NATURAL GAS

MARKET DESIGN TASK FORCE

REPORT TO THE ONTARIO ENERGY BOARD

February 4, 1999

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INTRODUCTION

Following the Ontario Energy Board's response to the Task Force's June 16, 1998 Report and the Board's invitation for the Task Force to continue its deliberations, the Task Force resumed its deliberations late in September and, after canvassing all EBO 202 participants, constituted four technical subcommittees to assist in its work. Interim reports were submitted to the Board on September 30 and November 6. This Report completes the current phase of the Task Force's efforts.

Because there was general agreement on the overall direction of the industry and, in most instances, as to the desirability of establishing a policy framework on an expedited and consensual basis, the Task Force was able to prioritize and focus on key issues necessary for an effective rate and service unbundling plan. It did so having regard for its own time and resource constraints, as well as the constraints imposed by the government's legislative agenda.

From the outset, Board (and MEST) staff took an active role in the Task Force's deliberations. They were of particular assistance in enlightening the Task Force as to the issues of most immediate relevance to the Board (and the MEST) and in providing feedback as the Task Force's thinking evolved.

In respect of the issues identified in the Task Force's work plan, the efforts of the Task Force to achieve consensus were very successful in many areas. The remaining issues will require additional time and, perhaps, other processes in order to achieve a satisfactory resolution.

Early in this phase of its deliberations the Task Force developed a work plan and constituted four subcommittees, through which much of the technical discussions were undertaken. The Operational Subcommittee was mandated to address a number of immediate operational issues relating to title transfer and load balancing. It also provided technical input on capacity entitlement issues, as did the Rates and Services Subcommittee.

The latter subcommittee addressed a number of technical issues that flow from unbundling, including those relating to load profiling. The Customer Interface Subcommittee focussed on developing effective customer awareness campaigns, while the Information Systems/Technology Subcommittee began to identify and prioritize systems development work to be undertaken in connection with the unbundling process.

It is the overall consensus of the Task Force (and its subcommittees) that its efforts undertaken to date have informed and benefited all constituents and have encouraged the development of working relationships that do not generally arise through more formal hearing, mediation or rule-making processes. While significant competing interests are "in play", there are the threads of a common vision for the future of the natural gas industry in Ontario. The desire to facilitate an orderly and effective transition to a more competitive and efficient, but equally reliable, market motivated all Task Force members to persevere, with open minds, when consensus proved elusive.

To the extent that issues can continue to be discussed and resolved within the context of the Task Force (or similar processes), it is believed that all constituents are eager to pursue such avenues. While the Task Force began to address many of the more detailed and technical implementation issues, this work should be ongoing and subject to more direct and timely Board input. The Task Force is prepared to assume responsibility for coordinating such work, should the Board so direct.

It should be noted that the Task Force, on the advice of Board and MEST staff, did not address certain key consumer protection issues (some of which were dealt with in its June 16, 1998 Report), including those relating to the licensing regime (and codes of conduct) for marketers, customer contracts, dispute resolution mechanisms and the framework for monitoring compliance and enforcement. These issues are being addressed through other processes.

There are a number of other major issues which the Task Force did not address directly. One, of immediate relevance (and touched upon in the Task Force's discussion of consumer education initiatives) is a concern that further restructuring of the gas industry be

compatible with (and not become subordinate to) electric restructuring. Another set of concerns not addressed by the Task Force relate to the need to develop safeguards (and monitoring mechanisms) in respect of market power issues which are likely to arise during and beyond the transition to a more competitive market (e.g., proposed mergers, changed corporate structures, affiliate transactions, undue market dominance).

Similarly, the Task Force did not consider mechanisms to ensure that regulation evolves along with changes in the industry. Increased reliance on market forces will reduce the need for traditional regulation while giving rise to new issues as the role of LDCs change and new players provide an expanding array of services. Clearly, regulation will need to become more streamlined and refocused as the industry evolves. Policies will have to be sufficiently flexible to accommodate nascent competition in combined electric and gas products and services and allow for the further convergence of competitive retail utility markets and other markets.

This report begins with a summary of the Task Force's recommendations and outlines an immediate agenda of ongoing technical work. It then focuses on the fundamental policy issues in respect of which resolution was not achieved at the Task Force and where some Board direction may be required. A more detailed review of the Task Force's deliberations (and the basis for its recommendations) follows.

SUMMARY OF RECOMMENDATIONS

CAPACITY ENTITLEMENT

The Task Force favours an optional (rather than mandatory) allocation of storage and upstream transportation capacity to end users, with provision for LDC recovery of stranded costs (after mitigation).

While identical allocation methodologies as between the LDCs may not be practical, the guiding principle should be equal proportional access.

Storage Allocation - The Task Force favours tying storage capacity to the end use customer during any transitional period that involves cost based storage prices. Annual capacity redistribution on the basis of the original allocation will keep the distribution of storage assets aligned with supplier market shares.

While, as a matter of principle, the Task Force favours a market based pricing mechanism for the allocation of storage capacity, it was unable to devise appropriate mechanisms and, accordingly, took the view that a cost based pricing model should be maintained at this time. The Task Force agreed, however, that a mechanism will be necessary to ensure that economic rents flow to end-users to the maximum extent practicable.

It should be noted that all new LDC peak storage offerings and short term storage ("parking" services) available for ex-franchise customers are already priced at market based rates (and have been since 1997).

Assuming a commitment to move to market based pricing and pending the development of mechanisms for determining market price and effectively allocating economic rents to end users, the Task Force took the view that a cost based pricing model should be maintained on an interim basis.

The Task Force proposes an April 1, 1999 initial date for identifying storage capacity available for allocation and not previously assigned, although it is unlikely that parties will be ready to contract by this date.

Upstream Transportation Allocation - The Task Force is of the view that there should be a one time optional proportional entitlement to upstream transportation capacity not previously assigned, at cost, as soon as practicable.

CUSTOMER MOBILITY

The Task Force agreed on a number of objectives, including:

- (i) that customer mobility should be facilitated and is essential to effective competition;
- (ii) that "full" mobility (i.e., suppliers solely having resort to normal contractual remedies) should be in effect as soon as practicable;
- (iii) that LDCs will remove themselves from the middle of the end-user and supplier relationship as soon as practicable; and
- (iv) that any mechanisms to facilitate customer mobility should be designed to avoid anti-competitive barriers and ensure an adequate level of customer protection and education.

While there was agreement as to the objectives, a divergence of views as to how best to realize these objectives could not be resolved. Board direction will be required to resolve this issue.

ACCESS TO SERVICE/CREDIT RISK ISSUES

The Task Force is of the view that marketers should be obligated to serve any customer in their chosen market segments subject to their ability to stipulate terms of service.

The Task Force agreed that marketers should acquire the right to terminate service for non-payment pursuant to their supply agreements, subject to "shut-off" standards approved by the Board. The "shut-off" standards should include "mandatory service" periods for existing residential heating customers in respect of circumstances which give rise to public policy concerns (e.g., "winter gas" or other situations where it is determined that supply should be extended beyond the normal shut-off point because of health reasons or other social concerns).

One method for funding "mandatory service" would be an industry wide fund, specific to each rate class and funded through a pre-determined gas commodity cost to be collected from distribution system users. Such a fund would be available to reimburse suppliers and the LDCs for the value of gas mandatorily supplied to end use customers during mandatory service periods.

The Task Force could not achieve consensus as to whether suppliers should be able to invoke physical shut-off rights in order to enable them to recover all (or a portion of) distribution costs incurred in respect of a terminated customer (assuming the customer is otherwise able to secure another source of supply).

For safety reasons, termination of service should continue to be controlled and physically performed by the LDCs.

TITLE TRANSFER

The Task Force reviewed and agreed upon various short term title transfer arrangements to eliminate "meter bounces" to a transmission pipeline interconnected to the LDCs' systems.

Fee structures for such services should be resolved in rate cases or other forums (such as rule-making).

The Task Force endorses the public reporting of pricing at Dawn.

CONSOLIDATION OF DIRECT PURCHASE CONTRACTS

The Operational Subcommittee considered mechanisms to aggregate customer loads with respect to storage and transportation. The Task Force supports this objective and each of the LDCs felt that it could be achieved (to differing degrees).

CONVERSION ISSUES

The Task Force agreed to the following procedures to facilitate the gradual conversion of all customers out of the "buy-sell" mechanism:

(i) as of April 1, 1999 no new buy-sell contracts should be entered into;

- (ii) from April to November 1999 marketers should only renew buy-sell contracts with the LDCs for a term of 18 months or less;
- (iii) marketers should only be able to move existing customers off buy-sell by positive customer election to another option or by providing them with an economically equivalent service; and
- (iv) on a predetermined (and disclosed) date following unbundling (e.g., April 1, 2000) there should be no further renewals of buy-sell contracts.
 Grandfathering mechanisms (i.e., WACOG or a surrogate) will be required for the remaining term of existing contracts.

EMERGENCY PLANNING

The Task Force is of the view that existing ECMAP (Eastern Canadian Mutual Assistance Plan) members should continue to be responsible for pooling and reallocating capability in the event of an emergency.

The Task Force recommends the enactment of the necessary regulations to give the ECMAP Agreement power in law to ensure effective and timely response to emergencies.

LOAD BALANCING SERVICES

The Task Force agreed that load balancing services should provide for a variety of options (i.e., daily, monthly, seasonal), to the extent customer demand dictates, as choice and flexibility will be of utmost concern to marketers and their customers.

The Task Force recommends a "three tiered" load balancing service. The first tier would reflect the fact that all customers are equally at risk for some degree of operational forecast error. The cost of the LDCs providing this base level of load balancing would be reflected in all delivery rates on a commodity basis. The second tier would be a "nominated service" available to customers who request the LDCs to arrange peaking and/or other means to balance their supply with demand. This service would be provided on a "user pay" basis.

The third tier of load balancing would be unplanned and non-nominated and would remedy supplier performance defaults with an incentive rate structure designed to deter them.

PRICING OF UNBUNDLED COMPONENTS

While further work will be required on pricing issues, the Task Force agreed that it would be unfair to price displaced, unbundled services based on fully allocated costs while pricing new (or incremental) services based on marginal costs.

The Task Force agreed that, provided the costs of stranded assets are vigorously mitigated during restructuring, the LDCs should be entitled to recover them over a reasonable transition period from all users.

The Task Force agreed that the costs associated with gas handling services (i.e., gas control, nominations) should remain bundled in the delivery charge.

UNBUNDLING TIMETABLE

The Task Force identified and undertook work on the following conditions to meet various constituents' expectations with respect to the unbundling process:

- (i) building customer awareness and education an LDC bill insert for the February billing cycle addressing licensing, with other initiatives to follow;
- (ii) developing a "bare bones" algorithm system to simulate demand profiles and allocate capacity for customers lacking daily metering by the end of March 1999;
- (iii) initial allocation (on a notional or contractual basis) of the required upstream transportation and storage capacity entitlements to customers as soon as is practicable;
- (iv) developing a wholesale rate for unbundled transportation and storage services for marketers, including the terms and conditions governing nomination and

delivery of daily requirements and imbalance settlement as soon as is practicable;

- (v) expanding the menu of unbundled components in the wholesale service for marketers to include billing and collection as of January 1, 2000; and
- (vi) further expanding the menu of unbundled components in the current retail service for general service customers, on an optional basis, to include storage, billing and collection, not later than April 1, 2000.

The timetable is predicated upon timely Board feedback in respect of the unbundling principles outlined in this report.

LOAD PROFILING ISSUES

The Task Force concurred with the substantial progress made by its Rates and Services Subcommittee to develop daily demand forecasting algorithms to simulate end use demand for customer groups where daily volume reads are not individually available.

CONSUMER EDUCATION

The Task Force recommended guidelines for an immediate consumer education campaign, to be conducted through inserts to be included in bills sent out by the LDCs during their February 1999 billing cycle. The Task Force is of the view that these communications should be complemented by a range of other delivery mechanisms, including website postings, community newspapers and call centres (which should be listed on the bill inserts).

The Task Force is of the view that a longer term customer awareness programme should be undertaken, following market research to be conducted after the February campaign.

The Task Force is of the view that the MEST and the Board should be identified in these consumer awareness efforts, given that energy sector reform represents a significant policy initiative of this government and to help assure "parity" with similar initiatives to be undertaken in respect of electricity.

Ultimately, marketers should have a greater interest in and ability to ensure a high level of consumer awareness.

The Task Force agreed that there should be minimal requirements with respect to customer billing formats, given the desire to maximize the range of service offerings. Instead, generic requirements (e.g., the need to disclose what a customer is paying and the basis therefor) should be favoured. Customers should also be provided with an explanation of direct billing.

INFORMATION SYSTEM/TECHNOLOGY ISSUES

The Task Force agreed that customer data and information (other than in an aggregated, non-attributable form) should only be made available with the customer's consent.

The Task Force generally agrees with the recommendations of the Retail Technical Panel of the Market Design Committee with respect to customer information issues.

LICENCE PROCESSING

The Task Force agreed that the Director of Licensing should maintain a list of all license holders which the LDCs and others should be able to access electronically.

ONGOING WORK

While the Task Force was able to identify key policy issues and either resolve them or achieve an informed divergence of views, the time frame available for this phase of the Task Force's efforts didn't allow it (either directly or through its subcommittees) to work through many of the technical details which flow from its policy recommendations. Some of these, in respect of which the Task Force proposes that the subcommittees continue their deliberations, are outlined below.

TITLE TRANSFER

The Operational and Information Systems/Technology Subcommittees are in the process of adopting longer-term title transfer procedures and developing the requisite IT and legal infrastructure to facilitate title transfers within the province.

CONSOLIDATION OF DIRECT PURCHASE CONTRACTS

Mechanisms identified by the Task Force to pool transportation and storage capacity utilization to supply aggregated loads in several areas under various redelivery contracts will have to be developed as unbundling occurs.

CAPACITY ENTITLEMENT

Pricing mechanisms for the allocation of storage capacity require further consideration.

The allocation methodologies and mechanics (for upstream transportation and storage capacity) as well as for the ultimate transition to promote liquid secondary markets require additional work.

CONVERSION ISSUES

A number of proposals designed to accelerate the phase-out of the "buy-sell" mechanism merit further consideration.

RATES AND SERVICES ISSUES

In addition to continuing its work in respect of load balancing and profiling issues (e.g., determination of time period for correcting imbalances), the Rates and Services

Subcommittee did not have sufficient time to address several tasks identified for it by the Task Force, including:

- (i) access conditions/form of contracting;
- (ii) rate design for multiple receipt/delivery points; and
- (iii) hybrid bundled services.

CONSUMER EDUCATION

The Task Force proposes that the Consumer Interface Subcommittee continue to meet subject to Board acknowledgement of the need to (i) oversee and evaluate market research conducted after the immediate campaign and (ii) develop the longer term campaign.

INFORMATION SYSTEM/TECHNOLOGY ISSUES

The Information System/Technology Subcommittee did not begin meeting until late in this phase of the Task Force's efforts (given that its work had to await the resolution of key policy issues). It is now meeting on a regular basis to address key infrastructure issues (such as a devising a single set of billing interface standards, developing load-profiling algorithms and considering standards for allocation and clearing and settlement mechanisms).

Mobility tracking mechanisms will have to be addressed once basic mobility issues are resolved.

An immediate challenge should be to prioritize and scope out the costs of various systems development initiatives related to (and, in many instances, required for) unbundling.

FUNDAMENTAL POLICY ISSUES

As the Task Force refined and prioritized its work plan, it became evident that, once basic objectives are agreed upon, the bulk of the issues that need to be resolved in order to develop a comprehensive framework (and infrastructure) for unbundling lend themselves to

resolution by consensus and require detailed, substantive and focused collaboration on the part of all market participants. These are issues that must be addressed in connection with an orderly unbundling process that are largely technical in nature or do not pose concerns in respect of which there are fundamental differences of view.

As a result, the Task Force devoted most of its attention to issues which, in its view, require fundamental policy determinations early in the unbundling process. In some cases (e.g., title transfer, conversion issues, consumer education) the Task Force was successful in developing consensus proposals. In others (particularly those relating to capacity allocation) the Task Force made substantial progress, at least with respect to guiding principles and short-term policy direction, but could not come to an overall consensus resolution. Consensus on two other fundamental policy issues (customer mobility and credit risk) proved to be elusive and will likely require guidance from the Board in order to advance the overall process.

Each of these fundamental issues are outlined below. A more extensive discussion concerning the allocation of upstream transportation and storage capacity follows later in the report. The Task Force assumed (for reasons which became evident from the inability to achieve consensus on the issues canvassed below) that LDC bundled services would remain available during a transition period.

THE UNBUNDLING PROCESS

A primary focus of the Task Force was the inter-relationship of capacity assignment to other issues. For example, although the Task Force was in agreement on the benefits of customer choice, there was no consensus on setting a date certain for the LDCs to exit the merchant function at this time. As a general matter, the Task Force is of the view that customer choice should be made as attractive as possible (a "pull" approach), rather than seeking to establish a system in which customers are forced to choose a competitive supplier (a "push" approach). This will entail the LDCs working with competitive suppliers and, at

the same time, continuing to offer a regulated sales service as an alternative to them until it is evident that such service no longer meets a market need.

It was evident from the Task Force discussion that there remains uncertainty regarding the duration of the transition period and the precise configuration of the retail natural gas market thereafter. Recognition of such uncertainties - including the receptiveness of customers to choice (with differentiation by market segment) as well as the identification and management of potential stranded costs and the risks that result from a voluntary approach to capacity assignment — suggests a flexible approach to capacity allocation and related issues. The Task Force is confident that these issues can be satisfactorily resolved and recommends that we proceed on this basis.

To satisfy their historic obligation to provide reliable, least-cost service to customers, LDCs have secured upstream pipeline and storage capacity to transport supply to their citygates. In its June 1998 Report, the Task Force described a "fully unbundled" market model that it believes is a desirable end-state for the Ontario marketplace. In that model, one or more liquid market centres would be developed in Ontario, primarily at pipeline-LDC interconnects and storage points. Upstream pipeline capacity currently held by LDCs would be held by marketers and end-users on an at-risk basis, as would most Ontario storage capacity. The LDCs would offer stand-alone distribution services on their own systems, including "wholesale" services under which marketers would render bills directly to customers. Under this model, there would be no necessary connection between shippers on upstream pipeline systems including TransCanada PipeLines Limited and marketers that are active on the distribution systems. The markets for transportation, storage, and gas supply would be connected through made-in-Ontario prices generated at the Ontario market centres. The LDCs have indicated that they will be advancing proposals to facilitate such unbundled services in their next rate cases or other proceedings.

The public interest benefits of the model were described in the Task Force's June Report. They arise from "unbundling" storage, transportation, gas supply, distribution, and billing activities from one another. In an unbundled environment, there would be

competition amongst marketers and end-users to assemble and operate portfolios of transportation, storage, and gas supply assets that would enable them to deliver gas at the Ontario market centres in the most cost-effective way possible. This should result in overall cost savings, better products and services for end-users, and efficient, market-driven capacity additions for both storage and transportation.

In the current phase of its deliberations, the Task Force focused on the details of a plan for moving the Ontario market towards the fully unbundled model, recognizing that there are impediments to implementing the "end-state" model in a single step. In particular, the Task Force concentrated on measures that could be implemented in the medium term, (i.e., within 12 to 15 months). Consensus was generally achieved on the broad outlines of such a plan.

It should not be inferred that any compromise in system reliability ought to be permitted. Although the magnitude of contingency space must be resolved, the LDCs will continue to hold those storage and transportation assets needed for proper system operations. It is expected that, as unbundling progresses, the need for the LDCs to hold such assets may diminish.

The Task Force addressed all policy issues in the context of general objectives for a competitive gas market, namely to (i) provide the broadest possible customer choice; (ii) provide all customers with an opportunity to share in the benefits of increased competition; (iii) ensure full and fair competition in the gas supply market; and (iv) separate the supply function from local distribution services. In addition to these general principles, it was agreed that any capacity allocation programme should achieve three interrelated objectives, namely (i) preserve system reliability; (ii) provide a level of flexibility that promotes effective competition; and (iii) minimize stranded and other transition costs.

There is a risk that unbundling will result in stranded utility costs. However, the Task Force noted that, in general, it is unlikely that unbundling will cause the LDCs to incur additional costs that subsequently become stranded. Stranded costs will normally relate to embedded assets (including contracts) that existed prior to unbundling. Stranded costs could

also occur when LDCs commit for new assets (i.e., upstream transportation contracts) on behalf of customers. Stranding will occur if the value of these assets declines to less than their cost because they cannot be fully utilized or because the value that can be recovered in the market is less than full cost even if fully utilized. As a result, the stranding of costs will not result in an increase in total utility costs borne by ratepayers even if the stranded costs are recovered in their entirety from ratepayers. Total costs will increase if assets are stranded because redundant, alternate facilities are built or utilized, leaving LDC assets under-utilized.

As an initial matter, it was agreed that the LDCs will continue to make available "bundled" transportation services like eastern and western bundled transportation. Under those transportation services, customers deliver gas to the utility at an annual average-day rate at the Alberta border and take gas from the distribution system at their end-use facilities as required. The LDCs look after all aspects of contracting for and managing the storage and transportation capacity necessary to provide this transportation and annual load balancing service, subject to a requirement that customers "true up" any annual imbalance at or near the end of each year.

While it was agreed that there would not likely be a need for new and more complex LDC bundled services (e.g., services that require customers to balance more frequently, or that oblige the LDCs to provide load balancing only within monthly or quarterly periods, as opposed to annually), the LDCs indicated their willingness to consider developing such services if there is customer demand for them.

In addition to bundled transportation services, the LDCs will give direct purchase customers the option to use further unbundled services. That is, the LDCs will make available directly to customers the upstream transportation and storage capacity necessary to meet their needs, along with stand-alone distribution services. The practical issue raised by this plan is that of how, and on what terms, the storage and transportation capacity now held by the LDCs for the purpose of providing sales, buy/sell, and bundled transportation services will be allocated to customers and priced.

CAPACITY ALLOCATION METHODOLOGY

For large volume end-users the proposed allocation methodology presents few fundamental issues of principle. Such users are capable of dealing individually with transportation and storage entitlements, or dealing individually with competing marketers to allocate risks and costs. Small volume consumers, however, are not capable of dealing with such entitlements. As a practical matter, the storage and transportation entitlements associated with their requirements may fall under the control of marketers who are at arm's length with, and outside the control of, the end-users. This raises the issue of whether any economic rents that may be associated with storage and transportation capacity will flow ultimately to end-users, or to the marketers who acquire effective control of the capacity used to serve those end-users. The Task Force agreed that the unbundling program should be designed such that, as between end-users and marketers, economic rents will flow to end-users to the maximum extent practicable.

Two basic approaches to reaching that result were identified. One is to establish a system that will "track" entitlements to end-users over time, as end-users migrate between marketers. If the allocated capacity is priced at the LDC's cost, all marketers will face the same costs of serving their new customers, and competitive forces should ensure that any economic rents associated with the capacity flow ultimately to end-users. On the other hand, the processes necessary to continually reallocate capacity amongst marketers, as customers exercise market choices, are likely to be cumbersome at best (and unworkable at worst). Such processes may reduce the scope for marketers to achieve efficiency gains, since each marketer will necessarily have under its control, at any point in time, a portfolio of capacity that is identical to the LDC's and to the portfolio of every other marketer. In a sense, such a regime reflects only a limited unbundling of capacity and a constraint on competition, with a resulting loss of efficiency.

The other possible approach is to rely on competitive and (where relevant) appropriate regulatory mechanisms to operate in the capacity markets to flow any rents associated with capacity through to end-users. If the markets work properly, there should be no need to "track" and reallocate capacity entitlements amongst marketers as customers

exercise market choice. In that case as well, the exact nature of the initial allocation mechanism is relatively unimportant, since the approach assumes that capacity will be continuously reallocated by market forces in a way that benefits end-users. The "full unbundling" model described in the Task Force's June Report essentially assumed that this approach will be effective and appropriate in the long run.

The capacity allocation process is important primarily because it affects the ability to provide maximum benefits from choice to end users. For this reason, the Task Force's discussion of alternative allocation processes was integrally related to other aspects of customer choice that are critical to benefiting end users. Here, as elsewhere, the willingness of various constituents represented on the Task Force to consider particular approaches was dependent on the overall approach to customer choice. In this context, the issue of customer mobility proved to be pivotal.

Upstream Transportation

With respect to upstream transportation, the Task Force was able to agree on a framework for allocating capacity associated with low volume end-users. That framework is described in greater detail below, but as a general matter it relies on the second approach described above. It involves a one-time, optional allocation of capacity to marketers, at cost with provision for recovery of stranded costs, after prudent mitigation, from all LDC delivery customers (so that sales customers do not subsidize transportation customers). In other words, the Task Force believes that, given conditions in upstream capacity markets now (and anticipated over the next several years), market forces can be relied on to ensure that either there are no economic rents associated with upstream transportation, or that any rents that do materialize will flow ultimately to end-users.

Storage

With respect to storage, the Task Force had greater difficulty. Under current market conditions, the value of LDC storage exceeds its costs (i.e., there are economic rents associated with it). The LDCs do not concede that the current approach of regulating implicit storage prices for in-franchise customers to a cost-based level is appropriate in the

modern environment. While they are prepared to continue with cost-based rates as a transition mechanism, they reserve their rights to make alternative proposals in the future on the broader question of how storage rates should be regulated, if at all.

Given the likelihood that there is economic rent associated with LDC storage, the allocation approach agreed to with respect to upstream transportation (a one-time optional allocation at cost, based on market share) would appear to give "incumbent" marketers a competitive advantage and potentially, windfall gains. In order to address this problem, some Task Force members favoured retention of cost based rates, with an annual reallocation of capacity as market shares change. Another member believed that annual reallocations, which presumably could only be done at the beginning of the storage cycle in April, were not frequent enough to enable competition to work effectively. The alternate approach that was considered was to price storage at market levels, but then return any economic rent associated with that practice to end-users by crediting it to the distribution cost of service. A major difficulty with this approach is defining a "market price" for storage. As described below, various proxies were considered, as were auction schemes.

In the end, the Task Force agreed that LDC storage for in-franchise customers should continue to be priced at cost at this time. There was no consensus on the mechanism or timing for transitioning to market based pricing from the traditional cost based approach.

It should be noted that all new LDC peak storage offerings and short term storage ("parking" services) available for ex-franchise customers are already priced at market based rates (and have been since 1997).

CUSTOMER MOBILITY

No single issue occupied more attention from the Task Force (both during its current deliberations and in the process leading to its June 16, 1998 Report) than that of customer mobility. All agreed that relatively few satisfied customers are likely to switch suppliers.

It was easy to achieve consensus on a number of objectives, including:

- (i) that customer mobility should be facilitated and is essential to effective competition;
- (ii) that "full" mobility (i.e., suppliers solely having resort to normal contractual remedies) should be in effect as soon as practicable;
- (iii) that LDCs will remove themselves from the middle of the end-user/supplier relationship as soon as practicable; and
- (iv) that any mechanisms to facilitate customer mobility should be designed to avoid anti-competitive barriers and ensure an adequate level of customer protection.

Beyond these areas of agreement (and general agreement as to the principle of sanctity of contract), the Task Force faced fundamentally divergent views with respect to protocols for customers being able to switch suppliers (during the term of an existing contract) during the transition to full unbundling.

The fundamental economic concerns relate to potential competitive advantage between "incumbent" marketers and newer (or prospective) market entrants (the latter class including affiliates of the LDCs), as well as the desire of the LDCs to be relieved of their intermediary role in customer/marketer disagreements (which, in addition to imposing costs, can only serve to erode the value of their customer relationships) and the view of consumer representatives that mobility promotes customer choice and competition.

On the one hand, all but the "incumbent" marketers, view the development of effective mobility mechanisms for in-term switches as being essential to achieving unbundling (and, more generally, to ensuring that natural gas remains an attractive commodity option). The LDCs and consumer representatives (i.e., CAC, OCAP) view this (and customer education) as essential to enabling an orderly unbundling process. With respect to mobility, they see little benefit in giving retail customers lots of options but, possibly, little real choice (because they are or become "locked-in" to a particular offering).

On the other hand, "incumbent" marketers view unbundling as essential to enabling full mobility and argue in favour of contractual certainty and sanctity pending a rapid transition to full unbundling. They argue that unbundling will allow for open mobility and that a rapid shift in mobility mechanisms could create customer confusion.

As outlined in the Task Force's June 1998 Report, the incumbent marketers feel that the LDCs do not have the systems flexibility to manage operational considerations relating to various mobility proposals. They also question the utility of dedicating resources to this issue, given limited customer demand and their view that by the time an interim solution is settled upon full unbundling could be achieved. They also raised concerns about the lack of an enforceable affiliate code of conduct.

While a variety of "compromise models" were discussed (and are described below) no consensus was achieved. Essentially, some of the "incumbent" marketers took the position that customer mobility is not an appropriate issue for the Task Force to be addressing at this time. They take the view that the Board (in its EBO 202 Advisory Report and subsequently) has not sought Task Force input with respect to mobility rights other than in the "post-unbundled" market (where marketers will be able to manage upstream and downstream activities and customers will be free to engage in commercial relationships directly with the marketers).

They view the recent Regulation made under the *Ontario Energy Board Act*, (1998) as dispositive of this issue, from a regulatory and legal perspective (as all parties were invited to submit their positions, which were considered by the Board in formulating its recommendations). To the extent that other customer mobility issues are to be addressed, this group of marketers takes the view that it should be subject to the transparency and other procedural requirements of a rule-making process (having regard for potential conflicts of interest, anti-competitive effects, consumer cost implications and their view of the Board's jurisdiction in light of Bill 35).

Other interests represented on the Task Force, on the other hand, were eager to explore various compromise proposals, with a view to ensuring an orderly transition to an

unbundled market. In this context, the LDCs recognised the need to work with the marketers to devise mechanisms for capacity allocation and contract administration to facilitate customer switches and related marketer risk management.

The vexatious issue relates to "in-term" customer switches. Issues relating to end of term switches have largely been addressed (although the proposals have not yet been formally ratified) by OEMA. Upon formal OEMA approval of the proposed policy marketers will be required to notify customers of their contract expiry/renewal dates. In the absence of an affirmative customer election to cancel, renewals will roll over, while cancellations by the customer at expiry will revert to system gas (or its substitute). The Task Force discussed the possibility of a registry system being maintained (possibly by a third-party verification service) which, on request, would provide customers with information concerning contract terms (i.e., expiry/renewal dates) and of third-party verification being required. The intention would be for such facilities to serve customers, rather than be available to agents as a marketing tool.

The Task Force is of the view that new contracts (i.e., customers) signed up after March 1, should be subject to third-party verification, as well as an appropriate "cooling off" period (now prescribed by Regulation).

During the course of the Task Force's deliberations, a number of potential approaches to addressing the issue of in-term switches were identified. While the Task Force did not take a normative view on any, it thought it might be useful for future efforts to resolve this issue to briefly outline each of them. It should be noted that all of the proposals were advanced on the basis of consensus implementation — all parties reserved their rights in the event the issue is to be determined through a more formal process.

Standard (Term Differentiated) Exit Fee — This concept originated within the OEMA Retail Customer Education Committee. The notion would be to include a standard exit fee provision in all new customer contracts (or renewals) effective March 1, 1999. The LDCs indicated their willingness to assist marketers in managing transport/storage risks relating to this proposal (by relaxing timing requirements on the usage of inventory). The "incumbent" (and certain other) marketers took the view that any such fee would constitute

unnecessary and undue interference with contractual arrangements and constraint on competitive offerings. They argued that there is no precedent for such a remedy in Canada except with respect to long term mortgages, where the financial ramifications for the customer are far more substantial. While such a mechanism may arise as a result of market forces, they argue that it should not be imposed.

Limiting Term of Contracts — One of the concepts noted in the Working Group Report was that of limiting new contracts (including renewals to a one-year term), pending unbundling. Late in the Task Force's deliberations, in an effort to reflect and achieve a measure of consistency with the recommendations emerging from the Market Design Committee's proposals for transitional retail mobility in electricity, the LDCs proposed that renewals, conversions or new retail customer contracts be limited to a 1 year term during a "transitional period" which would follow the initial consumer education campaign (e.g. from spring 1999 for a year). Implementing such a proposal was again viewed by certain "incumbent" marketers as an undue impediment to competition. As with the "standard exit fee" proposal, they argue that it would limit meaningful offerings from being generated in the market.

LDCs to Withdraw from Their Role in Mediating Customer Mobility Disputes –

The LDCs, customer representatives and new entrants have indicated their desire to have the LDCs move quickly to a position where they can simply take directions from customers (or their appointed agents), rather than be in a position of having to mediate customer mobility disputes. Their legal authority for doing so might be buttressed by amendments to existing GTAs/GPAs and by the removal of certain LDC undertakings on March 31, 1999 or by the Board taking a view on this issue in the context of licensing and distribution codes. Implementation of such a proposal would be governed by appropriate codes of conduct with respect to LDC affiliates. The incumbent marketers also take the view that the LDCs are not suited to mediating customer disputes and, for that reason, have supported the OEMA call centre as a dispute resolution mechanism.

New Marketer Indemnity — Another proposal, discussed in the context of pre-March 1, 1999 contracts (but not necessarily limited to that context) would be for the LDCs to follow customer directions, but only where the new supplier is prepared to assume the liabilities to the existing supplier of a customer switching during the term of existing contract. The new supplier would have the right to claim against such customer for any losses incurred as a result. The incumbent marketers argue that this proposal is impractical, as it is difficult to calculate the unforecasted costs associated with the transfer of a customer in an efficient manner (i.e., the effect of the switch on hedging, load balancing, etc.).

Mobility to Coincide with Unbundling—The incumbent marketers also participated in the Electric Market Design Committee's "retail technical panel" ("RTP") which made the following recommendation, that was ratified by the MDC plenary panel, on the matter of mobility.

"Recommendation 4-7. LDCs should be required to notify retailers currently providing service to a customer of an impending change in service prior to making the change and to wait ten working days before implementing the transfer. If during that period a current retailer indicates that existing contract terms prevent a transfer, an LDC must cease transfer processing until the matter has been resolved and proof of the resolution has been submitted with futher instructions regarding whether and how to proceed. LDCs must maintain neutrality with respect to all parties during this process. Until the matter has been resolved, the current retailer will continue to serve the customer and pay the LDC according to the existing contract terms and conditions."

The RTP, in its analysis, identified a number of goals of the registration and transfer procedure, which included the need to avoid putting the LDCs in a position which could arise in a perceived conflict of interest, the need for confidentiality of contractual information, and the need for the marketplace to develop robust offerings through contractual certainty.

The incumbent marketers supported this proposal, yet in order to accelerate unbundling, some of the "incumbent" marketers indicated that they would be prepared to agree to an "open" switching regime applicable to all customers (including existing customer

contracts, rather than just prospective contracts) on a non-preferential basis once unbundling is effective (i.e., when marketers can render a bill). Under this proposal marketers would be restricted to normal commercial remedies in enforcing the contractual obligations of their customers. This proposal was qualified by noting the need to devise a mechanism to ensure that customers could not switch marketers merely to avoid paying their bills. It was rejected in principle by some, who sought greater assurance as to the timing of implementation.

Compromise Protocol – The proposal to which the Task Force dedicated the most attention was that of devising a protocol for customer switches during the term of a contract entered into after March 1, 1999. Under such a protocol, the following would occur.

- 1. GTAs/GPAs would be modified to indemnify LDCs from liability arising from acting on customer's instructions subject to the protocol.
- 2. Customers would be required to provide written instructions to a new supplier, who would immediately notify a third-party verifier. The verifier would ascertain (from the existing supplier) the expiry date of the customer's contract, in order to determine if the customer was switching during the term of the contract or selecting a new supplier post contract expiry.
- 3. The third-party verifier would immediately advise the customer that he/she is subject to an existing contract, but would not attempt to provide specific information concerning the contract. After a specified "cooling-off" period, the third-party verifier would advise the existing supplier of the customer's intentions.
- 4. The switch would occur after the lapse of a specified number of days (or the next following month-end) after affirmative third-party verification. The time period for this switch would be "ratcheted down" as systems become more robust.
- 5. The costs of any LDC "switch fee" and third-party verification would be for account of the new supplier (unless otherwise agreed).

Certain "incumbent" marketers expressed the view that this protocol would drive up contracting costs (as the market would have to take transfer risk into account) and give rise to customer confusion. They noted that any indemnity of LDCs from liability arising from acting on customer's instructions would have to be subject to adequately addressing concerns about potential conflicts of interest relating to LDC affiliates who are direct competitors. They also remain opposed to the concept of a "switch fee", as articulated in the Task Force's June 1998 Report.

More generally, they question whether developing a process to deal with in-term switches, whether pre-March 1, 1999 or pre-unbundling, is a prudent use of resources, arguing that it will be a time-consuming, expensive and distracting process to deal with a relatively short-term situation. They urge that efforts should be concentrated on accelerating the unbundling timetable, rather than diverting resources to deal with this concern.

ACCESS TO SERVICE/CREDIT RISK

There was extensive discussion within the Task Force with respect to the obligation of suppliers to serve and their ability to invoke "shut-off" rights (as opposed to the right to discontinue supply, in which case a customer could seek another supplier) in order to mitigate receivable risks (rather than as an instrument for retaining customers). All agreed with the consensus achieved in the Working Group Report that the "regulated LDCs should not use the threat of shut-off to collect money owing to a third-party gas marketer for commodity sales." The issue arises in the context of unbundled billing. The LDCs, in particular, want to ensure that they are not disadvantaged by the collection function being provided by a marketer.

The focus of the Task Force discussion was on the extent to which marketers should be protected (by the ability of the LDC to disconnect customers) with respect to distribution charges paid by them to the LDCs. While the Task Force agreed that resolution of this issue is fundamental to developing a model for the unbundled environment, and a variety of options were proposed, no consensus was achieved.

Transitional Measures

One proposal advanced was that, pending the LDCs exiting the merchant function, marketers would be entitled to full credit back from the LDCs for up to a pre-determined number of days (e.g., 90 days from the date of the bill) of distribution charges paid by it in respect of a customer, once the marketer discontinued supply to that customer. There would be no priority entitlement to funds actually collected by the marketer. The discipline on the marketer would be that, in order to invoke this remedy, it would have to revoke the customer (who could then seek other sources of supply or revert to system gas without restriction). The proposal was ultimately rejected by certain marketers, who indicated a concern that it would give rise to incentives for customers to "game the system" (and for other marketers to use the procedure as a marketing tool).

The Task Force did not extensively explore the issue of default supply in the context of transitional measures (given the continued existence of system gas). It was noted by certain marketers, however, that default supply could be provided by marketers in the transition period (as well as by the LDCs), assuming that they are put on a "level playing field" with respect to bad debt recovery/enforcement mechanisms.

End State Model

Two models were put forward with respect to the remedies available to suppliers once the LDCs are out of the merchant function.

Both assume that marketers should be obligated to serve all customers in their chosen market segments, subject to their ability to stipulate commercially reasonable terms of service (i.e., price, payment terms, bill frequency, late payment changes or interest on outstanding balances, credit checks, security deposits, advance payments, etc.) Similarly, both assume that, when marketers take on the retail billing function, they will effectively assume liability to the LDC for distribution charges and full responsibility for the collection thereof. As a result, the LDC distribution rate may reflect collection and bad debt costs related to marketer activity only.

The Task Force agreed that marketers should acquire the right to terminate service, subject to "shut-off" standards approved by the Board. These standards should include mandatory service periods for existing residential heating customers in respect of circumstances which give rise to public policy concerns (e.g. "winter gas" or other situations where it is determined that supply should be extended beyond the normal shut-off point because of health or other social concerns).

It was generally agreed that a mechanism to fund mandatory service will be required. One such mechanism might be an industry wide fund, specific to each rate class and funded through a pre-determined gas commodity cost to be collected from distribution system users. Such a fund would be available to reimburse suppliers and the LDCs for the value of gas mandatorily supplied to end use customers during mandatory service periods. From an economic perspective, such a fund would change the LDCs' current bad debt provisions. Recovery from the fund would require evidence of reasonable collection efforts and that any related customer disputes had been settled.

Views diverged at the Task Force as to whether suppliers should be able to invoke physical shut-off rights in order to enable them to recover all (or portion of) distribution charges incurred in respect of service provided by them to a customer (assuming that the customer could otherwise secure another source of supply). All agreed that, for safety reasons, such shut-off procedures should continue to be controlled and physically performed by the LDCs.

One model would limit suppliers to normal commercial remedies. This would include the right to discontinue supply (following notice), which would result in shut-off (once system gas is phased out) unless the customer could secure another source of supply (or is entitled to "default supply", as described above). Marketers would be able to invoke other tools to mitigate credit exposure and manage their assets/liabilities, subject to the "obligation to serve" previously described.

Others were of the view that service providers who elect to use consolidated billing for the gas service should have access to "shut-off" procedures to collect distribution costs incurred by them, irrespective of whether the end-use customer is able to secure an alternative source of supply. This view would ensure the primacy of a supplier's relationship with a customer by allowing suppliers to invoke disconnection, subject to it being administered by the LDCs in accordance with standardized rules and procedures applicable to all market participants.

This divergence of views illustrates, again, how integrally related customer mobility issues are to most fundamental aspects of the unbundling process.

As noted above, there was a general view that suppliers should be subject to an obligation to serve within their defined market. It is assumed that, in the end state model, the market will devise mechanisms to address access concerns arising from poor credit or lack of credit history (e.g., securities deposits, pre-payments, use of credit information, credit card payment systems, etc.). Similarly, backstopping measures in respect of contracting failure should be handled by commercial arrangements (at whatever level an end user or marketer prefers, subject to whatever minimum standards the Board may prescribe).

OPERATIONAL ISSUES

TITLE TRANSFER

As indicated in the Task Force's June 1998 Report to the Board, the opportunity presented by the removal of restrictions on title transfers is the potential for a broader competitive gas supply market to develop within Ontario. Such a market would consist of multiple sellers and buyers who would transact for gas volumes at a number of trading points or "market centres" inside Ontario likely at, but not limited to, the inlet points to the distribution systems. Such a market would generate "made in Ontario" prices that would be a function of both production area pricing and the competitive activities of non-LDC sellers functioning as holders and managers of transportation and storage capacity upstream of the LDC distribution systems.

Passage of Bill 35 allowed for title transfers and burner tip sales to occur in Ontario. Title transfers that previously occurred through "meter bounces" at points of interconnections to the Ontario LDC system can now occur anywhere in the province. In this regard, the Task Force considered the immediate needs of market participants for title transfer mechanisms (and load balancing flexibility) under current contracts, as well as the technical best practices and capabilities required for longer term title transfer mechanisms.

Short Term

Given the immediacy of the time constraints with respect to Bill 35, the Task Force prioritized action items. Its first focus was on changes that could be accomplished without the need for OEB intervention or approval. Accordingly, the Task Force (through the Operations Subcommittee) reviewed the LDCs proposed interim nomination procedures, operational guidelines and fees, all of which will be applicable until the next rate cases for the LDCs. These arrangements, summarized below, are now in place. There was no consensus as to the relevant fee structures — the current fees for title or inventory transfer services are noted below, although the Task Force did not address their reasonableness. These issues are more appropriately addressed in rate cases or other forums (such as rule-making).

Wholesale title transfer transactions can now occur in Ontario without the need for "meter bounce" to a transmission pipeline interconnected to the LDCs' systems. Each of Enbridge and Union confirmed that their existing gas control systems could accommodate this change. While "meter bounces" have been eliminated, the LDCs did not anticipate that the volume of transactions is likely to change appreciably over the short term.

Title or inventory transfer services are also available at the retail level among end-use customers or their agent/marketers operating in Ontario. The services are potentially of significant value to "bundled T" service or "buy/sell" customers as a means of balancing delivery and consumption volumes for existing bundled contracts. Each of the LDCs has confirmed that they will provide additional flexibility for these customers.

For each of Union and Enbridge title transfers are a nominated service with a current fee of ¼ cent/GJ.

In the case of Union, this fee is effective from January 1, 1999 and is capped at \$1,500 per month unless a shipper utilizes other storage and transportation transactional services to a value of \$5,000 per month (in which case the fee is capped at \$750 per month). Union allows imbalance trading between bundled customers by permission only. The fee is currently 3 cents/GJ. The fees for exchanging storage inventories involving any shipper who is not a bundled customer are currently 2 cents/GJ and ¼ cent/GJ transfer fee to the seller and 2 cents/GJ to the buyer. All of these revenues go to Union's storage and transportation revenue deferral account.

Enbridge makes available inventory transfers on "bundled T" banked gas accounts prior to the contract year end (currently at the ¼ cent/GJ fee). This service is not available to "buy/sell" contracts because there is no banked gas account to transfer between customers. Revenues go to Enbridge's transactional services deferral account.

The short term objective of both LDCs is to provide facilitative mechanisms which are revenue neutral to their previous transactional services. These are viewed as transitional prices until other elements of the liquid market emerge.

Title transfer between the LDCs was rejected by them as being administratively complex and of little practical value. Nor does it represent the physical location of the gas that is to be transferred. It was generally felt that suppliers would be better equipped to deal with imbalances with each LDC.

As noted in its Second Interim Report to the OEB, the Task Force is highly confident that, as a practical matter, the LDCs will work closely with their commercial customers to devise short term accommodations. Effective lines of communication have been established so that, absent extraordinary circumstances, it is unlikely that Board involvement will be required to mediate or resolve such concerns.

Longer Term Mechanisms

Similarly, there do not appear to be any significant impediments to the adoption of longer-term procedures or systems development to facilitate title transfers within the province. This effort is currently underway, although the Task Force did not focus on it (except in respect of certain information systems requirements, discussed below). While it is clear that more robust procedures and systems will be required for the implementation of full unbundling, the Task Force does not anticipate that the development of such mechanisms will raise significant policy concerns.

Transparency of In-Ontario Pricing

A market centre that has already developed within Ontario is at Dawn. This has resulted in a "made in Ontario" price at this location.

The Operational Subcommittee strongly endorses the public reporting of pricing at Dawn. The Task Force concurs. NGX Gas Daily and Canadian Natural Gas Price Reporter were polled for their intentions. Quick Trade currently trades at Dawn and NGX intends to develop an electronic trading facility for Dawn pricing if suitable commercial arrangements can be made. Both Gas Daily and CNGPR will continue to provide daily public reporting of the Dawn price.

CONSOLIDATION OF DIRECT PURCHASE CONTRACTS

The Operational Subcommittee considered the ability to aggregate customer loads, regardless of type/class of redelivery contract, with respect to storage and transportation. Few impediments were found to the ability to pool transportation and storage capacity utilization to supply aggregated loads in several areas under various redelivery contracts. A relationship between pipeline nominations in TCPL delivery areas and the location of the end users was seen as necessary. Enbridge took the view that end users in similar TCPL delivery zones could be pooled. Union felt that all end users could be pooled under the proper nomination/administration procedures. These positions were welcomed by the Operational Subcommittee and the Task Force and will have to be developed as unbundling occurs.

CAPACITY ENTITLEMENT

As outlined earlier in the report, capacity allocation pertains to how existing gas deliverability assets, now largely controlled by the LDCs, will be apportioned to end-users or their appointed suppliers in an unbundled operating environment. Deliverability is derived from assets that include upstream pipeline transportation capacity, gas storage space and gas storage deliverability. As noted above, capacity entitlement rights and the processes put in place to transfer capacity have the potential to significantly affect end-use customer mobility and the apportionment of business risk and market opportunity amongst market participants. While all agreed that the best model is one that supports the highest level of customer mobility and choice practicable, there was considerable disagreement as to the details.

In its Second Interim Report to the OEB, the Task Force identified a number of criteria against which various models for allocating deliverability assets should be evaluated. It also achieved consensus that allocation should be proportional (based on load profiles), with end-users entitled to the value of any economic rents. Some Task Force members reserved the right to argue that, in the long term, end-users should not be entitled to the entire value of such economic rents. The Task Force sought input from the Operational and Rates and Services Subcommittees as to the most effective mechanisms to satisfy the identified criteria. Based on this input, the conclusions of the Task Force are outlined below.

Allocation of Storage

The Operational Subcommittee concurred with the Task Force's guideline of equal proportional access to storage capacity not previously assigned. Allocation by rate class should take into account the load factor and annual volume for the class. Allocation to small volume end-users should be at the rate class averages, while larger volume, non-typical load factor end-users should have their historical entitlement considered in determining their allocation. The rate class as a whole should adhere to the rate total allocation.

Ideally, the initial allocation and contracting for storage space and deliverability would occur on or about April 1st, since at this time of year storage is almost empty. Hence the potential difficulties in pricing the inventory of commodity (for transfer pricing purposes)

which would exist at any other time of year are minimized. The Task Force recognized however that while an initial allocation of storage may be attainable by April 1, 1999 or shortly thereafter, it is highly unlikely that parties will actually be able to execute the necessary contracts by this date.

Work required before this can occur includes execution of necessary storage contracts with the LDCs, completion of upstream arrangements and resolution of LDC operational details. Task Force members accept that this administration will take some time and that further work is required to determine how this allocation of and access to unbundled storage entitlements can practically be utilized at less ideal times. The Task Force believes this can reasonably be accommodated; further effort is required to work out the operational details. The alternative to sorting out these practical details is for industry participants to wait another year (i.e., until on or about April 1, 2000) for access to storage entitlements. This is considered a significantly less acceptable resolution of the issue.

Both the Operational and Rates and Services Subcommittees were of the view that the best way to ensure a high degree of customer mobility, particularly during the transition period, is to tie storage capacity to the end-use customer in such a way that capacity entitlement moves with the end-use customer from supplier to supplier. Annual capacity redistribution on the basis of the original allocation is seen as a way to keep the distribution of assets aligned with continual changes in supplier market shares under a cost based regime.

This approach is favoured for storage allocation (which will initially be available at cost) because end-use customers are expected to opt for all of their capacity entitlement (due to its currently positive economic value). As discussed later in this report, it is not the proposed approach to the allocation of upstream transportation capacity due to the significant administrative complexity associated with it.

Other proposals considered included a "one time" (based on market share) allocation or a one-time auction (which could establish both an allocation and a market price for storage capacity). This approach was considered impractical for political reasons (given the view of some of natural storage capacity being a "public good").

Given the lack of consensus on the proper approach to allocating and pricing storage, all reserved their rights to make and support any proposal in future proceedings.

A redistribution of the storage capacity allocated to each end-user on the termination of the end-user's agency agreement will be accommodated by the LDCs during a transitional period. It was noted that the redistribution of storage as customers change suppliers will raise inventory transfer valuation issues that will need to be resolved among suppliers and their customers.

The end state model would entail continuous secondary market redistribution of the asset. Someone will have to continue the ongoing function of maintaining a customer database. Growth will be accommodated by developing or leasing additional storage assets, as dictated by market pricing (although they could be rolled into a cost based pricing mechanism).

There was no resolution as to the issue of whether assignment of storage entitlement should be mandatory or voluntary (although, given the current economic value of cost based storage, this issue may be largely theoretical). Differences in approach are evident even between the two LDCs. Mandatory assignments (at cost) would avoid the possibility of stranded assets being left with the LDCs (an issue more relevant in the case of upstream transportation, given current market conditions). If stranded cost solutions on an industry wide basis could be achieved, mandatory allocation would be less relevant. Voluntary assignments reduce the risk of the LDCs' holding unused capacity for the suppliers, but immediately subject such capacity to market pricing (which may cause stranded costs to arise).

As with voluntary versus mandatory allocation, differences in approach between the LDCs exist with respect to the volume of storage allocated with respect to the end-user's mean daily volume, operating contingency proposals and other less significant issues. Given the nature of their portfolios, it became apparent that identical allocation methodologies as between the LDCs may not be practical.

At a late stage in its deliberations the Task Force was advised by Union that, in the context of its EBRO 499 Settlement Agreement (November 16, 1998), it agreed to refer the issue of storage entitlement in its Northern and Eastern Operations Area to the Task Force with a request that it be given high priority so that it may be resolved by April 1, 1999. The Task Force did not have an opportunity to consider this specific issue during the deliberations leading to this report.

Allocation of Upstream Transportation

While the Operational Subcommittee would have preferred to achieve a consistent allocation methodology in respect of upstream transportation throughout the province, it became evident that this would be impractical. Union and Enbridge are subject to different contractual obligations for long haul transportation. Union has a significant portion of delivered gas in its portfolio, while Enbridge has essentially a complete match between its market and long haul transportation. In addition, different characteristics of gas supply and use of transportation capacities on the Union system between its Northern and Southern areas require different allocation approaches for each area. Accordingly, the focus of the Task Force was on maximizing the ability of each LDC to satisfy user demand (rather than achieving a uniform system across the province).

Concern was voiced that mandatory assignment of capacity would be self-defeating and a barrier to entry. While Enbridge initially advanced proposals which would have entailed a mandatory allocation (given the general expectation that there may be excess supply of upstream transportation to Ontario in the medium term as additional pipeline capacity east from Chicago is completed, and there is a time lag as market growth occurs to fill this capacity), they were prepared to consider moving to optional allocation models based on an understanding that there should be reasonable transition (i.e., stranded) cost recovery. The LDCs must be assured a fair opportunity to recover costs of upstream capacity. They should not be penalized for incurring costs required to fulfil their current public service obligations and then having to shed those costs as a result of the transition to full unbundling. Presumably the mechanism for recovery of stranded costs, if incurred, will be the subject of a

future regulatory proceeding (which could involve a rate case or, in a performance based regulatory environment, some other mechanism to satisfactorily address this concern).

It was noted that the next several years will be a propitious time to effect a permanent allocation, given that almost 90% of TCPL capacity comes back into the market by 2003. The passage of time will make resolution of this issue more difficult, as the LDC's existing contracts for upstream capacity start to expire and their role in the retail merchant function diminishes. It is clear that this developing situation must be addressed soon so that the LDCs, in consultation with TCPL, can plan properly and make rational, informed decisions regarding capacity contracts. This is essential to minimizing potentially strandable costs.

Union is particularly concerned about achieving allocational equity and is proposing a voluntary, temporary assignment (by pro rata vertical "slices") of all previously unassigned upstream transportation at tolls. This pro rata vertical slice approach is a change from Union's current Board approved practice of assigning only its TCPL firm transportation contracts to direct purchasers under renewable twelve month contracts. This approach recognizes that Union is "running out" of TCPL firm capacity to assign to direct purchasers and proposes to allocate a proportional share of all previously unassigned transportation contracts. This proposal will require Board approval.

It should be recognized that direct purchasers will also be responsible for the portion of their transportation portfolio that is currently met by Union's delivered gas contracts which have no contractual firm upstream transportation attached to them. The allocation would be proportional by rate class and would assign the upstream pipeline contracts which Union uses to serve specific delivery areas.

It was noted that Union and Enbridge contracts for STS service (i.e., service available from TCPL that involves deliveries of gas into downstream storage in the summer and withdrawal in the winter — one way to balance supply and demand in areas that are not physically connected to storage, such as northern or eastern Ontario) may not be assignable if doing so reduces the pooling rights under these contracts. This is currently undergoing evaluation by TCPL. This is one of the benefits of continued temporary assignment of the

LDCs' upstream transportation to customers. Additionally, temporary assignments eliminate the need for customers to meet the stringent credit requirements of TCPL and other pipelines, as will be required with permanent assignments.

A similar arrangement may be required for Enbridge's use of the Union M12 (i.e., long-term storage and transportation service on the Union system) contracts.

Enbridge, which is more comfortable than Union as to its ability to fully satisfy customer demand based on the make-up of their current portfolio, initially proposed that all upstream transportation (excluding Union M12) be assigned on a mandatory, first come/first served basis at tolls, based on the end-users' mean daily volume. It would be prepared to forego mandatory allocation if an acceptable industry solution for stranded costs is developed. It is also prepared to make permanent assignments of transportation available to its end-use customers.

Unlike storage, the Task Force proposes that transportation capacity be allocated on a one time optional basis, and thereafter be available on a renewable, temporary assignment basis with the LDCs <u>not</u> involved in the periodic redistribution of these entitlements. The rationale for this approach is that upstream transportation allocation on an optional basis, under current market conditions, could result in a significant number of parties not opting to take their full allocation entitlement. When this occurs, the LDCs may manage the potential stranded costs associated with non-allocated capacity by assigning this capacity on a long term basis to others or possibly turning this capacity back to the upstream pipelines in order to mitigate demand charge exposure. Consequently, future access to this capacity cannot be guaranteed for a shipper who originally opted not to take its full entitlement.

Under current market conditions, it is expected that significant capacity could be managed in this way, with the result that the entitlement "attached" to specific end-users could vary substantially depending on the commitment originally made by themselves (or their agents on their behalf). Under this scenario, the principle of attachment to the end-user is problematic in that the administrative burden associated with tracking the variable entitlements opted for by specific end users makes this unworkable.

This approach can be contrasted with the storage allocation approach in which the Task Force recommends that allocation "follow the end user" on the following basis:

- (i) although storage allocation will also be optional, it is expected that the vast majority of end users will opt to take their full storage entitlement under current market conditions (based on the initial availability of storage at cost). Consequently, tracking these full entitlements will be administratively simpler; and
- (ii) allocation to follow the end user is only applicable in the transition period (until storage values have been transferred to be available at market), which limits the time in which this tracking must be performed.

It is anticipated that overall market growth will be accommodated in a similar fashion as it is today, with the LDCs identifying, through discussion with the industry, the need for additional upstream transportation. The basis for this approach is that the LDCs are in a better position to identify generic growth trends on a non end user specific basis than retail marketers can currently perform. The LDCs are prepared to contract for such capacity, either with the support of a contractual arrangement with end-users or, based on some other approved mechanism that meets the needs of industry stakeholders and is acceptable to the appropriate regulators, which could include both the Board and the NEB.

Pricing of Storage

The most difficult issue addressed by the Operational Subcommittee was that of devising an effective mechanism for distributing the differential economic rent between market based and cost based storage to Ontario end-users. In considering market and cost based methodologies no consensus was achieved as to an appropriate model, although considerable progress was made identifying the attributes and consequences of such models. It should be noted that the current differential between market and cost based pricing is estimated by the LDCs to be in the range of \$20 million to \$40 million per year (or \$8 to \$12 per year per average household). These values, while subject to fluctuation (i.e., it is

conceivable that storage assets, at cost, may be "stranded" in the future), point to the challenge in achieving consensus on an appropriate model.

While there was no consensus on whether storage should be priced at market or cost, there was some level of comfort with the latter approach during the transition (i.e., until experience is gained and the market evolves). Either approach is problematic. Under a cost based regime the current method of returning a premium to the market is by disposition of a deferral account. This can give rise to problems. Under a market based regime, the challenge is to determine a market price that is acceptable to all parties, given the current lack of liquidity and transparency in the market.

The market based methodology considered would initially entail a market price being determined on an annual basis. This price would be charged on all storage contracts (both in and ex franchise). The LDCs proposed that the differential between the market price and the actual cost of the storage (assuming, as is the case today, that it would be positive) be returned to the end-user in the form of a rebate of their distribution charge. This would cause an increase in the contracting party's cost of storage (and, thus, its delivered commodity cost) with an offsetting credit to the distribution cost so that the end-user is kept "whole".

There are several advantages to such a methodology. For one, the market would determine the value of the assets on an ongoing basis. In addition, the allocation formula itself would be less critical, as prices would "clear" in the market.

On the other hand, if the net effect is to achieve cost based rates through a credit mechanism, some question why not do so directly. Some also believed that a market based approach with a credit mechanism solely to in franchise customers might yield an unacceptable difference in comparable storage costs between the LDCs (insofar as Enbridge purchases storage capacity from Union).

Other potential disadvantages were noted in respect of this proposal for market based pricing. For one, the significant differential from cost could lead to consumer confusion and

give rise to the risk of market concentration as a result of "deep pocket" buying power. The rebate mechanism (and other aspects of the proposal) are administratively difficult and challenging to monitor. From a retail marketer perspective, this rebate mechanism is not dissimilar to the "buy-sell" mechanism, which has caused customer confusion and has constrained the formation of a burner-tip price. It was agreed that a mechanism other than a line item rebate to flow economic rents to the end use customer (through a reduction of distribution charges) is desirable.

While a market based model is generally viewed as more desirable, there was no agreement on an acceptable market pricing methodology. Without that, it is not possible to go immediately to this mechanism. The subcommittee began to develop such a methodology but did not have sufficient time to resolve the issues involved. The pricing methodology proposed would endeavour to duplicate the key parameters a marketer would use in making a storage leasing decision. The Dawn summer/winter differential as determined by reviewing the forward strip at a particular point in time (e.g., March Nymex close) would be used as indicative of the average arbitrage opportunity and of the value of one year storage. Refinements might include averaging the forward strips over several calendar months, the last three days, and the final day of trading, average more than one year forward, averaging with increased weighting on the prompt year, and utilizing only the prompt 12 month forward strip. Some discount to the resulting number (e.g., 10%) might be applied as a surrogate for the marketer's margin. Some were of the view that this methodology holds promise, but that it requires more technical analysis before industry agreement is possible. Others were less optimistic about this particular proposal.

Another option considered for determining market price was reference to exprovincial benchmarks (e.g., Michigan storage). Use of spot market pricing for late summer season excess storage was felt to be inappropriate for pricing unbundled in franchise storage. It was noted that Ontario storage for ex franchise long term markets is not frequently available.

There are also dynamics to consider between upstream pipeline capacity and storage assets, since the value of each is somewhat interdependent. For example, under an optional allocation regime with market based storage pricing, the value of storage is affected by the amount of upstream pipeline capacity available, since such capacity can be used as a substitute for storage. Consequently, if significant incremental upstream transportation capacity is available to Ontario and is surplus to market requirements, it may lead to discounting of transport capacity and hence diminish the market value of storage. However, this development would indicate a competitive and efficient market in Ontario.

The cost based methodology would simply duplicate the system as it occurs today. Obvious advantages are consistency with the treatment of upstream transportation, the fact that there would be no debate as to price and avoidance of difficulties with respect to dealing with flowback. Marketers would aggregate the individual storage allocations at cost and utilize them as they deem appropriate. This would provide them with an opportunity to maximize the value of the asset. Pending a high level of customer mobility in the market, it should be expected that marketers would retain a portion of the additional economic rents.

From an administrative perspective, this methodology would reflect the status quo, with no recycling of revenues or monitoring requirements. It is inconsistent with the overall thrust of minimizing regulatory intervention in the market for natural gas and is likely to trap economic rents in the hands of marketers. As such, some were of the view that it could impose barriers to entry for new marketers.

The methodology would require a regular audit and re-allocation of the cost based storage assets to the Ontario marketplace, in order to ensure that these assets do not migrate to another geographic location. Many questioned the effectiveness of such a mechanism, assuming a reasonably liquid market.

It should be noted that both the cost and market based models will require the maintenance of a database of end-use customers and the aggregators serving them. It is envisaged that this database will include end user identifier (account number), location, market segment and, on a transitional basis, storage allocation entitlement. It was assumed

that this will be performed by the LDCs (as is currently the case), while the end user allocation will shift between aggregators at the termination date of the end-user's contract.

For reasons described, the Task Force recommends cost based allocation at the outset. Over a period of time it may become practical to move to a market based pricing regime. For this reason, the Operational Subcommittee considered transitional mechanisms. One such model would progressively allocate 20% less per year at cost while auctioning the remainder so that, over a period of 5 years, all storage pricing would be market based. While this proposal was found unacceptable, most subcommittee members believe that some transitional model to market based pricing is desirable.

Indeed, consensus on a cost based model as a transitional mechanism was predicated on agreement that there should be a clear focus on moving towards a market based pricing regime when it becomes practical to do so. As previously noted, a firm commitment to the development of a methodology to move to market based pricing is fundamental to acceptance by the LDCs of the cost based approach at the outset. It was noted that the pace (and success) of the transition will be linked to effective customer mobility and education programs.

CONVERSION ISSUES

As indicated in its June 1998 Report to the Board, the Task Force believes that the continuation of the "buy-sell" mechanism is an impediment to the development of a fully competitive market for a variety of reasons including:

- (i) it only imitates competition and is not a true market offering;
- (ii) it over simplifies many operational and technical issues; and
- (iii) it is based on the LDCs continued involvement in the merchant function.

In other words, the "buy-sell" mechanism is no longer necessary. Leaving it in place can only serve to delay the unbundling process.

The Task Force confirms its previous recommendation that the "buy-sell" mechanism should be phased out in an orderly manner. The following procedures were agreed upon for all customers:

- (i) as of April 1, 1999 no new buy-sell contracts should be entered into;
- (ii) from April to November 1999 marketers could only renew buy-sell contracts with the LDCs for a term of 18 months or less;
- (iii) marketers should be able to move existing customers off buy-sell by (i) positive customer election to another option, or (ii) providing the customer with an economically equivalent service (e.g., east or west bundled T); and
- (iv) on a predetermined (and disclosed) date following unbundling (e.g., April 1, 2000) there will be no further renewals of buy-sell contracts. Grandfathering mechanisms (i.e., WACOG or a surrogate) would be required for the remaining term of existing contracts.

The Board could further accelerate conversion by requiring customers to make an election (something customers rarely do of their own volition) or relaxing existing requirements relating to positive election.

SYSTEM GAS PHASE OUT

The Task Force considered a variety of options with respect to system gas phase out, based on its assumptions that (i) system gas phase out will be condition (vs. date) driven, and (ii) suppliers will have the ability to impose reasonable conditions on supply and shut-off rights (as discussed earlier in this report).

Concepts discussed included models for allocating (or tendering) remaining system gas customers. The Task Force accepts that prior to phasing out system supply appropriate default supply mechanism(s) will need to be developed.

Given lack of resolution on issues which the Task Force considers to be conditions precedent to the phase out of system gas, the Task Force determined to focus its attention on more immediate priorities.

EMERGENCY PLANNING/ALLOCATION

Further deregulation of the natural gas industry in the province of Ontario will impact control over and the use of assets that are currently managed by the LDCs in Ontario. In the context of the changes envisioned for the natural gas industry in Ontario there is a need to design emergency protocols and processes to deal with events that could potentially impair the health and safety of the public.

Presently, emergency protocols and processes are embodied in the Eastern Canadian Mutual Assistance Plan (ECMAP). ECMAP is a voluntary agreement between the LDCs operating in Eastern Canada and TCPL to plan for managing gas supply emergencies in eastern Canada by reallocating their capacity in the event that a major facility outage results in a member being unable to meet the firm requirements of its customers. The ability to effect ECMAP processes is premised to a large extent on the LDCs controlling the gas supplies in their custody as well as having sufficient access to and control over upstream transportation capacity and gas storage facilities.

Matters of contract and legislation impact the extent to which a member can assist another member in an emergency situation. For example, ECMAP members do not presently have the legal or contractual ability to divert gas supplies from non essential firm customers in one member's franchise to essential firm customers in another member's franchise. To ensure an effective emergency response and to ensure public health and safety in emergency situations ECMAP members require this ability. This issue is currently being reviewed with the Government of Ontario under the auspices of the Ontario Natural Gas Association. More generally, voluntary arrangements with respect to emergency planning may not be effective or sufficient in an unbundled environment.

Given the recent legislative changes and proposed new regulations, ECMAP members require a workable process be put in place to address public health and safety issues in the event of an emergency situation. While the existing ECMAP Agreement is an appropriate starting point, modifications to ECMAP should be made to create a framework for emergency protocol and processes.

The Task Force agrees that existing ECMAP members should continue to be responsible for pooling and reallocating capability in the event of an emergency. Changes should create an unencumbered transfer of shippers' capability to ECMAP members to allow ECMAP members to manage emergencies. These changes should also deal with the costs, risks and liabilities of such transfers.

Emergencies of the nature envisioned can not be managed solely on the basis of commercial arrangements. The Task Force recommends the enactment of the necessary regulations to give the ECMAP Agreement power in law to ensure effective and timely response to emergencies.

RATES AND SERVICES ISSUES

INTRODUCTION

Within an overall mandate to recommend the characteristics and timing of new delivery services, the Rates and Services Subcommittee was asked to specifically address the following priority issues, viewed by the Task Force as most critical to short-term marketplace development:

- (a) identifying what unbundling can be accomplished using existing LDC rate structures and tariffs as well as short-term unbundling options that can be developed with minimal changes to existing LDC rate structures and tariffs (to potentially "fast track" preliminary retail rate unbundling);
- (b) identifying the scope and extent of disaggregated components and developing a plan and timetable for implementation;
- (c) determining guidelines for the development of necessary algorithms to simulate end-use demand for customer groups where daily volume needs are not individually available and an approach with respect to the number and size of geographic zones and end-user customer segments for inclusion in such an algorithm.

These three short-term deliverables are addressed below. The first two are discussed under the heading "Unbundling Issues", while the last is dealt with under the heading "Load Profiling Issues". In addition, the subcommittee identified a number of further issues that it might deal with, should its mandate be continued.

UNBUNDLING ISSUES

Objectives

In its report to the OEB dated June 16, 1998, the Task Force defined "unbundling" as (i) the separate pricing and offering of the discrete elements of LDC services; and (ii) the further opening of previously monopolized elements of sales service to alternative suppliers of those services. While its deliberations focused on technical issues related to the implementation of unbundling, the Rates and Services Subcommittee was mindful of the overall objectives of the exercise.

The Subcommittee found the following reference insightful:

"The success of unbundling is a matter of customer economics, not political pronouncements. Regulators and legislators can mandate open access, utilities can create unbundled tariffs, but if the customer cannot save money or non-regulated marketers cannot profit by selling either the commodity or new services, unbundling will proceed very slowly."

The Subcommittee concurs with these fundamental criteria.

There was general agreement within the Subcommittee that the priorities for unbundling should be title transfers (transactions between marketers, end-users, and LDCs, both in franchise and ex franchise and in any combination), upstream transportation, storage, load balancing and billing. Implementation of such unbundled services is conditional upon satisfactory resolution of a number of related concerns, including the development of the

¹ Consumer Choice in Natural Gas: A Hard Look at Savings, Porter Bennett, Public Utilities Fortnightly, October 1, 1998.

requisite infrastructure (and resolution of associated cost recovery issues), as well as resolving customer mobility and education concerns.

The Task Force identified the two "poles" of LDC service — fully bundled (i.e., the status quo) and fully unbundled (i.e., the projected end state). The second end of the continuum is also known as the daily load balancing or "stripped rate" model — a wholesale rate with a menu of load balancing, billing and collection options to allow for rebundling by marketers. As is discussed later in this report, the Task Force is of the view that building customer awareness and education needs to be an ongoing precondition of movement towards the end state model. Customers need to understand their choices and obligations under new unbundled rates and services regimes before they are implemented.

Customers should enjoy enhanced choice among workable services within a reliable and reasonably predictable service environment. Minimizing any detrimental impacts on customers should also be a focus for all parties as unbundling proceeds.

Load Balancing Services

The Operational Subcommittee thoroughly reviewed the existing balancing provisions for bundled services utilized by Enbridge and Union. While understanding was improved, no significant changes in methodology or administration were agreed to. It was agreed that, in the future market place (which will be significantly unbundled) the load balancing agreements between TCPL and the LDCs will need to be addressed.

Looking ahead, it was agreed that load balancing services should provide for a variety of options (i.e., daily, monthly, seasonal) as choice and flexibility will be of utmost concern to marketers and their customers.

Currently, balancing the fixed daily deliveries of gas (mean daily volumes) from upstream pipelines with variable daily deliveries to end-users is met through customer diversity, storage and delivery/spot services. Storage is viewed as a separate component of load balancing. Under the daily load balancing model, storage retained by the LDCs would be used to optimize and ensure reliability in the overall system despite forecasting errors

(between aggregate actual and nominated use based on load profile algorithms) or physical under or over deliveries by parties delivering gas to the LDCs for redelivery to end-users.

The Task Force recommends the following "three tiered" load balancing service developed by the Rates and Services Subcommittee. The first tier would reflect the fact that all customers are equally at risk for some degree of forecast error. The cost of the LDCs providing this base level of load balancing would be reflected in all delivery rates on a commodity basis.

The second tier would be a "nominated service" available to customers who requested the LDCs to arrange peaking and/or other means to balance their supply with demand. The LDCs would forecast the level of service and be at risk for recovery of the costs to provide it. Second tier service would be provided on a "user pay" basis, likely with a demand/commodity rate structure to reflect its contracted nature and appropriately recover the costs of reserving assets to provide it.

The third tier of load balancing would be unplanned and non-nominated and would remedy supplier performance faults (such as failures to nominate/deliver or non-authorized deliveries beyond tolerances) with an incentive rate structure designed to deter them. It would be provided on a "user pay" basis, with a pre-set charge (non-cost based and a multiple of published index) which is sufficiently high to be perceived as punitive.

The most important condition of the "true-up" process under the daily load balancing model is the time period in which an imbalance must be corrected once timely notice is given. Recognizing that everyone pays for operational flexibility, the subcommittee considered whether parties would prefer a longer or shorter period in which to correct an imbalance once timely notice has been given. This determination requires further development work and resolution within the LDCs and through industry consultation.

Imbalances due to forecast errors will be tradable (electronically) while those due to performance fault will not. The recourse available to the LDC in the event of a performance fault by a marketer (delivery shortfall or failure to pay) should be handled through

appropriate contractual or credit arrangements between the LDC and the marketer, presumably without raising a barrier to entry.

It was also recognized that the current Limited Balancing Agreements ("LBAs") between TCPL and the LDCs (i.e., agreements between pipeline operators and shippers at a specific delivery point to reconcile imbalances between volumes nominated for delivery and actual volumes received) may not be adequate under an unbundled scenario and will likely require modification as unbundling evolves. It was suggested that TCPL's concern for the LBA obligation can be met in the first tier of the "three tiered" load balancing service outlined above. It was stressed that the second tier is likely to be an interim offering by the LDC as an elected delivered supply required to match supply with demand once the allocated assets are fully utilized. It was clarified that the first tier would not apply if a customer provides a self-generated nomination. The intent is to avoid a situation where it could nominate at will and be held harmless from the variants. It was noted that self-generated nominations may not be a functional choice. If it is to be available, it will require rules.

Unbundling Within Existing LDC Rates

Essentially, the issue of identifying what unbundling can be accomplished using existing LDC rate structures and tariffs boils down to one of determining whether customers served under current bundled options (such as system gas, "buy-sell" or "bundled T" service) could be encouraged to migrate to existing unbundled tariffs (e.g., Union (Southern) T1 service, Enbridge's Rate 300 series of services, or unbundled storage entitlements under Union (Northern and Eastern) rates). Although there is some recent and forecast migration to Union's T1 service by some larger industrial customers, the subcommittee noted several economic and/or administrative impediments to customers availing themselves of unbundled service under the current tariffs.

For one, Union (Southern) T1 service imposes eligibility requirements of a minimum annual volume of 700,000 m3 and telemetering capability. In addition, it was noted that a variety of economic factors (in addition to administrative simplicity) continue to make bundled service attractive. For example, Enbridge's 60/40 peak/annual allocation of TCPL

demand charges to bundled rate classes makes bundled service for high load factor and interruptible customers quite attractive.

Short of customers exercising different choices under the existing rate structure, little can be done to further unbundle services thereunder. It was not felt that migration to more unbundled forms of service (e.g., Eastern T-service) is a viable route.

Short-term Options

In identifying (and developing) short-term unbundling options that entail minimal changes to existing LDC rate structures and tariffs, a clear distinction needs to be made between unbundling rates and services. The former is constrained by the current regulatory regime, which requires OEB review and approval of a rate application by the LDC. LDC rates can't be changed without an order. Historically, this has been an expensive and time-consuming process. It is hoped that more expedient and less costly alternatives (such as the process undertaken by the Task Force itself) will be explored. The Rates and Services Subcommittee agreed that the priority should be to unbundle transportation and storage rates.

In the interim, however, implementation of administrative practices (such as title transfers) may address the short-term need for unbundling certain services. Such measures should continue to be pursued.

Components of Unbundled Distribution Services

In considering the components to be unbundled, customer preferences and competitive alternatives were considered as key factors. So, too, was the prospect of the so-called "death spiral" with respect to the continued provision of bundled services — i.e., the increasing loss of customer diversity within the bundled service class will yield progressively higher rates due to migration to unbundled services. While it was generally agreed that the LDCs would continue to offer bundled services as a choice for all customers, some questioned the demand of large industrial users for such services.

The physical delivery of gas from city gate to end-use location will continue to be an LDC service. However, the supply of the commodity will be unbundled. Some felt that the LDCs should only offer supply jointly with other services. Upstream transportation (i.e., the function and associated costs to move gas from production areas to the interconnections between the LDC and long haul pipelines) should be unbundled and distinguished from cross-franchise transportation (e.g., Union's M12 or C1 service).

With respect to information services, it was generally agreed that the cost of providing a requisite level of information on a non-discriminatory basis should be built into delivery rates. Some did not view information services as a candidate for unbundling. Others disagreed.

It was generally agreed that meter reading could be unbundled at a later time (when economic, broad-based automated meter reading ("AMR") becomes available).

With respect to gas handling services, it was agreed that the costs associated with this control function should remain bundled in the delivery charge.

Pricing of Unbundled Components

The pricing issue for unbundled components will be to strike an appropriate balance in order to avoid stranded costs (i.e., removing costs in excess of avoidable costs under a fully allocated cost of service ("FACS") approach) or a subsidy (removing marginal costs only). A related concern is whether the sum of the unbundled parts will equal (or perhaps exceed) the bundled whole. Subject to the resolution of market versus cost based pricing for storage (and, perhaps, reconciling the different methodologies currently in place for Enbridge and Union with respect to upstream transportation), it was agreed that existing methodologies for allocating costs should be usable when services are unbundled.

To the extent that certain costs of providing services are avoidable (i.e., lying somewhere between marginal and fully allocated costs), the LDCs are willing to unbundle and price them accordingly. These include direct and out-of-pocket costs that can be shed promptly. They exclude related infrastructure costs (which cannot be shed as quickly).

Determining avoidable costs is problematic when unbundling and pricing services such as billing. For example, if call centre personnel are shed, should only their direct labour costs be removed, or should a portion of fixed overhead and supporting costs also be factored in? In addition, significant costs will be incurred by the LDCs to implement unbundling (e.g., systems development costs). The treatment of such costs should be symmetric with the costs that are shed due to the displacement of services as unbundling occurs. It would be unfair to price displaced, unbundled services based on fully allocated costs while pricing new (or incremental) services based on marginal costs.

Some members of the subcommittee favoured a FACS approach to pricing unbundled services due to its accepted use in designing delivery rates (and, in certain cases, to pricing new or removing ancillary services). Questions were raised as to who should pay for stranded assets left by a notional (but not physical) removal of services under FACS. One method to deal with stranded costs arising from a voluntary allocation of assets under FACS would be transitional rate relief (in delivery rates or a "restructuring" charge) over a reasonable period of time (e.g., three years). Another concern raised with the use of FACS to price unbundled components is that the sum of the components may exceed the bundled price. It was noted that this may be appropriate if incremental costs are required to provide the various unbundled components.

On the other hand, it was argued that FACS pricing would create the needed "backward pressure" in non-monopolistic parts of the LDC business to stimulate efficiencies, competition and lower prices for customers. Proponents of FACS advocate it on the basis that it would "level the playing field". In other words, this approach to pricing unbundled components is preferable to those which may leave a subsidy in delivery charges and, thereby, impair the development of a competitive market for unbundled services.

It was generally acknowledged that displacement of unbundled services priced by FACS may strand assets of the LDCs. The Task Force agreed that, provided the costs of those assets are vigorously mitigated during restructuring, the LDCs should be entitled to

recover them over a reasonable transition period from all users (on the theory that all will benefit from the enhanced choice and flexibility afforded to them by market restructuring).

Revenue Forecast Risk During Unbundling

It was noted that, when introducing new rates and services, it will be difficult for the LDCs to accurately forecast the level of customer demand related to the mix of bundled and unbundled services that they provide. Transitional deferral accounts could be established to capture these "unforecastable" variances. In a performance based regulation regime there may need to be different treatment of these variances.

Unbundling Timetable

It is understood that some market participants are preparing to offer burner tip sales as soon as licensing is implemented (March 1, 1999). Third party billing and collection of rebundled bills to residential and small commercial customers by marketers is expected to be conducted by the end of the calendar year. In order to meet these expectations, the subcommittee tentatively identified the following conditions from a rates and services perspective. The timeline is approximate and fulfilment of each condition depends upon a number of factors (including resource availability, demonstrated market demand for the services and, where necessary, securing regulatory approvals):

- (a) Building customer awareness and education an LDC bill insert for general service customers to inform them of licensing is planned for the February billing cycle; other initiatives will follow (and are described later in this report).
- (b) Develop a "bare bones" algorithm system to simulate demand profiles and allocate assets for customers lacking daily metering by the end of March 1999.
- (c) Allocate (on a notional or contractual basis) the required upstream pipeline and storage capacity entitlements to all customers as soon as is practicable.

- (d) Develop a wholesale rate for unbundled transportation and storage services for marketers, including the terms and conditions governing nomination and delivery of daily requirements and imbalance settlement, as soon as is practicable.
- (e) Expand the menu of unbundled components in the wholesale service for marketers to include billing and collection as of January 1, 2000.
- (f) Further expand the menu of unbundled components in the current retail service for general service customers, on an optional basis, to include storage, billing and collection not later than April 1, 2000.

As was noted previously, the Task Force is of the view that the unbundling process should occur as expeditiously as possible, but in an orderly and manageable fashion so as not to compromise the LDCs' critical systems and operations. Unless the Board indicates concerns with the unbundling principles outlined in this report (or otherwise expresses concerns with respect to the timetable), the LDCs indicated their commitment to these timelines and their expectation that items (c) and (d) above should be achievable within three or four months.

LOAD PROFILING ISSUES

Objectives

The primary objectives for developing load profiling and daily demand forecasting algorithms are two-fold:

- (i) to provide daily natural gas demand forecasts for all end-users; and
- (ii) to determine the capacity entitlement for storage and transportation costs to marketers and/or end-users.

Other issues (e.g., the desire to maintain or create incentives to conserve energy) were not considered by the subcommittee.

Daily load balancing involves the daily delivery of gas to the LDC at a "wholesale" receipt point by a customer or supplier acting on behalf of a group of customers for redelivery to the customer(s) at each retail point of use. Most end-use customers lack daily metering and are billed on a monthly cycle basis under general service rates. In order for a supplier to deliver the required amount of gas from its portfolio of unbundled assets to serve the retail requirements of all its customers beyond the LDC city gate the daily usage of each customer must be estimated. This estimate can be developed from statistically derived algorithms.

Methodologies are also needed to provide daily demand forecasts to large volume endusers, for both those equipped and not equipped with an AMR device. Since significant differences in load profile may exist among customers in some rate classes, a means other than the class average should be used to ensure fairness in the asset allocation process.

Recognizing the forecasting error inherent to algorithm development and the risk of weather variations, the subcommittee agreed that the LDCs should retain a portion of total storage capacity to protect system reliability and integrity. The level retained would be a function of the forecast error imbedded in algorithms and the risk associated with weather forecasting.

The subcommittee agreed that the degree of differentiation by end-use segments and any disaggregation of geographic zones must be investigated in order to strike an appropriate balance between accuracy for nominations (needed to optimize system operation and minimize administrative complexity) and cost. An operationally sound nomination process requires an information tracking system by pipeline and delivery zones. Finally, the subcommittee agreed on the need for a consistent approach among the LDCs, along with independent statistical verification.

The LDCs could provide a monthly demand forecast to suppliers and customers opting for the daily load balancing service in order to assist them in their planning. The volumetric forecast would be set for the year to follow and would utilize historical billing data, normalized for the weather differences.

Algorithm Guidelines

In developing guidelines for the algorithms to simulate end-use demand for customer groups where daily volume reads are not individually available, the subcommittee engaged in a discussion that extended beyond the development of formulae to estimate usage. Rather, it focused on the entire demand estimation and supply settlement process. The summary of the issues it made progress on follows.

Weather Forecast - In order to provide a workable planning tool to all parties, a consistent degree day forecast model must underpin the monthly demand forecast.

Algorithm Components - An algorithm would consist of a base load (non-temperature sensitive) component and an average use per degree-day ("energy coefficient"). For simplicity, the subcommittee agreed that the base load component should be determined by the use of summer load as a proxy. The energy coefficient should reflect seasonal differences. A single methodology should be adopted for both LDCs. Significant demographic or behavioural differences in the use of gas should be captured when developing algorithms.

Forecasting Error/Tolerance Band - A reasonable tolerance band should consider temporal, economic, and integration constraints. The risk of forecast error is greatest in the shoulder periods at precisely the time when the LDCs' ability to manage that risk through retained storage is most constrained. The subcommittee recommends that daily "backcast" data be provided with forecast data to provide opportunities for customers to "self-correct" their deliveries "in period" to mitigate imbalances due to variances between actual and forecast weather. "Self-correcting" adjustments would be subject to the discretion of the LDCs as delivery system operators. Availability of intraday nominations under the unbundled model is recommended.

Large Volume Customers - The subcommittee agreed that the LDCs can offer the option of providing daily forecasts for large volume customers. Different approaches would be required for customers with or without AMR capabilities.

Systems Development Issues - While this issue was to be addressed by the Information Systems and Technology Subcommittee, it was recognized by all parties that information systems are needed to support the daily load balancing model. The issues that need to be addressed include the development and functionality of the system infrastructure, together with the timing of deliverables. For instance, what would be the cost and development timeline for a "bare bones" system versus a dynamic integrated system (which could link algorithms, billing system, and degree day forecast)?

Another key issue is how development costs should be recovered. Some parties are of the view these costs should be included in the LDCs' delivery charges, while others felt they should be recovered on a user pay basis.

Legal/Liability Issues - To the extent that suppliers will rely on the forecast requirement provided by the LDCs through the algorithm model, the issue arises as to what indemnities, if any, are appropriate with respect to imbalances due to forecast errors.

It was recognized that all parties will be relying on LDC developed forecasts for nomination purposes and that the algorithms will be made available in good faith as a facilitative service. In such circumstances it would be inappropriate to apply punitive third tier load balancing charges to volume imbalances arising from forecast errors. Delivery of forecasted volumes as nominated should constitute fulfilment of a party's obligations (i.e., no penalties should attach to forecast variances).

Where forecast obligations are not met, the supplier should be subject to a punitive third tier load balancing charge. This should serve to deter performance defaults.

Similar issues arise with respect to the delivery obligations. The difference between the actual versus forecast weather and the algorithmic error could be managed through the LDCs' retained storage capacity, without added risk to those that met their daily obligations. Where the obligations were not met, the supplier would be subject to a punitive third tier load balancing change which would deter performance faults.

Geographic Zones

Enbridge initially proposes that three zones will apply (Niagara, Toronto, and Ottawa), with the zones applicable to Union to be determined and reflective of its more diverse geography. There may be some congruence of zones for Union and Enbridge due to close proximity. Multiple zones in northern Ontario (Western and Northern) are needed, with the potential for zonal differentiation if energy coefficients differ sufficiently to so warrant.

The issue of TCPL delivery areas was discussed in establishing zones for algorithms. Transportation entitlements must match the disaggregated franchise specific areas used to determine asset entitlements when unbundling. Matching of upstream and downstream entitlements, particularly for STS, is an issue both the LDCs and TCPL are aware of and will work out. This issue may not impact the algorithm per se, but adds a level of complexity for the LDCs in tracking and providing information to suppliers to accommodate their nominations in an operationally and contractually sound manner.

Customer Segmentation/Grouping

Given the preponderance of space and water heating use in the residential market, the subcommittee proposes an average customer approach. Although both LDCs have identified that there are some atypical customers within their residential customer base, this issue was not considered significant.

Segregating the non-residential general service market requires an annual volume "cut-off" to distinguish between customers whose load profile would be determined on a customer specific basis rather than segmented class average use. Storage allocations based on segmented class average algorithms will yield faulty results if applied to atypical customers (e.g. non-winter peaking loads).

Enbridge currently proposes the cut-off to be an annual use of 340,000 m3 or greater, (i.e., all large volume contract customers). For the purposes of the daily demand forecasting, Enbridge also intends to establish a "cut-off" for Rate 6, with the remainder to be separated

between process or heating use. For the purpose of storage and transportation capacity entitlement, Enbridge intends to individually analyze all large volume contract and Rate 6 customers based on "winter excess over average" and "mean daily volume" concepts, respectively). Below this cut-off, a "filter" for load factor and/or seasonal use (summer/winter ratio) could remove customers with atypical profiles.

Although the issue is where to "draw the line", this approach will ensure appropriate asset allocation and daily load estimation. Enbridge's preliminary storage and transportation capacity entitlements should be available by the end of February 1999, with daily demand forecasting algorithm completed later in the spring of 1999. Union expects a similar timeline for its developmental work.

OTHER ISSUES WITHIN SUBCOMMITTEE MANDATE

The subcommittee sought guidance about the continuance of its mandate into 1999 and the need, if any, for it to identify any pending issues beyond the initial short-term deliverables reviewed above. It noted that the Task Force's work plan identified several additional tasks for the subcommittee to address beyond those it has addressed, including: (i) access conditions/form of contracting; (ii) Union's delivery commitment credit (system integrity); (iii) interruption; (iv) rate design for multiple receipt/delivery points; and (v) hybrid bundled services.

CONSUMER EDUCATION

The Customer Interface Subcommittee focused on developing proposals regarding immediate and future customer education initiatives for the natural gas sector. The subcommittee proposed and the Task Force supports an immediate campaign to inform consumers about legislative changes occurring March 1, 1999 as well as a longer-term campaign to inform consumers about market developments and to build on past educational efforts intended to increase awareness about the natural gas industry generally. The Task

Force also encourages the MEST and the Board to ensure co-ordination and balance in consumer education programmes for the natural gas and electricity markets.

OBJECTIVES OF CONSUMER EDUCATION

Ultimately, the success of efforts to provide unbundled services to small volume customers will depend upon effective consumer education. To date, despite an ongoing restructuring process, migration in the residential market has not been overwhelming. Neither the Board nor the Task Force are inclined to support forcing customers to leave system supply. In order to facilitate an orderly movement to this new market structure, consumers must be informed of the changes and have access to credible, comprehensible and factual information to enable them to take full advantage of the choices (and mitigate their exposure to the hazards) that competition will offer them. Customer communication and outreach campaigns are essential to ensure customer awareness of the changes in the natural gas market and to encourage active customer participation in the assessment and selection of energy service providers.

With respect to what type of information should be provided, the Task Force believes that customers need information on the changes in the industry and the types of services available, as well as guidance on how to evaluate various offers. The provision of unbiased, accessible information should facilitate customer migration to a competitive marketplace.

The Task Force noted that many of the key issues they were unable to resolve within the timeframe available (e.g., mobility, system gas phase-out) are integrally related to the ability of consumers to make informed choices, as will be the rapidity of movement towards an unbundled market structure. The Task Force also noted the parallel initiatives which are occurring with respect to the electricity industry, (and other networked sectors), which will create opportunities for substitution of commodities and services and thereby broaden the ambit of customer choice. In this regard, the Task Force reviewed and concurs with the recommendations of the Retail Technical Panel of the Market Design Committee (recommendations 7-16 to and including 7-24) and encourages the MEST and the Board to

co-ordinate and ensure balance in the consumer education programmes for the new natural gas and electricity markets.

IMMEDIATE CAMPAIGN

The subcommittee has proposed and the Task Force supports an immediate campaign to be conducted through inserts to be included in bills sent out by Enbridge and Union during their February 1999 billing cycle. The subcommittee urged that these communications be complemented by a range of other delivery mechanisms, including website postings, community newspapers and call centres (which would be listed on the bill inserts). It was agreed that billing inserts are the most practical, economic and efficient approach to any short-term initiative insofar as it ensures that information reaches customers directly and disperses receipt of the communication throughout the billing cycle. This should result in inquiries to the listed call centres (i.e., the LDCs, OEMA, MEST and MCCR) being evenly distributed throughout the month (thereby reducing the burden on them).

Although specific wording of the bill inserts has been left to the LDCs, the subcommittee agreed that the key messages to be relayed through the immediate campaign should include:

- As of March 1, 1999 all natural gas marketers serving small volume customers will be licensed by the Board:
 - any marketer who attempts to sign you up after March 1, must be licensed:

you may ask to see proof of their license; and

if you are currently supplied by a marketer, you should contact them directly to determine whether they will be licensed as of March 1, 1999.

Licensing should provide consumers with additional protection:

in order to obtain and maintain a license a marketer will have to comply with certain conduct standards and other criteria determined by the Board; these changes will not compromise the reliability of your gas supply; and

for more information contact OEMA, LDCs, OEB, MEST, MCCR.

- The natural gas market will continue to be open to greater competition (and enhanced consumer protection).
- Initially these changes will only effect the gas portion (about 40%) of your gas bill.
- Similar changes will be taking place with respect to the supply of electricity.

In addition to these immediate messages (relating primarily to implementation of the licensing regime), the subcommittee recommended that background information, building on recent customer information initiatives undertaken by the LDCs, be included in the campaign. This recognizes the fact that there is still a measurable lack of awareness among small volume consumers about the industry and the various purchasing options available to them. Such messages might include the following (which have been taken directly from previous bill inserts):

- "You can buy your natural gas supply from your utility or from an independent supplier, called the natural gas marketer. Buying your gas from an independent marketer is similar to choosing a different company than your local telephone utility for your long distant service. The utility still provides the basic facilities and services. No matter who supplies your gas, your utility still delivers the gas through its pipeline network to your home."
- "Many different prices and terms are available. For example, an offer of a
 fixed price (one that does not change even if the market price of natural
 gas increases or decreases) or a discount or a rebate against the regulated
 LDC price. Terms may be one or more years." (Note: discounts and
 rebates may not be relevant in the future.)
- "The rates the LDCs charge for supply and delivery are subject to the examination of and approval by the Ontario Energy Board, a regulatory agency of the Province of Ontario. Because the LDCs are regulated utilities they cannot offer various prices to different groups of customers. They pass through the costs of purchasing gas without a discount or mark-

up. The rates are set using forecast gas prices. At a later date, this forecast is reconciled to the actual gas prices realized by the LDCs and results in either a credit or a debit to customers' account."

The subcommittee did not undertake to "wordsmith" key messages — communications experts within the LDCs have been responsible for the development of the materials, subject to effective oversight. Similarly, the subcommittee did not take a position as to whether materials sent out by the LDCs should be identical or, rather, that effective oversight simply ensure that the messages are agreed upon and co-ordinated.

The LDCs have developed the above-described communication strategy. The Task Force reviewed and commented on draft bill inserts prepared by each of the LDCs and the initiative is proceeding. It was agreed that the costs of these communication efforts should be captured in a deferral account for recovery from ratepayers (assuming that they are prudently incurred).

LONGER TERM CAMPAIGN

For reasons described above, the subcommittee and the Task Force are of the view that educational information should be made available to consumers on an ongoing basis, both during the transition to a more competitive market environment and after the market has evolved. Indeed, the ability of customers to choose a (relatively) unregulated marketer to supply their burner tip needs will generate the need for better customer education and care during the transition period (which must be of sufficient duration to accommodate this change). While it did not undertake the task, the subcommittee urged that specific timelines be developed for this ongoing campaign as soon as possible.

The subcommittee felt strongly that consumer research should be undertaken as a basis for developing the longer-term campaign. In this regard, it was agreed that market research could best be conducted after the February 1999 campaign. The LDCs have been asked to develop a budget and work plan for such market research, with a view to better understanding customers' then current level of awareness about the industry, areas of confusion and expectations about further deregulation. Upon direction from the Board, the

Task Force has proposed that the subcommittee continue to meet with a view to developing the longer term campaign.

The subcommittee noted that certain issues must be resolved before they can be made the subject of an effective consumer awareness campaign (and, in certain instances, before an effective campaign can be undertaken). Such issues include customer mobility provisions and the move to fully unbundled retail billing, both of which give rise to the potential for significant customer confusion. The Task Force agreed that information related to these issues should be communicated to consumers well ahead of implementation.

While the direct roles and responsibilities of marketers in the customer education process are not addressed herein, they should not go unmentioned. Ultimately this constituency should have the greatest stake in (and ability to ensure) a high level of consumer awareness and satisfaction.

GOVERNMENT BRANDING

The Task Force spent some time discussing the issue of branding — the extent to which the MEST or the Board should be identified (as well as take a leadership role) in any consumer awareness program. The general view was that, to the extent that energy sector reform represents a significant policy initiative of this government, the MEST and the Board should be prominently identified in any consumer awareness effort. Government branding of such initiatives should promote accountability for public policy and help to assure "parity" with respect to similar initiatives in respect of electricity.

For unbundling to succeed, a significant educational effort will be required to change the expectations and attitudes of market participants concerning gas service. In this context, the Board (and MEST) are uniquely capable of leading the initial effort through which all stakeholders should come to a common understanding of the basis for public policy. Their sponsorship of an initial education effort should provide a strong foundation for subsequent marketing communications by addressing customers' uncertainties and concerns related to supplier choice and unbundling.

BILLING DISCLOSURE

One specific facet of consumer education considered by the Task Force related to billing disclosure issues. The Task Force agreed that there should be minimal requirements with respect to billing formats, given the desire to maximize the range of service offerings. For example, mandating inclusion of the LDC distribution charge as a separate line item may not be helpful for comparison purposes, given that such charges will differ depending on the marketer and the services being purchased by it from the LDC. It may be simpler to impose some generic requirements (e.g., the need to disclose what the customer is paying and a basis therefor).

In this context, the importance of transitional consumer education efforts — explaining new bills and comparing them to what the customer has been accustomed to receiving — will be critical in respect of existing contracts. Customers will also have to be provided with an explanation of direct billing.

As with many other issues, it was noted that billing requirements are directly related to customer mobility issues. There should be less concern about mandating billing disclosure requirements in an environment in which customer switching is facilitated. On the other hand, in a limited customer mobility environment, there is likely to be more concern about prescribing billing disclosure requirements.

It was also noted that there may continue to be a requirement to disclose (whether on the bill or elsewhere) metered consumption. With respect to consumption history disclosure, the LDCs noted that they maintain a data set of metered consumption for all end-users, which they are prepared to provide to agents at the request of an end-user. While they will continue to maintain and provide data on end-use metered consumption, at some point the LDCs will no longer be in a position to provide other billing history information (since they may not be providing retail billing services).

INFORMATION SYSTEMS/TECHNOLOGY ISSUES

GENERAL

Given the time constraints faced by the Task Force and the lack of resolution of certain key policy issues, it did not turn its attention to many of the infrastructure issues, other than at the conceptual level. With the passage of time, these issues now loom large. Immediate attention and direction from the Board is required.

To a large extent, these are technical matters which should be susceptible to cooperative resolution once key policy issues are resolved. Hence, for example, given the strong desire of marketers to be able to render bills so as to interface directly with their customers, discussions have commenced (facilitated by the Information Systems/Technology Subcommittee) to devise a single set of billing interface standards. Similarly, as discussed previously, the subcommittees are working to develop load-profiling algorithms and will be considering standards for allocation and clearing and settlement mechanisms (some of which have been canvassed by the Market Design Committee in respect of electricity). Mobility tracking mechanisms will have to be addressed once basic mobility issues are resolved.

In effect, systems and interfaces are the backbone for unbundling - there is a high level of agreement (and co-operation) as to what needs to be done, but the "code" can't be "written" until key aspects of the business model have been settled.

The scope of work is significant. Systems development work can be expensive and the costs could easily become controversial. An immediate challenge will be to scope out the costs of and to prioritize various potential initiatives. This is an area that the subcommittee could usefully focus on, with the benefit of Board input.

ACCESS TO CUSTOMER INFORMATION

At a general level, the Information System/Technology Subcommittee has been considering the types of information that will be passing back and forth between marketers

and the LDCs in the unbundled environment, so that appropriate protocols can be devised with respect to the access to and use of such information.

It was agreed by the Task Force that customer information (other than in an aggregated, non-attributable form) should only be made available with the customers' consent.. Such consents may be obtained by a marketer on sign-up.

As is the case with respect to consumer education, the Task Force generally agrees with the recommendations of the Retail Technical Panel of the Market Design Committee with respect to customer information issues (recommendations 7-1 to and including 7-15).

LICENSE PROCESSING

It was agreed that a transparent register should be maintained, with the ability of the LDCs to access it electronically. Issues relating to interface standards are to be considered by the subcommittee.

CONCLUSION

With opportunities for customer choice soon to be greatly enhanced by Ontario's electricity reforms and a public policy commitment to eliminate regulatory policies which artificially constrain customer choices in the natural gas industry, resolution of the issues addressed by the Task Force is critical to the timely introduction and smooth functioning of unbundled service. Within the constraints of time and resources available to it, the Task Force is modestly pleased with the progress it has made. With limited time and resources, the Task Force was able to identify and prioritize key issues and, in respect of most, achieve consensus as to resolution (if not the detailed implementation mechanisms) or, at least, an informed divergence of views. In some instances, the Task Force made progress in digging down into the details of implementation.

Much remains to be resolved (and new issues will continue to emerge as the market evolves).

Irrespective of the Task Force's continuing role, it believes that the Board's choice of regulatory process (e.g., use of collaborative efforts rather than reliance on traditional quasi-judicial procedures) will be a key determinant in the success of the unbundling process. Based on its experience to date, the Task Force is of the view that resort to regulatory proceedings to resolve unbundling issues should be by default, preferably either coupled with or following unsuccessful (or, more typically, partially successful) collaborative efforts to develop consensus proposals.

The advantages of a collaborative process (and its limitations) whether it be the Task Force as presently constituted or in some other configuration, are well known to the Board. The Task Force believes that its continued usage will lead to the development of an effective unbundling program with the least cost and fewest resource requirements, by utilizing direct communication of technical personnel and facilitating efforts to review alternative proposals.

As noted in the letter of transmittal, the Task Force is satisfied that it has taken the fundamental issues it identified and addressed as far as it can at this time, absent specific direction from the Board. Looking ahead (in the context of rule making, rate cases and other imminent regulatory initiatives), the Task Force sees a continuing role for a group such as itself (and its subcommittees) to continue to "drill down" into a substantial number of detailed technical issues that require prompt attention. The Task Force's role could become primarily one of co-ordinating the subcommittee efforts, in which case its funding requirements should decrease substantially.