition. Although retailer licence requirements may prohibit a retailer from using consumer information obtained for one purpose for any other purpose, it would be extremely difficult for the Board to monitor this with respect to standard supply service and ensure that this requirement is enforced. Prohibiting a third party from marketing activities and retailing to other electricity consumers within the distributor's service territory achieves the goals of a level playing field without excessive regulatory burden.

Fourth, allowing a competitive entity to provide standard supply service may result in cross-subsidies between regulated and competitive activities. The value of consumer information and direct access to customers that is made available to a third party that provides standard supply service should not subsidize the third party's competitive activities. Due to this potential for cross-subsidization, a third party with competitive services who also provides standard supply service is no longer indifferent between whether or not a standard supply service customer leaves to a different retailer. As mentioned above, a standard supply service that creates incentives for the supplier to keep consumers on the service may seriously inhibit competition.

Finally, it is important to note that limiting retailing activities of third parties does not inhibit

economies of scale or scope for the purpose of providing standard supply service. Provision of standard supply service, as proposed in the draft Code, essentially is nothing more than a billing function. Procurement of supply is not required. Electricity is passed through at the spot market price with a regulated administrative charge to cover the cost of providing standard supply service. There is no value to providing standard supply service in and of itself, unless the provider is able to use consumer information from standard supply service consumers to market competitive products. As discussed above, use of consumer information for this purpose without the consumer's consent should not be allowed. Since this obligation primarily is a billing function anyway, economies of scale associated with a single billing system could be maintained so long as the billing services function was in an affiliate separate from retail and marketing services. For example, a large retailer could create an affiliate whose sole purpose is to provide billing services to distributors for the purpose of standard supply service and to retailers for the purpose of competitive products. Such economies could be achieved by a distributor through outsourcing to specialist firms.

Billing and Marketing

Standard supply service is a regulated distribution obligation. As such, it should not be used to provide cross-subsidies for competitive activities. To ensure that standard supply service is not used to cross-subsidize competitive marketing activities, bills to standard supply service customers should not reference any retailer other than the distributor and should not include any marketing information or promotional materials except those of the distributor. The Board expects that distributors will serve as an important consumer communication resource in that they will have access to most consumers at the beginning of the market. It is important that providers of standard supply service be able to include unbiased educational materials in bills. However, this resource should not be available for marketing or other competitive activities.