RP-1999-0017

IN THE MATTER OF the *Ontario Energy Board Act*, 1998,

AND IN THE MATTER OF an Application by Union Gas Limited for an order or orders approving or fixing just and reasonable rates and other charges for the sale, distribution, transmission and storage of gas in accordance with a performance based rate mechanism commencing January 1, 2000;

AND IN THE MATTER OF an Application by Union Gas Limited for an order approving the unbundling of certain rates charged for the sale, distribution, transmission and storage of gas.

BEFORE: George Dominy
Presiding Member and Vice Chair

Malcolm Jackson
Member

DECISION WITH REASONS

July 21, 2001

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1. THE APPLICATION AND THE PROCEEDING

1.1 THE APPLICATION

1.1 Union Gas Limited ("Union", the "Applicant" or the "Company") filed an application, dated March 5, 1999 (the "Application"), with the Ontario Energy Board (the "Board"), for an order or orders approving or fixing just and reasonable rates and other charges for the sale, distribution, transmission and storage of gas commencing January 1, 2000 in accordance with a performance based rate mechanism. The Application also sought an order approving the unbundling of certain rates charged by Union for the sale, distribution, transmission and storage of gas. The Application was given Board File No. RP 1999-0017.

1.2 Union has also applied to the Board for such accounting or interim orders as may be necessary in relation to the Application, including the disposition of balances in the deferral accounts.

1.3 Union's unbundling proposals focused on upstream transportation and storage. Union proposed to pursue the unbundling of customer billing and the development of a wholesale delivery rate through a separate application.

1.4 Union proposed a price cap mechanism for its Performance Based Regulation ("PBR") plan, with an initial term of five years from January 1, 2000, to December 31, 2004. Union's proposal started with rates approved by the Board in the EBRO 499 Decision issued on January 20, 1999.

1.2 THE PROCEEDING

1.5 The Board issued a Notice of Application dated April 9, 1999. The initial pre-filed evidence of Union Gas was not received until December 10, 1999.

1.6 On December 8, 1999 the Board issued an order making Union's rates interim effective January 1, 2000.

1.7 Procedural Order No. 1 was issued on December 22, 1999, setting the dates for the issues conference and the issues day.

1.8 Procedural Order No. 2 dated January 21, 2000, approved the Issues List and set dates for the interrogatory process and for the filing of intervenor evidence.

1.9 Procedural Order No. 3 dated March 8, 2000, revised the dates for filing Union's responses to interrogatories and filing intervenor evidence.

1.10 On March 13, 2000, the Green Energy Coalition ("GEC") filed a Notice of Motion seeking to compel Union's responsiveness to GEC's interrogatories and to extend the date for filing GEC's evidence. On March 24, 2000, the Board issued a Notice of Written Hearing of Motion specifying dates for submissions, with final reply by GEC set for April 3, 2000. The Board issued its Decision on the Motion on April 14, 2000.

1.11 Procedural Order No. 4 dated April 7, 2000, ordered that a settlement conference be held over a four day period starting May 16, 2000.

1.12 Procedural Order No. 5 dated April 27, 2000, rescheduled the settlement conference for the period May 10, 2000, to May 19, 2000. A one-day meeting of intervenors was held on May 9, 2000.

1.13 Procedural Order No. 6 dated June 2, 2000: made provision for the settlement conference to be reconvened on June 6, 2000; set June 12 , 2000 for procedural and motions day; and set June 13, 2000 for the commencement of the oral hearing.

1.14 On June 7, 2000 Union filed a Settlement Agreement settling most of the unbundling issues. There was no agreement on PBR issues. Union made an oral presentation on the Settlement Agreement on June 19, 2000. The Board accepted the Settlement Agreement on June 21, 2000.

1.15 On procedural and motions day the Board heard a motion brought by Union to exclude the evidence filed by Energy Probe. On June 13, 2000, the Board accepted Energy Probe's evidence on the basis that it might be relevant to the unsettled issues on unbundling and might be of assistance to the Board.

1.16 The oral proceeding commenced on June 13, 2000, and concluded on July 12, 2000 after 19 hearing days. Union's argument-in-chief was presented orally on July 13 2000. Twenty-three intervenors filed arguments by July 24, 2000. Union's reply argument was filed August 15, 2000.

1.3 PARTIES AND THEIR REPRESENTATIVES

1.17 Below is a list of parties, including the company, and their representatives who participated actively, whether through the settlement conference process, through leading of evidence or cross-examination at the oral hearing, or by filing argument.

Union Gas Limited	Michael Penny Marcel Reghelini
Board Staff	Jennifer Lea Michael Lyle Stephen Motluk James Wightman
Consumers Association of Canada (“CAC”)	Robert Warren
Ontario Association of School Business Officials (“Schools”)	Thomas Brett
Industrial Gas Users Association (“IGUA”)	Peter Thompson
Vulnerable Energy Consumers Coalition (“VECC”)	Michael Janigan
Pollution Probe	Murray Klippenstein
Heating Ventilation and Air Conditioning Contractors Coalition Inc. (“HVAC”)	Ian Mondrow
Alliance of Manufacturers and Exporters Canada (“Alliance” or “AMEC”)	Beth Symes Carol Street
Energy Probe	Mark Mattson Thomas Adams
Coalition for Efficient Energy Distribution (“CEED”), TransCanada Gas Services, PanCanadian Petroleum, Dynegy Canada, Suncor/Sunoco, CanEnerco Limited	George Vegh Ziyaad Mia
Duke Energy	George Vegh
Comsatec Inc. (“Comsatec”)	David Waque
TransCanada PipeLines Limited (“TCPL”)	Stanley Rutwind Tibor Haynal

Major Energy Consumers and Producers ("MECAP") and Wholesale Gas Supply Purchasing Group ("WGSPG")	Richard King Charles Keizer Peter Budd
Association of Municipalities of Ontario ("AMO")	Peter Scully
Enbridge Consumers Gas ("ECG")	Tanya Persad
Enron Capital Corp. ("Enron")	Andrew Diamond John Rook
City of Kitchener Utilities ("Kitchener")	Dwayne Quinn Alick Ryder
Green Energy Coalition ("GEC")	David Poch
Nova Chemicals ("NOVA")	Michael M. Peterson
London Property Management Association ("LPMA")	Randy Aiken
Ontario Association of Physical Plant Administrators ("OAPPA")	Valerie Young
Hydro One Networks	Mary Anne Aldred
Coalition of Eastern Natural Gas Aggregators and Sellers ("CENGAS")	David M. Brown
John Fullerton	

1.4 WITNESSES

1.18 The following Union employees appeared on behalf of the Applicant:

Wayne E. Andrews	Manager, Customer Support
Steve W. Baker	Director, Products and Pricing

Rick Birmingham	Vice-President, Market Management
Tom Byng	Manager, Regulatory Applications
Pat Elliot	Controller
Allan Fogwill	Manager, Market Knowledge
Michael Packer	Manager, Rates and Pricing
Helen Platis	Manager, Market Planning and Evaluation
Michael A. Stedman	Director, Acquisitions

1.19 In addition, Union called the following external witnesses:

Ross Hemphill	Vice-President, Christensen Associates
Philip Schoech	Vice-President, Christensen Associates

1.20 IGUA called the following witnesses:

Peter Fournier	President, Industrial Gas Users Association
Hugh Johnson	Partner, Stephen Johnson, Chartered Accountants

1.21 CAC and VECC called the following witnesses:

Dr. John R. Norsworthy	Professor of Economics and Finance, Rensselaer Polytechnic Institute

Dr. Johannes Bauer	Associate Professor, Michigan State University

1.22 Comsatec called the following witnesses:

Robert McBean	Energy Co-ordinator, Falconbridge Limited
Paul Waque	Principal, Comsatec Inc.

1.23 TCPL called the following witnesses

Mark Stauft	Director, Regulatory Strategy, TransCanada PipeLines Limited

1.24 CEED called the following witnesses:

Robert Weir	Manager Origination and Business Development, Dynegy Canada Inc.
Angelo Fantuz	Director, Eastern Sales, PanCanadian Petroleum Ltd.
Gia DeJulio	Director, Energy Supply and Regulatory Affairs, Sunoco Inc.
Bruce Fraser	Director, Eastern Marketing, TransCanada Gas Services

1.25 Energy Probe called the following witness:

Tom Adams	Executive Director, Energy Probe

1.26 GEC called the following witnesses:

Paul Chernick	President, Resource Insight Inc.
Chris Neme	Director of Consulting Services, Vermont Energy Investment Corporation

1.5 EVIDENCE, ARGUMENT AND ORGANIZATION OF DECISION WITH REASONS

1.27 Copies of all the evidence, exhibits, arguments, the Settlement Agreement and a verbatim transcript of the proceeding are available for review at the Board's offices.

1.28 The Board has considered all the evidence, submissions and arguments in the proceeding, but has summarized the evidence and the positions of the parties to provide context for the issues on which the Board has determined a decision should be made.

1.29 The Board received four letters of comment expressing concern about the level of Union's charges.

1.30 In the written Decision with Reasons, chapters, sections and subsections are numbered and are set out in a table of contents. Paragraphs are numbered sequentially throughout each chapter. Pages are numbered from the beginning of Chapter 1, throughout to the end of the Decision. A copy of the Issues List as it existed prior to the ADR, and which many parties adopted for the organization of argument, is provided in Appendix A. In addressing the issues, headings such as "The Application", "Positions of the Intervenors", "Union's Reply" and "Board Findings" are commonly used.

1.31 Because of the interconnected nature of the issues in this proceeding, there are occasions when arguments related to one issue have been stated previously in relation to another issue and may have been repeated. Some repetition is unavoidable. For the benefit of readers, the Board has also outlined below Union's PBR proposal.

1.6 OUTLINE OF UNION'S PBR PROPOSAL

1.32 This outline describes the elements of Union's price cap PBR plan proposal. As part of its argument-in-chief Union provided a PBR Proposal Summary that is set out in Appendix B.

1.33 Union's PBR proposal is based on the price cap formula:

PCI = I - X ± Z ± Pass-Through Items = 1.9% ± Z ± Pass-Through Items

where the price cap index ("PCI") is determined by adjusting prices for the forecast growth in inflation ("I") offset by a productivity factor ("X"), adjusted as required for the impact of external factors beyond reasonable expectation of management's control. The additional adjustment are either non-routine and called "Z" factors, or relatively routine, predefined, and referred to as "pass-through" items.

1.6.1 Fixed Price Cap, Term, and Starting Date

1.34 The proposal is for a five-year PBR plan escalated by a price cap commencing on January 1, 2000, and terminating on December 31, 2004. The price cap, an annual escalator comprising an estimate of inflation less a stretched productivity offset, is fixed for the term of the plan.

1.6.2 Starting Rates and Initial Adjustments to Year 2000 "Base Delivery Revenue"

1.35 The proposal starts with the 1999 delivery revenue at approved rates of $787.2 million based on the product of rates and volumes approved by the Board in its EBRO 499 Decision. This revenue is then adjusted by the addition of $31.4 million for delivery/redelivery and storage revenue (Northern and Eastern Operations area, previously collected in bundled customers' gas supply transportation charge and T-service storage service rates, now to be collected in delivery rates) and the removal of $7.6 million for short-term gas supply costs associated with load balancing. This sets a base delivery revenue of $811.1 million for the year 2000. For the purpose of determining rates, to this base delivery revenue is added a price cap component (reflecting the impact of the price cap on that portion of the base delivery revenue which is escalated), other post-escalator adjustments to base revenues, and "pass-through items" to yield the "revenue at new rates"; the rates are determined by calculating the new rates which would recover this revenue based on the approved 1999 volumes and consistent with the cost allocation methodology approved by the Board in EBRO 499. The proposal is to use the Board- approved 1999 volumes to determine rates in all years of the plan.

1.6.3 Adjustments to Year 2000 Base Delivery Revenue Before Applying the Price Cap

1.36 The Delivery Commitment Credit ("DCC") and Y2K costs, while being recovered in rates by virtue of embodiment in the base delivery revenue, are removed from the "base delivery revenue" before applying the price cap escalation; the amounts removed are $27.3 million and $7.6 million respectively. This results in a revenue of $776.2 million to which the price cap escalator is applied.

1.6.4 Pricing Formula

1.37 The price cap is determined by the difference between the inflation factor and the stretched productivity factor. The inflation factor Union proposed, based on a five-year forecast of Gross Domestic Product Price Index ("GDPPI") ,and an implicit input price differential of 0% for the utility, is 1.6%. Union proposed a productivity factor is -0.7%, based on an analysis of 1987-1996 data from Union's Southern Operations Area, which is then stretched by 0.4% to become -0.3%. The net effect of these parameter choices is a fixed price cap of 1.9% per year. Application of the 1.9% price cap to the applicable revenue of $776.2 million yields a price cap escalation of $14.7 million for the year 2000.

1.6.5 Adjustments to Year 2000 Base Delivery Revenue After Applying the Price Cap

1.38 These adjustments include additions of $4.0 million for the recovery of unaccounted-for gas ("UFG") from previous periods and $6.8 million for changes to the method of accounting for pension and post employment benefits, and a removal of $10.3 million for amortization of the accumulated deferred tax balance. The net impact of these post-escalation adjustments is an increase in revenues of $0.5million.

1.6.6 Pass-Through Items

1.39 The pass-through items include changes for gas cost related items associated with the provision of delivery services, a formulaic increase for return on equity ("ROE"), and an increase for a proposed methodological change in forecasting UFG. The first category comprises revaluations for changes in the weighted average cost of gas ("WACOG"): an increase of $5.6 million for the UFG allowance; an increase of $4.1 million for inventory carrying costs; and a decrease of $0.8 million for compressor fuel. The ROE pass-through results in an increase of $5.7 million while the change in methodology for forecasting UFG volumes, from a weighted average of past volumes of UFG to a weighted average of UFG ratios, adds $5.6 million. Overall the pass-through items amount to a net increase of $20.1 million for year 2000.

1.40 Going forward, Union proposed: to pass through the impact of the most recent Quarterly Rate Adjustment Mechanism ("QRAM") for the gas cost related items annually, seeking customer agreement through the proposed customer review process; to adjust the ROE only on the rate base approved for 1999 in EBRO 499 using the Board-approved formula; and to use the weighted average ratio method for estimating UFG. These items would not be removed prior to escalation by the following year's price cap on the basis that they are ongoing costs as opposed to one-time expenses.

1.6.7 Year 2000 Rates

1.41 Summing "base delivery revenue", the price cap escalation, adjustments to base rates, and pass-through items results in a total revenue base of $846.4 million. The year 2000 rates are determined by allocating this amount over the 1999 Board-approved volumes.

1.6.8 Non-Routine Adjustments

1.42 Potential non-routine adjustments, outside of the price cap, include stranded costs associated with both the unbundling of upstream transportation and the unbundling of customer billing, external impacts due to changes in GAAP, tax, government charges or other legislative changes, and the potential for rate decreases due to unbundling of customer billing. Union proposed a materiality threshold of $1.5 million for a single item or $3.0 million for a "cumulative event" before item(s) would be considered for treatment as non-routine adjustments. One-time non-routine adjustments would not be escalated by the price cap but ongoing non-routine adjustments, though they might change in amount, would be escalated by the cap in future years. Union proposed that the appropriate treatment would be brought forward through the customer review process.

1.6.9 Pricing Flexibility

1.43 Union proposed that customers be categorized into two baskets: basket 1 comprising in-franchise customers, and basket 2 comprising ex-franchise storage and transportation customers. Basket 1 would be further divided into: sub-basket 1(a) for small volume customers, whose annual consumption is less than 5 million m^3; and sub-basket 1(b) for large volume storage and delivery customers, whose annual consumption equals to or is greater than 5 million m^3.

1.44 Union proposed that the cap on the average annual increase in service prices for basket 1(a) customers, except for Rate Classes M4 and 20, be limited to twice the price cap (i.e., 3.8%) with the added constraints that: the cumulative impact in the average price of basket 1(a) services does not exceed 1.5 times the price cap; and there must be unused ("banked") pricing flexibility by virtue of the price not having been increased by 1.5 times the price cap in previous years. For Rate Classes M4 and 20 a price cap of 6% was requested to facilitate rate harmonization.

1.45 Union proposed that for basket 1(b), the 1.9% cap would apply to the annual increase in the average price of storage and delivery services currently provided under rate schedules applying to in-franchise customers consuming 5 million m^3 or more annually.

1.46 Union proposed that for basket 2, the 1.9% cap would apply to the annual increase in the average price of cost-based storage and transportation services currently provided under ex-franchise rate schedules.

1.6.10 Off-Ramp(s)

1.47 Union proposed one "off-ramp" or criterion to trigger a Board review of Union's price cap PBR plan during the term of the plan. Union proposed that a decline in its financial position sufficiently serious to prevent utility operation or threaten financial failure would be cause for the Board to reexamine the plan.

1.6.11 Service Quality Indicators

1.48 Union proposed four non-Demand Side Management ("DSM") Service Quality Indicators ("SQIs"): pipeline integrity surveys, telephone response, emergency response, and gas utilization infraction. Each SQI has its own minimum standard. These include: 100% completion of pipeline system integrity surveys, 65% of telephone calls answered within 20 seconds, utility attendance at emergency site within 1 hour in 95% of the incidents, and 100% gas shut off for infracted appliances beyond the correction date. Actual performance of the Company with respect to each would be reported annually to participants in the customer review process. While there are no direct financial incentives (rewards or penalties) for deviations of actual performance from the minimum standards, failure on the part of the Company to achieve the standards would initiate a process, the first stage of which would be a utility report to participants in the customer review process giving reasons for the failure and proposed remediation to correct the situation. Should parties' agreement with the Company's remediation plan not be secured, the matter would be brought to the Board for adjudication.

1.49 The Company proposed to employ DSM as an SQI measure in support of customer value expressed in terms of quality and reliability. The proposed minimum standard for this SQI is 75% of the target volume savings identified in Union's five-year DSM Plan. Union also proposed to introduce a shared savings mechanism ("SSM") to provide a financial incentive/penalty mechanism. Performance reporting would be done via an annual evaluation report audited by a third-party consultant.

1.6.12 Additional Risks and Benefits

1.50 Under cost-of-service regulation the Company forecasts annually the costs and utilization associated with operating its integrated storage, transmission, and distribution system and recovers the Board-approved costs in rates. The Company manages the variance of actual from the Board-approved costs and utilization forecast for the test year only, resetting the cost and utilization forecast for the next

year. Under the Union's proposal, the Company would manage the utilization level risk without the ability to reset the forecast annually.

1.51 Similarly, with respect to facilities construction, under the current regime, Board-approved costs and associated revenues of projects are incorporated into rates. Under the proposal, the Company would be responsible for managing, under the price cap, the incremental revenues required to support the projects and, for the term of the PBR plan. The Company would not be able to increase the equity component in rates and would be at risk for unfavourable cost and revenue project variances (with respect to forecast).

1.52 Under cost-of-service regulation Union currently manages the risk of declining average use per customer on a one-year basis; but under Union's proposal this it will manage this risk for the term of the plan. Other risks that Union will be required to manage without the ability to reset forecasts annually include: changing economic conditions, interest rates, and any warming trend in weather.

1.53 To offset these risks, Union proposed to retain, for the benefit of its shareholder the following amounts: revenue from new services, the premiums arising from market priced storage, and proceeds from asset disposition.

1.6.13 Monitoring and Reflecting Changes in the Gas Supply Portfolio Under the QRAM

1.54 Union proposed to continue using the Quarterly Rate Adjustment Mechanism ("QRAM") to adjust gas supply commodity rates. Union proposed to provide, at the proposed annual customer review process, a description of the gas supply and transportation arrangements and the related rate changes required to recover other gas supply purchase costs. Union proposed that the information provided would include: a summary of its allocation of upstream transportation to customers migrating to direct purchase, the projected balances in its gas supply deferral accounts, and a summary of the year-ahead gas supply plan.

1.6.14 Treatment of Long Term Fixed Prices/Negotiated Rates

1.55 Union proposed that it be allowed to negotiate fixed prices for services with terms exceeding one year as an option for customers who do not elect to take a service under the pricing terms set out in a rate schedule. The volumes subject to the longer term fixed prices would be deemed to be at the posted rate for purposes of checking compliance with the rate schedules. Any negotiated rates would be treated as a pass-through items and non-routine adjustments, unless the negotiated contract specifically excluded these items.

1.6.15 Treatment of Market-Priced Storage

1.56 Union proposed that existing ex-franchise cost-based storage contracts (M12) be renewed at market prices. Union also proposed to eliminate the deferral account in which the market premium on long-term storage contracts is accumulated.

1.6.16 Treatment of New Services

1.57 Union may develop new services, in addition to the current regulated services, to enhance the storage, transportation, and delivery services it offers. New services may be regulated and hence be placed into the appropriate service basket and priced subject to the price cap parameters; or they may be unregulated and priced competitively. In either case, Union proposed to disclose all new services proposed or contemplated proposed by the Company so that they could be addressed in the customer review process.

1.6.17 System Expansion Plans and Customer Connection Policies Under PBR

1.58 Union proposed to continue to use the EBO 188 criteria for system expansion projects: individual projects must attain a profitability index ("PI") of at least 0.8 while the rolling portfolio must have a PI greater than or equal to 1.0. The Company would ensure that access to the existing distribution system is provided on a non-preferential basis.

1.6.18 Reporting and Monitoring Requirements / Customer Review Process

1.59 Under Union's proposal it would not report cost-of-service or extensive financial information during the PBR term. Each year, in the customer review process, the Company would provide an information package, distributed in late June, with proposals for non-routine adjustments, potential gas cost changes, forecast balances in deferral accounts, financial information on the Company's prior year financial performance, and any proposed dispositions of same, referral of formula-based pass-through items (excluding the final re-adjustment based on forecast long bond rates and yield spreads not available in June), and an SQI performance report.

1.60 Union would seek the consensus of the parties in July and file a report with the Board by the first week of August identifying the consensus achieved and specifying issues requiring Board adjudication. The Board would adjudicate any unresolved matters and the Company would then issue in the first week of October a rates package incorporating the consensus attained, Board findings, the formula-based ROE adjustment, proposed deferral account dispositions, and a demonstration that all proposed rates were consistent with the plan.

1.61 Union would then seek parties' acceptance of consistency of th rates package with Union's PBR plan, any consensus achieved, or any Board decision on disputed matters. By October 31, of each year of the plan Union would submit any revisions to the previously distributed package to the Board for approval and seek an approved rate order by mid-November in order to implement rates by the following January first.

1.6.19 Second Generation Price Cap Plan

1.62 Union proposed that rate regulation using the PBR price cap approach continue, without cost-of-service regulation rebasing, after the initial term of plan, subject to a review of the plan and revisions "to correct or fine-tune its operations." Union suggested for the second generation plan that: the Canadian GDPPI be used as an inflation factor; a Canadian gas distribution industry standard be used to determine the productivity offset; and pricing flexibility be retained. Union proposed that the Union's proposed second generation PBR plan be reviewed in an attempt to achieve consensus in customer review process in 2004.

2. PERFORMANCE BASED REGULATION ("PBR")

2.1 OVERVIEW AND RATIONALE

2.1.1 Introduction of PBR

2.1 In markets where there is insufficient competition, as is the case with distribution, transmission and storage services offered by Ontario's natural gas utilities, regulation is frequently prescribed by statute to bring about certain behaviour and benefits that would result if there were effective competition in the goods and services provided.

2.2 Various features have been introduced into the regulatory schemes over the past decades in order to provide incentives to promote better management and improved cost incurrence. Performance based regulatory schemes, also sometimes referred to as incentive based regulation, have taken many different forms. Some performance-based regulatory schemes focus on one or more very specific performance goals, for example schemes to incent demand side management. Some schemes are more general and focus on company-wide performance targets for price changes, cost changes or revenue changes. Of these, some have focused on capping revenue increases, and some schemes have simply focused on prescribing acceptable tolerances on returns to capital. Union's proposal focused on prescribing a price cap formula which would guide rate changes over a period of time.

2.3 Under a price cap PBR scheme, subject to meeting service quality standards, the utility has the incentive to minimize costs because, until a subsequent review of the relevant data, the shareholders of the utility may keep or share in additional profits which result.

2.4 Union proposed a five-year fixed price cap plan for the years 2000-2004 inclusive. Union supported the choice of a fixed price cap (as opposed to a variable price cap) citing among other things the advantage of greater rate predictability. Union's plan was based on the price cap formula:

PCI = I - X ± Z ± Pass-Through Items = 1.9% ± Z ± Pass-Through Items

where the price cap index ("PCI") is determined by adjusting prices for the forecast growth in inflation ("I"), offset by a productivity factor ("X"), adjusted as required for the impact of external factors beyond reasonable expectation of management's control. The additional adjustments are either non-routine and called "Z" factors, or relatively routine, predefined, and referred to as Pass-Through Items.

2.5 The basis for the five-year term according to Union, is that it would provide incentive to undertake cost reducing investments for projects which may not show a return in a shorter time period.

2.6 Union proposed to base rates on the 1999 test year data approved in EBRO 499, i.e., 1999 test year volumes and the 1999 test year revenue requirement, the latter subject to some adjustments. Union's position, in support of using Board-approved rather than actual data, was that using actual 1999 data would constitute retroactive ratemaking. Its proposal, which would apply to the utility's regulated rates for the storage, transportation, and distribution of natural gas, included pricing flexibility provisions to allow management to make limited specific rate changes affecting relationships among rate classes.

2.7 Union's position was that PBR is a feature of the regulation of many North American utilities, including gas utilities. Union cited the government's white paper that the Board should pursue regulatory symmetry in its regulation of natural gas and electricity, industries that have a number of features in common. Union noted that the Board had adopted a PBR methodology for setting rates for electricity distribution utilities.

2.8 Union's stated objectives for its PBR framework were:

- it should be fair for all stakeholders and ensure that there is an appropriate balance between risk and opportunity. The benefits of improving productivity have to be shared between the Company and its customers;

- it must be simple, and its results easily understood and administered;

- it must be comprehensive, so that the framework allows the utility to manage its business in total and not focus on individual aspects or line items that could create distorted incentives;

- it should result in predictable and stable rates, to the extent possible, so that the utility and its customers generally know what rates can be charged over a reasonable period of time;

- it should be sustainable, in the sense that it should stand the test of time and not require significant amendment during its term;

- it should promote efficiency to motivate fair and economic decision-making by the utility.

Positions of the Intervenors - Introduction of PBR

2.9 Schools argued that the application before the Board in RP-1999-0017 was a landmark case in that it is the first long-term comprehensive fully articulated PBR proposal made to an energy regulator in Canada. The gas pipelines plans are all targeted PBR plans, limited for the most part to operating and maintenance ("O&M") expenses, or otherwise truncated. The Board's PBR plan for electricity distribution was for a shorter period and, in some sense interim in nature. Accordingly, Schools argued that the Board's decision in this case will become a guideline for plans to be submitted by Consumers Gas, Hydro One, and the second generation plan for the electricity distribution utilities.

2.10 CAC, VECC, IGUA, AMEC, and Schools argued that the PBR proposed by Union should not be accepted by the Board at this time. CAC believed that the plan is deficient in most respects. This sentiment was shared by Schools, VECC, and IGUA. These intervenors argued that while Union's PBR has some positive features, and while there has been some enthusiasm in the regulatory community for PBR, the benefits must be demonstrated. They stated that it is not clear that under Union's proposal ratepayers will benefit and that there is a risk that ratepayers will be worse off than under the Board's existing cost-of-service ratemaking.

2.11 Energy Probe also believed that ratepayers may be negatively affected by Union's PBR proposal vis-a-vis cost-of-service regulation. Kitchener expressed a similar sentiment and urged the Board to consider regulatory symmetry between gas and electricity. Schools commented that "it would leave most ratepayers decidedly less well off than under the current cost of service regime. Most ratepayer delivery rates have actually declined in recent years under cost of service."

2.12 Schools noted that the Board described a good PBR plan in RP-1999-0034 as follows: "It [PBR] provides the utilities with the incentive for behaviour that more closely resembles that of cost minimizing, profit maximizing private companies. Customers and shareholders alike can gain from efficiency enhancing and cost minimizing strategies that will ultimately lower rates with appropriate safeguards for

service quality". Schools submitted that Union's PBR does not meet these standards. Schools further argued that Union's plan is fatally flawed, guarantees that ratepayers will face increasing rates over its term, and is unprecedented among all PBR plans extant in that it not only has a negative productivity factor but lacks any form of earnings sharing.

2.13 Schools, in arguing that ratepayers are more likely to be worse off under Union's proposed plan, noted that most ratepayer delivery rates have actually declined in recent years under cost of service. Also, they noted that ratepayers will not experience less volatile and more stable rates under the price cap plan since the gas commodity is the major cause of volatility and retroactive rate adjustments and the gas commodity will not be subject to the price caps.

> In Schools' view, cost of service regulation has worked well in the gas industry in the last several years in Ontario. Through continued hard work, intervenors representing ratepayer groups and Board staff, have gradually learned enough about the cost structure and working arrangements of the two major gas utilities to be able to assist the Board to redress some of the 'information gap' that has been a problem in some jurisdictions. While the utilities still have and still utilize their 'information advantage', consistent scrutiny in annual rate cases has made the playing field more even.
>
> Such well-developed cost of service regulation does not exist in the electricity industry, at either the transmission or distribution levels.
>
> In Schools' view, the Board should reject the [sic] Union's proposed plan as submitted. In doing so it should provide some guidelines as to what it would expect in a revised plan including in Schools' view the need for a gas distribution industry total factor productivity study (consistent with the Board's approach in RP-1999-0034) and direct that Union prepare a revised plan in accordance with such guidelines. Union should then seek consensus from its stakeholders and should prepare the gas industry productivity plan jointly with Consumer Gas and perhaps other Canadian gas utilities. The revised plan would be submitted for implementation in either January 1, 2002, or January 1,

> 2003, as appropriate and practical ... In the interim cost of service should continue.

2.14 Schools argued that if the Board were to implement a PBR plan before 2002, Union's proposal should be significantly modified including the use of 1999 actual data to set the base, removal of some of the adjustments proposed by Union, a higher productivity factor, and the introduction of an earnings sharing mechanism.

2.15 CAC noted Dr. Bauer's statement that, despite their advantages over traditional cost of service regulation, PBR plans are not a panacea and that the principal motivation for PBR plans for local electric distribution utilities in Ontario was the administrative impossibility of adjudicating over 200 individual rate applications.

2.16 CAC submitted that "in the determination of Union's application for a comprehensive PBR plan, it is important for the Board to first consider the threshold issue of whether or not Union's plan represents a superior approach to the current cost-of-service regime. To simply accept it on the basis that PBR, as a form of regulation, is experiencing popularity in Ontario would not be acting in the interests of Union's ratepayers. The Ontario Energy Board Act allows for incentive regulation schemes, but does not require them. ... Overall, CAC urges the Board to reject Union's proposed price cap plan this time. As demonstrated by Union's own evidence and the evidence of Dr. Bauer, Mr. Johnson and Dr. Norsworthy the plan design is deficient in almost every aspect. Union has not discharged its onus to demonstrate that its plan, as currently designed, represents a better alternative to the present cost of service regulatory regime."

2.17 CAC stated that, having reviewed the evidence and transcripts, Dr. Bauer concluded that the costs of Union's plan exceeded the overall benefits and that in moving to a new regulatory regime, the basic test is whether everyone is better off, or at least no one is worse off. CAC commented that Dr. Bauer did not believe this test was met by Union's proposal.

2.18 CAC proposed that the plan be postponed until 2002 in order to allow the Board to undertake a cost-of-service determination for 2001, to incorporate the impacts of corporate restructuring and changes that have taken place since EBRO 499, and to evaluate the impacts of unbundling.

2.19 IGUA supported the adoption of a "properly designed" PBR plan. In IGUA's view, such a plan would mimic "competitive forces by applying a formula ...". IGUA maintained that costs to serve particular rate classes and the revenue-to-cost ratios resulting therefrom remain relevant under PBR.

2.20 IGUA argued that whether rates were just and reasonable rates could only be determined from revenue- to-cost ratios. IGUA contended that a significant difficulty in this case was Union's refusal to provide a detailed cost of service presentation reflecting the utility's current level of achievement.

2.21 IGUA argued that a full cost-of-service review is the preferred approach to determine the point of departure for a PBR plan; basing a price cap plan on adjustments to an out-of-date business forecast is an inferior approach and creates a significant potential for miscalculation.

2.22 IGUA commented that "Union's reliance on specific costs associated with specific risks in support of its request for additional recoveries from ratepayers is more indicative of a request for relief under cost of service regulation for a multi-year test period of five years, than a proposal to introduce a properly designed price cap plan based on the application of a formula to a revenue base and base rates in order to mimic the competitive forces that operate to drive price changes in a particular industry."

2.23 IGUA argued "[t]he objective of a properly designed PBR price cap mechanism is to improve efficiencies so that both ratepayers and shareholders will be better off than they are now. If increased efficiencies cannot be achieved, then the adoption of a price cap plan is inappropriate. The price cap plan should operate to put ratepayers in a better position than they would be under a continuance of cost-of-service

regulation. The base from which a price cap plan operates ought not to be inflated to compensate the Company for its estimate of costs that it might face when operating under a price cap plan compared to operating in a cost-of-service regime. A price cap plan which deprives ratepayers of benefits which they enjoy under cost-of-service regulation, such as their share of margins derived from the use of utility assets and recorded in revenue deferral accounts, is inappropriate and an improperly designed plan. Nor is the adoption of a price cap plan an occasion for the utility to inflate the current level of recovery from ratepayers in order to deprive them of efficiency gains achieved under cost-of-service regulation. ... The primary purpose for adopting a comprehensive price cap plan is to stimulate a level of achievement which is better than the current level of achievement. The reward for shareholders under a price cap plan is the increased returns that they can enjoy <u>if</u> those managing the utility achieve improved efficiencies. If those managing the utility perform better than they have performed to date, then the shareholders will be rewarded. In a properly designed PBR price cap, which operates from the current level of performance being achieved, the shareholders are at risk for inadequate performance by those managing the utility. Inadequate performance by those operating the utility will not be remediated on an annual basis, as might be the case under a cost-of-service regime."

2.24 IGUA observed that the Board could decide to continue with cost-of-service regulation until Union brought forward a price cap proposal based on a cost-of-service review of its current situation.

2.25 VECC argued that a PBR regime should not start in fiscal 2000, citing Dr. Bauer's view that a PBR regime is more likely to be successful in a steady state environment. VECC suggested that the Board delay implementation of a PBR plan until the impacts associated with unbundling and corporate restructuring are clearly defined, noting that a delay would allow the PBR plan to operate prospectively rather than retroactively. Further, VECC criticized Union's use of 1999 Board-approved test year data.

2.26 VECC observed that revenue-to-cost information, useful for checking for cross-subsidization between rate classes, would not be provided under Union's proposal.

2.27 VECC noted that commodity prices are largely responsible for changes in customer bills and challenged Union's claim of improved price stability resulting from Union's fixed price cap plan.

2.28 VECC submitted that "there should be a fundamental restructuring of the price cap proposal to ensure that customers receive the benefits from cost reductions and revenue increases that have nothing to do with the actions of the Company under a PBR regime. In addition, the structure of the regulatory process for the Company should reflect informational requirements that clearly enable the Board and intervenors to identify the benefits of moving to PBR."

2.29 VECC stated that unlike the situation that the Board faced with electrical distribution utilities, as a result of delaying Union's PBR plan, only one regulatory review process would be added. VECC urged the Board to order Union to implement a PBR plan to be effective for Fiscal 2002, supported by a full cost-of-service review for 2001 and projection for 2002.

2.30 MECAP and LPMA recommended that the Board reject the proposed PBR plan and require Union to file a traditional cost-of-service rate application. They submitted that once proper base rates were established, the Board could consider a price cap proposal for implementation in 2002.

2.31 CENGAS supported Union's proposal arguing that there was no practical reason to delay implementation.

Union's Reply - Introduction of PBR

2.32 Union agreed with the CAC that the Company bore the onus of showing that its proposal will result in just and reasonable rates. Union further submitted that one factor the Board may wish to consider in evaluating a move to PBR is whether its price cap proposal is an improvement over cost-of-service regulation.

2.33 Union disagreed with intervenors' positions that its plan was deficient arguing that "the evidence deals comprehensively with the benefits of Union's PBR proposal, while intervenor positions in opposition are invalidated by misunderstandings, errors, conjecture or deliberate misstatement".

2.34 Union submitted that its plan "is a reasoned approach based on a well respected framework that has been widely used in North America" and "represents a fair balance of the interests of customers, the public interest and the company".

2.35 In response to IGUA's assertion that Union's proposal reflected a cost-of-service mindset and a lack of confidence, Union argued that the rate base adjustments it proposed were required to define the parameters of its plan properly from the outset and further pointed to the evidence of both Dr. Bauer and Dr. Hemphill that price cap plans generally have Z-factors or pass-through and non-routine adjustments and that the incentives of these plans are not diminished by these elements.

2.36 Concerning the arguments from CAC, VECC and others that it was inappropriate to introduce PBR until major structural changes such as unbundling were complete, Union argued that its unbundling proposals were an incremental part of the evolution of direct purchase that had been going on since 1985 and that its own restructuring efforts were part of continuous improvements within the company. Union argued that there will never be a time when all change comes to an end such that PBR can be introduced into a static environment, and further that Union's PBR is well suited for changing times and for facing increasing competition.

2.37 Union submitted that the absence of a 2000 cost-of-service filing was no real impediment to its application, arguing that EBRO 499 rates had been just and reasonable for 1999, and since there was no fundamental change to the scope or overall cost structure of Union's business, those rates were a reasonable basis as the starting point for its PBR plan. Union commented that "the very fact that these rates were not sought in conjunction with the introduction of a PBR mechanism should give the Board some comfort that they are not the product of any strategic positioning by either the company or intervenors."

2.38 Union argued that its price cap proposal "will, through the assurance of productivity improvements provide a customer dividend and create incentives for the company to achieve improved levels of productivity."

Board Findings - Introduction of PBR

2.39 The Board notes that there was strong criticism of Union's PBR proposal by almost all intervenors. Union's proposal has been described in argument by parties as "complex", requiring both "expert assistance" and "extensive consultation with Union ... to enable interested parties to understand the implications of Union's proposal s", and being "the first long-term comprehensive fully articulated PBR proposal made to an energy regulator in Canada."

2.40 In the Board's view the concept of "comprehensiveness" in a price cap PBR plan reflects the relative level of annual revenue change to be determined by application of the price cap index as compared to the revenue changes resulting from more traditional cost-of-service pass-through mechanisms which are embedded in Union's proposed PBR approach. The Board notes that in Union's proposal for the first year of their PBR plan only $14.7 million of a total of $35.3 million of the change in delivery revenues related to application of the PCI, i.e. less than half. By this measure the Board cannot conclude that the plan is comprehensive.

2.41 The Board acknowledges the complexity of Union's proposal. The complexity of Union's PBR proposal was compounded by the melding the PBR proposal with an unbundling proposal, the impacts of which are largely unknown at this time, leading some parties to support the recommendation that "[t]he OEB should postpone the introduction of a PBR regulatory regime until the impacts of upstream unbundling are known. This would allow basing a price cap plan on more reliable initial rates. A starting date of 2002 would achieve this goal."

2.42 The complexity of Union's proposal is further underlined by the elapsed time from the date of the utility's initial consultations with stakeholders in October 1998 to the filing of Final Argument in August 2000.

2.43 Several intervenors questioned whether the plan had any benefits for ratepayers, expressing concern that ratepayers could be substantially worse off under Union's PBR plan. In the Board's view, parties and the Board should strive to find ways in which to evaluate benefits over the PBR term.

2.44 In assuming responsibility for the rate regulation of some 250 municipal electric distribution utilities in 1998, the Board adopted a price cap methodology. The Board notes that its adoption of a price cap type PBR approach for electric distribution utilities was influenced by the administrative difficulties that existed in that sector because of the large number of utilities and the lack of history and experience with Board regulation to draw on. The Board also notes that work is currently underway to further develop the price cap plan for electricity distribution companies, particularly with respect to monitoring and evaluation.

2.45 Although in the Board's view, traditional cost-of-service regulation and the use of a forward looking test year has worked well for gas utilities in Ontario, the Board has indicated its willingness to entertain a comprehensive PBR proposal from Enbridge Consumers Gas. In the meantime, the Board has approved a "Targeted O&M" approach which has the potential to reward improved performance achieved through reduction of O&M costs.

2.46 The Board notes the evidence that many jurisdictions have introduced PBR regulatory regimes for gas distributors. The Board also notes that many intervenors did not reject the concept of PBR out of hand: CAC, IGUA, LPMA, Schools, and VECC for example, submitted that with appropriate modifications they could accept a PBR proposal for Union. The Board also notes that without the experience of an operating PBR mechanism there is a high degree of scepticism concerning the ratepayer benefits from the adoption of such a scheme.

2.47 The Board observes that Union's is the first comprehensive gas utility PBR proposal to come before it. Further, the Company did not, in this proceeding, provide the Board with an alternative should the Board not be comfortable with this proposal. In the Board's view, the current application by Union does not contain enough information to set rates based on its traditional cost-of-service approach. Rejecting the current application in favour of cost-of-service would require Union to come to the Board with another application, as well as another hearing on the matter.

2.48 The possibility of rejecting Union's proposal was raised during the hearing. Addressing this concern in part, for example on June 13, 2000, Union was asked by the panel:

> MEMBER JACKSON: Mr. Penny, ... if the Board were to turn down this PBR proposal, will there be sufficient cost-of-service data on the record for the Board to follow its usual procedure of fixing rates for this company with appropriate data that is forward looking and will the base year 1999 be sufficient as a base for the traditional cost-of-service methodology? Is there an alternative, a fall back, or do we just say no to PBR and trust that your current rates are sufficient? Mr. PENNY: I think the answer to that, Dr. Jackson, is clearly no, there is not -- that the record does not contain cost-of-service information for setting rates beyond 1999 on a cost-of-service basis. So if the Board turned down the PBR proposal the 1999 rates would continue in place, subject to the usual parameters, which is that the Board might ask the company to come in on the basis of advice from ERO or the company may decide that it requires an application to adjust those rates on a cost-of-service basis. But the narrow answer to your question is no, is that the filing

does not contain information for cost-of-service rate setting for the year 2000.

2.49 The Board notes that, under section 36 (6) of the Act, the burden of proof is on the applicant and, if the Board believes that the applicant has not provided sufficient information, it may simply deny it and let the rates previously in effect prevail or it may fix such other rates as it finds appropriate. Under these circumstances, in the Board's view, a panel would prefer to have sufficient information in a form familiar and clear, on which it can draw to find an alternative decision which is fair to the applicant and to all stakeholders.

2.50 The Board is of the view that, at the commencement of a price cap PBR plan for a utility, it is important to have full reliable and tested base data for the utility reflecting current operations and including class cost-of-service data and class revenue-to-cost ratios. Although it would have been preferable for this price-cap PBR plan to have this data for a more recent test year than 1999, the Board accepts the 1999 test year data approved in EBRO 499 as the basis for the PBR plan which the Board has approved for Union in this Decision.

2.51 However, the Board is concerned about exposing the ratepayer or the Company to undue risk through the adoption of a new regulatory approach. In considering Union's proposal, the Board has examined whether and how it could mitigate such risk. The Board has decided that on balance it would be in the public interest to adopt on a trial basis a modification of Union's price-cap PBR proposal for a shorter term than was applied for. This will allow the Board and all parties to explore its benefits and dis-benefits in relationship to the traditional annual or bi-annual adjustment of rates based on a forecast cost of service. The Board has also approved other provisions to mitigate risks for the term of the trial price-cap PBR plan.

2.2 FIXED PRICE CAP, TERM, AND STARTING DATE

2.52 Union's proposal is for a five-year PBR plan escalated by a price cap commencing on January 1, 2000, and terminating on December 31, 2004. The price cap, an annual escalator comprising an estimate of inflation less a stretched productivity offset, would be fixed for the term of the plan.

2.53 Union proposed that the price cap framework be effective for a term of five years, citing the need to be able to recover the costs of business process and cultural changes required to effect productivity improvements under the price cap as the rationale for the term sought. Union also referred to the evidence of their experts which indicated that a five-year term is typical for price cap plans in the electricity/gas distribution and telephone industries.

Positions of the Intervenors - Fixed Price Cap, Term, and Starting Date

2.54 Alliance submitted that in a five-year plan, any initial misspecification of the plan's parameters would lead to an excessive magnification of the distortion between market prices and the plan's prices. As such, Alliance took the position that either the price cap plan should be limited to a three-year term or there should be an earnings sharing mechanism implemented.

2.55 Alliance took the position that "more accurate" annual forecasts which are available should be preferred to the fixed five-year forecast, asserting that only one utility referred to in the evidence has a fixed price cap for the entire PBR period (Boston Gas) and that the regulator fixed it on the basis that the input price differential was not significantly different from zero.

2.56 Alliance was sceptical that ratepayers would receive a net benefit from Union's proposal. Further, Alliance asserted that the testing of "just and reasonable" rates under PBR posed a significant problem due to "information asymmetries". Alliance cited the evidence of Dr. Bauer to the effect that instituting PBR at a time of

significant structural change is not optimal due to the difficulty in setting parameters appropriately.

2.57 Alliance noted that in 1999 Union transferred ancillary businesses to an affiliate and that Union is currently undergoing further restructuring. Alliance submitted that the unbundling of upstream transportation and storage along with the expected application to unbundle the billing function render the present time inappropriate for introduction of this PBR plan. Alliance disagreed with starting the PBR plan on January 1, 2000, preferring January 2002; in the alternative, Alliance proposed continuing the approved 1999 rates for year 2000 and have Union submit a new rates proposal for 2001.

2.58 Alliance argued that the EBRO 499 rates were based on two-year old information and hence should not be used as the starting point. Rather, Alliance proposed that the "best evidence available" should be used, either 1999 actual results or the year 2000 utility budget. Alliance further advocated the use of an earnings sharing mechanism as a safeguard against prices and earnings that may be excessively high due to initial mis-specification of a PBR plan's parameters.

2.59 AMO recommended that PBR not be instituted for year 2000, suggesting that a three-year plan beginning January 1, 2001 would be more appropriate in terms of balancing incentives to the utility with ratepayers' concerns. AMO urged that implementation of a PBR plan be further delayed until 2002 at which time there will be some idea of the dollar impacts of the unbundling agreement which will assist in setting an appropriate base for PBR.

2.60 AMO supported the fixed price cap plan subject to its proposals with respect to other PBR issues being adopted but argued that the achievement of a Settlement Agreement on most unbundling issues proved that unbundling issues can be severed from Union's PBR proposal.

2.61 CAC submitted that a PBR plan should not be introduced prior to year 2002, and then only introduced if the Board is satisfied with the plan design, that the plan contains an earnings sharing mechanism, and that the starting base rates are set appropriately. Only in this circumstance would CAC support a five-year term for the plan.

2.62 CAC cited Dr. Bauer's evidence, noting that the fixing of the cap "unnecessarily relies on long-term estimates of input price changes", resulting in a less accurate (than is available) measure of inflation; the forecast could be updated annually and trued up to the actual inflation experienced. CAC also argued that a fixed inflation factor in conjunction with the return on equity adjustment weakens the plan by removing incentives on capital spending.

2.63 CAC opposed the use of a fixed inflation rate. In the event that an annual inflation rate were used, CAC urged that Union's proposed ROE adjustment be rejected on the grounds that changes in the cost of equity capital would be captured by changes in the I-factor. In addition, CAC asserted that Union's evidence was inconsistent because Union claimed that there was a zero input price differential between its input costs and the economy-wide input costs; yet, at the same time argued that the economy-wide inflation factor used in Union's price cap formula does not reflect the much higher capital intensity of the natural gas sector.

2.64 CAC opposed the use of EBRO 499 Board-approved rates as a starting point since: they were based on a forecast developed in 1997; they were the product of a negotiation process beyond the Board's detailed scrutiny; they were approved as just and reasonable for 1999; and they do not reflect current costs given the restructuring initiatives Union has been undertaking since EBRO 499.

2.65 CAC quoted Dr. Bauer's evidence as follows: "An accurate determination of initial rates is important. Any deviation from the correct rates is compounded by the price cap mechanism over the plan period and has a redistribution effect between ratepayers and shareholders ... The most important thing in a forwardly going PBR plan is that the base is correct. Because any mistake in determining the base is compounded over the duration of the plan." CAC submitted that a PBR plan must

be credible, arguing that the PBR regime in place for ECG has suffered due to a lack of such credibility in the base that was set initially.

2.66 With respect to the starting point, CAC also noted the organizational changes known to intervenors that had occurred subsequent to the EBRO 499 Decision, including 177 roles permanently reduced and 350 early retirements.

2.67 CAC noted that cost-of-service regulation is still in place, arguing that past productivity improvements should not be rewarded under a new regime. CAC also took issue with Union's argument that using actual 1999 data would constitute retroactive ratemaking, pointing out that these figures are not proposed to be a basis for 1999 rates but rather a better basis for setting future rates. CAC strongly opposed the retroactive application of PBR to January 1, 2000.

2.68 CAC's position was that the best way to initiate a PBR plan was to start from a full cost-of-service review for the year 2001, with the plan itself beginning on January 1, 2002. CAC argued that Union's proposal was not accompanied by sufficient supporting data, effectively putting the onus on intervenors to provide an evidentiary basis for PBR starting rates.

2.69 CAC argued that if the Board approves a 2001 year start for PBR a detailed cost-of-service study for the year 2000 ought to be submitted by Union for the purpose of determining year 2000 revenue requirement.

2.70 CAC submitted that if the Board approves a PBR plan for Union effective January 2000 then the 1999 actual financial data, normalized to reflect operational changes not accounted for in EBRO 499, should provide the basis for a PBR plan. If the Board decides to use 1999 Board-approved rates as a starting point, CAC proposed further adjustments.

2.71 CEED took the position that PBR should not be implemented until there is some experience with unbundling. CEED argued that Union would have an advantage, and hence not be neutral, in competing with marketers in offering unbundled services due to its status as a system operator and to the fact that it possesses customer information. Further, CEED submitted that PBR should be preceded by unbundling of distribution services, with the costs of unbundled services removed from rates.

2.72 CENGAS supported Union's PBR and unbundling proposals without delay, arguing that the opportunities for increased profits under PBR are appropriate for the increased competition that Union will face as a result of unbundling.

2.73 Energy Probe argued that Union has not, in this proposal, met the onus of Section 36 (6) of the Act, i.e., has not demonstrated the superiority of its PBR proposal over the existing cost-of-service methodology for setting just and reasonable rates.

2.74 Energy Probe also took the position that the necessary benchmark, the year 2000 outlook, is not in the evidence. Energy Probe's position is that the Board should not approve Union's proposal ; in the event that some PBR arrangement is approved, Energy Probe urged that any approval not extend beyond the year 2002. Energy Probe also requested that the Board direct Union to provide, among other things, a cost-of-service study.

2.75 Moreover, Energy Probe expressed concern that any sustainable cost savings realized by Union subsequent to the EBRO 499 Decision would, under Union's proposal , be pocketed by the applicant, whereas, under cost-of-service regulation these cost savings would flow to the ratepayers because weather-normalized sufficiencies result in rate reductions. In this connection, Energy Probe submitted that the extent of currently achieved cost savings is unknown to intervenors due to the fact that there has not been a cost-of-service filing in this proceeding. Energy Probe contended that savings in distribution costs are not weather-related, arguing that these costs are invariant with respect to throughput volume.

2.76 Energy Probe argued that, in the event that the Board accepts a PBR plan based on 1999 approved rates, any actual weather normalized excess be removed. Energy Probe also noted that with a fixed inflation factor, should actual inflation significantly exceed the factor, Union could, under its proposal, obtain relief by virtue of the off-ramp provided for in the event of a serious decline in financial position. However, in the event that inflation was below the anticipated level, due to the lack of a symmetric off-ramp for supernormal earnings, the ratepayers would have no such remedy available. Energy Probe proposed that an annual determination of inflation was appropriate for a PBR plan.

2.77 Mr. Fullerton expressed concern about the "set base" upon which the 1.9% proposed price cap operates.

2.78 HVAC's submission was that in going to a price cap plan, the costs ought to reflect the actual cost structure of the utility. During the operation of the plan, costs should relate to or approximate industry costs. HVAC argued that this design avoids over-recovery and links performance benefits to achievement with respect to the industry average. HVAC also advocated an earnings sharing mechanism to mitigate the impact of potential errors in setting the values of the PBR plan's parameters.

2.79 IGUA's position was that year 2000 is a transition year and, in their view, PBR ought to be implemented prospectively. IGUA indicated a willingness to accept a PBR plan starting January 1, 2001, and ending December 31, 2003. However IGUA indicated it would support a PBR plan ending December 31, 2004, provided that the following revisions to the plan are made: adjustments to the delivery revenue base and base rates to reflect 1999 normalized actuals; removal from price cap escalation of pass-through and non-routine items; a maximum price cap of 0.5% applied to the delivery revenue base; continuation of the current ratepayer sharing of revenue deferral accounts; and provision of a mechanism to share Union's weather normalized utility/corporate earnings in excess of the allowed ROE.

2.80 IGUA expressed reservations with respect to the riskiness of the combination of a fixed price cap and a five-year term. Also, if the plan is to be based on adjusted EBRO 499 approved rates, IGUA urged that a two-stage process be used in which the first stage would adjust the delivery revenue base ("base") and the second stage would adjust the base rates.

2.81 IGUA enunciated three general principles with respect to a PBR plan: neither the base nor base rates should include pass-throughs or Z-factors, and in calculating unit costs related to these factors, normalized volume forecasts (or a reasonable proxy) for the year in question should be used; base and base rates should reflect "current level of achievement"so that the PBR plan provides utility incentives for surpassing that level; and neither the base nor base rates should be increased to provide for recovery of expenses incurred in past years due to changes in methodology.

2.82 IGUA made further submissions that only the difference between I and X is important for a fixed price cap. However, if the plan uses an annual inflation measure, then a specific X-factor finding is required. In addition, IGUA argued that a fixed price cap plan does not justify a partial ROE pass-through without removing the pre-tax ROE from the base to which the price cap is applied. Notwithstanding the preceding, IGUA indicated a willingness to accept a five-year fixed price cap containing Union's proposed I-factor of 1.6%, but disagreed with Union's productivity offset of -0.3%, recommending instead an X-factor in the range of +1.1% to +1.6%.

2.83 NOVA indicated that it supports IGUA's position on this issue, stating that ratepayers should benefit from cost reductions and other changes reflected in the 1999 actual results. NOVA further stated that, unless otherwise indicated, it supported IGUA's position on other issues.

2.84 Kitchener submitted that the greater incentive for Union to invest in productivity improvements which is inherent in a longer term PBR plan must be weighed against the risk of negative outcomes that may accompany the initial design and implementation of the plan itself. Also, Kitchener supported IGUA's position that the PBR plan should not be retroactively imposed and endorsed IGUA's proposed three-year plan beginning January 1, 2001.

2.85 Kitchener indicated a five-year plan would be acceptable if Union's proposal was modified as follows: it was rebased according to a year 2000 full allocation cost study; rates were based on EBRO 499 revenue-to-cost ratios; a productivity factor of approximately 1.6% was used; was eliminated for vulnerable M9 (T3), M10, and Rate 77 customers; current revenue sharing mechanisms were continued; and an earnings sharing mechanism was implemented.

2.86 Kitchener's position was that the plan should not start prior to January 1, 2001. However, Kitchener did propose adjustments with respect to a January 1, 2000 starting date for consistency with the figures in the applicant's pre-filed evidence. Kitchener repeated the concern expressed in Dr. Bauer's testimony regarding the critical importance of starting with the correct base revenue level to avoid compounding errors that can not be remedied by adjusting the parameters later.

2.87 Notwithstanding the preceding, Kitchener accepted the concept of a fixed price cap plan and the proposed inflation parameter of 1.6%, but did not accept the proposed X-factor, arguing it was of the wrong algebraic sign and of too slight magnitude.

2.88 LPMA indicated that it would support a five-year PBR plan only if the issues raised by Dr. Bauer, i.e., modification of the productivity offset, addition of an earnings sharing mechanism, reduced pricing flexibility, and meaningful base rates, were addressed. If these revisions are not made to the plan, LPMA submitted that a three-year term would be more appropriate.

2.89 LPMA requested that the Board direct Union to submit, for full scrutiny, a full cost-of-service filing for year 2001, with the intention of implementing a PBR plan for year 2002. They took issue with using 1999 approved rates as an appropriate basis for a PBR plan commencing in 2000 noting the significant restructuring and downsizing that Union has undertaken. If a year 2000 PBR plan, based on approved 1999 rates, is instituted, LPMA submitted that undesirable results such as the following would ensue: (i) the savings already realized by the utility will not be flowed through to the ratepayer (e.g., meter reading, OEB costs, wages and benefits, long-term interest costs); and (ii) since the 1999 cost allocation study is out of date, it will not be possible for rates based on 1999 approved rates to be just and reasonable.

2.90 LPMA also opposed the introduction of a PBR plan while the industry is in a state of flux citing the pre-filed evidence of Dr. Bauer: "PBR works much better under relatively stable ("steady-state") industry conditions. It is much less appropriate during times of rapid structural change, when the definition of meaningful plan parameters is difficult if not impossible. Under these conditions, there exists an increased risk that the plan does not properly reflect the underlying economic structure of the industry. Whenever regulators have influence on the timing of reforms, major structural adjustments should be completed prior to the introduction of PBR."

2.91 Overall, LPMA argued that Union had not met its onus to demonstrate that the customer will enjoy benefits under its PBR proposal. This failure was largely due to Union not providing current cost information.

2.92 If the Board does approve a PBR plan on the basis of the application before it, LPMA proposed treating year 2000 as a transitional year with adjustments to base revenues as contained in LPMA's argument, with implementation of a PBR scheme in year 2001. LPMA cautioned that their proposal does not take into account changes in throughput volumes or non-routine adjustments likely to occur beyond year 2000.

2.93 LPMA opposed fixing the GDPPI estimate for the five-year plan because it adds unnecessary risk (the possibility of an accumulated over- or under-forecasting for five years), and it is underpinned by a single forecast, unlike the forecasts used for the purposes of the quarterly rate adjustment mechanism ("QRAM") and the ROE. LPMA suggested using the average of a number of one-year ahead forecasts, consistent with the use of forecast interest rates in the ROE pass-through proposal, with a yearly true up. LPMA proposed 1.3% as an appropriate I-factor for year 2000.

2.94 In the event that the Board does approve a PBR plan beginning in year 2000, LPMA advocated using 1999 normalized actual financial results as a starting point. They also opposed perpetuating shareholder rewards for productivity gains realized under cost-of-service stating that "... it would not be logical to inflate costs that no longer exist in 2000."

2.95 MECAP concurred with LPMA, adding that the three-year term contemplated would encompass the years 2000-2002. WGSPG supported MECAP on this issue.

2.96 Schools expressed a preference for a three-year term in the event that the Board approves a price cap plan for Union. As the rationale for their position, Schools cited reduction in uncertainties and the lack of a comprehensive gas industry productivity study underpinning Union's proposed X-factor.

2.97 Schools accepted the fixed I-factor of 1.6% subject to two caveats: the X-factor used be in the range 1.25%-1.5%, citing the evidence filed with respect to the X-factors used in other plans, the productivity factor of 1.5% that the Board set for electric distribution utilities, and Dr. Norsworthy's evidence which took into account the input price differential of -1.1%, estimates of output growth, system expansion policy under PBR, and economics of density; and that the ROE pass-through proposed by Union be rejected.

2.98 VECC submitted that a three-year term would be preferable to a five-year term given the current restructuring, the lack of prior experience, the quality of the utility data, unbundling, and the absence of an earnings sharing mechanism, citing the evidence of Dr. Bauer and Mr. Johnson in support. VECC supported LPMA's position should the Board approve a five-year term for the price cap plan.

2.99 VECC's submission was that a one-year-ahead forecast of GDPPI be used for the I-factor to be trued up to the actual at the end of the year. In conjunction with this choice, VECC's position was that the X-factor should be 2.53% in accordance with Dr. Norsworthy's evidence which took into account the input price differential of -1.1%, estimates of output growth, system expansion policy under PBR, and economics of density, and the ROE pass-through should be rejected.

2.100 Comsatec, ECG, Enron, GEC, OAPPA, Pollution Probe, and TCPL made no comments on this issue.

Union's Reply - Fixed Price Cap, Term, and Starting Date

2.101 Union argued that since it had signaled its intentions to propose a PBR plan, consulted with parties, then filed its application March 5, 1999, filed evidence December 10, 1999, and had rates declared interim effective January 1, 2000, therefore the implementation of a price cap plan on January 1, 2000 was prospective. Union asserted that it had undertaken restructuring initiatives in 1999 and 2000 to achieve the productivity commitments it had proposed in the plan, noting that Union would only seek recovery of the restructuring costs in the event that the Board adjusted base rates to reflect the financial impact of restructuring.

2.102 Union disputed IGUA's contention that "inappropriate" components of its proposal, such as the partial ROE pass-through, were being justified by the choice of a fixed inflation factor. Union replied that the pass-through is required, independent of the use of the fixed I-factor, due to the fact that the gas distribution industry is more capital intensive than the economy as a whole, resulting in Union's cost of capital impacts not being fully reflected by the GDPPI. Union asserted that if the I-factor were not fixed, the only change in its plan would be with respect to non-routine

adjustments. Union added that it would consider only industry-specific occurrences for non-routine treatment if a variable I-factor is employed.

2.103 Union also disputed IGUA's position that only the difference I-X is material should a fixed price cap plan be approved, responding that separate findings on I and X would provide a sounder evidentiary basis for the Decision, inform parties, and give greater guidance for the second generation PBR scheme.

Board Findings - Fixed Price Cap, Term, and Starting Date

2.104 The Board is of the view that it would be inappropriate to start a PBR plan in the year 2000 since it was already late in 2000 by the time the Company had filed its evidence and the hearing was completed.

2.105 The Board does not accept Union's proposal for a PBR plan in which the price cap is fixed for the term of the plan. The Board is mindful of Dr. Bauer's evidence that the fixed price cap unnecessarily relies on long-term forecasts of input price changes. Use of such a long-term forecast, when annual forecasts are readily available, unnecessarily increases the risk exposure for all parties. The Board prefers an approach that will allow the price cap to change annually based on changes in a key component of the price cap which can be determined from readily available data. The determination of annual components of the price cap is dealt with by the Board in addressing the pricing formula.

2.106 This is the first application of a comprehensive PBR plan for a gas utility in Ontario and the Board has no experience with the operation of such a plan. Further, as will be discussed later, the Board is concerned that Union's plan was not based on an up-to-date cost-of-service presentation and any errors in setting the base will be compounded over the duration of the plan. For these reasons, in order to mitigate risks, the Board does not accept the use of a five-year term.

2.107 This Decision establishes rates for the year 2000 and puts in place a three-year PBR plan for the years 2001-2003. In the sections that follow, the Board addresses its specific findings with regard to Union's proposal. As discussed later, rates newly calculated for the period prior to the date of the implementation of this Decision may lead to the calculation of amounts which will either be offset against certain deferral account balances or will be used to design rate riders to be applied going forward.

2.3 1999 FINANCIAL INFORMATION AND RELATED BASE ADJUSTMENTS

2.108 Union's proposal was to use the EBRO 499 rates that the Board-approved for the 1999 test year as a starting point for their PBR plan, adjusting them as indicated in Appendix 2 ("Outline of Union's PBR Proposal") to derive base revenues to which the price cap would be applied for year 2000. Union specifically disputed the propriety of utilizing weather normalized 1999 actual financial results as a point of departure for a PBR scheme submitting that they are unreflective of normal operations. Union claimed that the weather normalized results "represent short-term responses to a number of influences ... most significantly, warmer than normal weather. Accordingly, these results do not form an appropriate basis for rate-making and should not be used for adjusting approved rates."

2.109 Union's evidence was that the weather in 1999 was 8 % warmer than normal. Union stated that the normalized excess it had achieved in 1999 was due to unsustainable cost reductions undertaken to manage the effect of the warm weather.

2.110 Union noted that revenues were normalized but the expenditures were not. While normalizing increases the revenues notionally, the normalized excess revenues are not actually collected. Union's position was that the normalized results reflect the favourable O&M reductions undertaken by management, while the unfavourable revenue impacts have been excised in the normalization process. Union also asserted that, if the current proceeding were a traditional cost-of-service case, the 1999 normalized results would not "represent the appropriate starting point because they represent the vagaries of the past not the forecast for the test year." Union took the

position that “the use of 1999 actual information will be retroactive rate-making which the Board has consistently rejected”.

Positions of the Intervenors - 1999 Financial Information and Related Base Adjustments

2.111 In opposing the use of 1999 Board-approved rates as a starting point, Alliance argued that the EBRO 499 rates were based on two-year old information and hence should not be used. Rather, Alliance proposed that the “best evidence available” should be used, either 1999 actual results or the year 2000 utility budget.

2.112 CAC strongly objected to the use of adjusted 1999 Board-approved delivery revenues to initiate a PBR plan in year 2000, preferring a full cost-of-service review for the year 2001 to precede a PBR plan commencing in 2002. However, CAC submitted that, if the year 1999 were to be used as the starting point for a year 2000 PBR plan, 1999 actuals should be used and in addition should the 1999 actuals rates should be adjusted to reflect the full year impact of labour cost reductions made in 1999 (including salaries, wages, and benefits), the reduction in provincial income taxes, the lower cost of refinancing long-term debt, and meter reading cost reductions.

2.113 Energy Probe stated that “... the only acceptable starting point for base rates is the current annualized cost-of-service, normalized for non-recurring items.” Energy Probe argued that the 1999 actual weather-normalized excess should be removed from rates.

2.114 HVAC, referring to the fact that Union’s O&M costs for the year ended December 31, 1999, were $9.542 million below the EBRO 499 Board-approved costs, argued that the issue of normalization of revenues is irrelevant to the question of sustainability of cost reductions. HVAC repeated Dr. Bauer’s assertion regarding the importance of setting base rates that reflect the underlying costs of utility services. In response to Union’s position that prior year’s historical results have not been used for test year ratemaking, HVAC cited both the lack of a test year forecast - which the Board has conventionally relied upon to guide the setting of rates - and the

comprehensiveness of Union's proposal as indicative of a "complete departure from past rate making practices." HVAC emphasized their position that Board-approved rates for fiscal 1999 are not necessarily just and reasonable (in the sense of reflecting utility cost-of-service) for a five-year PBR plan starting in year 2000. As a general principle, HVAC also urged that the price cap formula should be a reasonable proxy reflecting industry cost structure in a competitive environment. HVAC submitted that part of the realized 1999 cost savings was sustainable and the base should be adjusted to reflect these savings. HVAC proposed that the reduction should be offset by Union's restructuring costs.

2.115 IGUA reiterated that the Company's refusal to submit a full cost-of-service study for 2000 leaves the Board with two alternatives: direct the utility to provide a full cost-of-service presentation for 2000; or adjust the "out of date" 1999 normalized actuals.

2.116 In response to Union's contention that starting with normalized actual 1999 results constitutes "retroactive rate making", IGUA argued that normalized historic and bridge year results have always been a consideration in setting just and reasonable rates for a test year.

2.117 IGUA stated that as a point of principle Union should not be rewarded for "a level of achievement anticipated in 1998 when striking a budget for 1999, when that level of anticipated performance has already been exceeded."

2.118 Kitchener supported using weather-normalized 1999 actuals and disputed Union's contention that the cost savings realized in 1999 are not sustainable. Kitchener argued that both the warmer weather and lower normalized average consumption are continuing trends which Union has to manage on an ongoing basis and that Union responded to these negative revenue impacts by initiatives such as the elimination of 177 full-time positions.

2.119 LPMA took issue with Union's assertion that the use of 1999 actual results as a PBR base for 2000 constituted retroactive ratemaking. LPMA argued that the use of a 1999 forecast prepared in 1998 - when 1999 actuals are now known - is illogical and "even more retroactive." LPMA submitted that "the Board has consistently used the most recent and reliable information available to it in setting rates."

2.120 VECC did not support the use of EBRO 499 Board-approved rates, but supported the use of 1999 normalized actuals as a reasonable starting point for a PBR plan.

2.121 AMO, Comsatec, ECG, CEED, Enron, Fullerton, GEC, OAPPA, Pollution Probe, and TCPL took no position on this issue.

2.122 CENGAS supported Union's proposal on this issue.

Union's Reply - 1999 Financial Information and Related Base Adjustments

2.123 Union responded that the actual 1999 expenditures largely reflect the Company's efforts, which are unsustainable in the long term, to mitigate warmer than normal weather and greater declining use per customer, which are circumstances beyond the Company's control. Union claimed that the1999 results are not representative of current operations and do not form a credible basis on which to base a PBR plan; use of such a basis would be "equivalent to regulation on a historical test year." Union admitted that "actual cost experiences can provide some insight into rate making. The Board has considered historical normalized costs (among other things) in considering the reasonableness of forecast costs."

2.124 Responding to the argument of Energy Probe, Union asserted that costs such as compressor fuel vary with the weather and, as such, cannot be permanently reduced on the basis of experience in a year that exhibited warmer than normal weather. Other costs that do not vary with weather can only be reduced temporarily by management initiative.

2.125 In response to intervenors' position that rates should be adjusted to reflect Union's switch to bi-monthly meter reads, Union replied that these "meter reading efficiency gains" were a "productivity initiative Union undertook in 1999" and that adjusting for this type of item, while ignoring possible costs incurred and insisting on a stretch factor, constitutes "cherry picking" and "should be ignored".

2.126 Union disagreed that starting rates ought to be based on a year 2000 revenue requirement, arguing that there is no normalized year 2000 revenue forecast in evidence, and adding that "Union did not file a detailed 2000 revenue requirement precisely because it was asking to move to PBR beginning in 2000. The existence of recently approved rates, found to be just and reasonable in EBRO 499, made the development of a 2000 cost-of-service filing unnecessary." Union submitted that the same issue of out-of-date information would arise even if a cost-of-service filing had been done for 2000, recognizing the time it takes to prepare and review.

Board Findings - 1999 Financial Information and Related Base Adjustments

2.127 The Board recognizes that there is merit in the arguments made by many parties with respect to the use of weather-normalized 1999 actuals as the best available base for use in a PBR plan beginning in year 2000. The Board notes Union's argument that, while the costs are not directly volume dependent, some costs are nonetheless low and unsustainable because they reflect management's short-run responses to warmer than normal weather. The Board disagrees with Union's submission that using actual data from 1999 to set future rates would be retroactive ratemaking. In setting future rates for utilities historical data is relevant and using such data does not make the rates retroactive.

2.128 The Board also recognizes that much of the analysis, including a tested set of volume data and a cost-of-service analysis for the 1999 weather normalized data by rate class, is not on the public record and may require considerable time and effort to generate. The Board finds that for this trial PBR period the use of the EBRO 499 Board-approved data, with adjustments that the Board makes later in this Decision, is

acceptable for ratemaking for 2000 and for the trial PBR plan, in that it provides a consistent data set.

2.129 The Board accepts the use of delivery revenue of $787.2 million as approved by the Board in EBRO 499 for 1999 as a starting point in determining rates for year 2000. The Board also accepts the use of 1999 Board-approved volumes as a starting point in calculating the rates. Due to the passage of time and events, the Board also accepts that adjustments to the 1999 delivery revenue base are necessary to establish a relevant base for 2000. The Board also finds that the initial price cap increase should not occur before January 1, 2001.

2.130 Union proposed to adjust the approved EBRO 499 delivery revenue of $787.2 million by the addition of $31.456 million for delivery/redelivery and storage revenue (Northern and Eastern Operations area, previously collected in the bundled customers' gas supply transportation charge and T- service storage delivery revenue, now to be collected in delivery rates) and removal of $7.569 million for short-term gas supply (load balancing). The Board notes that no parties disputed these adjustments and the Board approves these adjustments.

2.131 These adjustments produce a base delivery revenue of $811.1 million for the year 2000. In addition to these adjustments the Board discusses in the following sections other adjustments to base delivery revenue for the purpose of determining rates for 2000 and for establishing the delivery revenue base for the commencement of the trial PBR plan in January 2001.

2.4 ADJUSTMENTS TO BASE DELIVERY REVENUES AND BASE RATES

2.132 Union proposed a number of adjustments to the base delivery revenues. These were categorized by Union according to when they would be applied:

- Adjustments to base delivery revenue before applying the price cap, including delivery commitment credit, Y2K costs and regulatory costs;

- Adjustments to base rates, including recovery of accumulated unaccounted-for gas ("UFG") variances, change in accounting for pension and other post-retirement benefits, accumulated deferred tax amortization, delivery commitment credit, Y2K costs and regulatory costs; and

- Pass-through items, including gas costs (UFG, inventory carrying cost and compressor fuel), return on equity ("ROE") adjustment, and UFG volume adjustment.

2.133 Intervenors suggested other adjustments:

- Adjustments to base delivery revenue before applying the price cap, including adjustments to reflect 1999 normalized actuals, impact of lower provincial income taxes, OEB cost assessment, meter reading costs, interest cost for long-term debt refinancing, employee wage and benefit cost reductions, and to reflect removal of compressor fuel costs, UFG, inventory carrying costs, deferred tax amortization, ROE and income tax from the base;

- Adjustments to base rates, including adjustments to reflect 1999 normalized actuals, impact of lower provincial income taxes, OEB cost assessment, meter reading costs, interest cost for long-term debt refinancing, employee wage and benefit cost reductions; and

- Pass-through items, specifically long-term debt costs.

2.4.1 One-time Adjustments to Base Rates

2.134 Union proposed one-time adjustments to base rates for the following items: recovery of accumulated UFG variances from prior periods, changes to the accounting treatment of pension and post-retirement benefits, amortization of the deferred tax balance, Y2K remediation costs, and regulatory cost savings. Union also proposed adjustments to reflect the elimination of the delivery commitment credit that was agreed to by all parties in the Settlement Agreement

Positions of the Intervenors - One-time Adjustments to Base Rates

2.135 IGUA took the position that if a price cap plan were to be approved "based on an adjusted out of date forecast of business activity" then adjustments should first be made in two stages: first to determine the delivery revenue base for application of the price cap, then to make the other adjustments to base rates. IGUA submitted that the delivery revenue base and base rates should exclude pass-through and non-routine costs, the delivery revenue base and base rates should reflect the Company's current level of achievement, and the delivery revenue base and base rates that are escalated by the price cap should not be increased by amounts based on changes in methodology applied by Union to determine the amounts to be recovered in prior test years.

2.136 In the event that the Board chooses to adjust the 1999 weather-normalized actuals IGUA submitted that for rates starting January 1, 2000 the Delivery Revenue Base should be decreased by $17.4 million. IGUA derived this estimate by summing the 1999 normalized revenue excess of $8.2 million, the $4.7 million recovered in 1999 rates for customer information services costs not incurred, and $4.5 million cost savings which would have been realized had actual1999 year-end staff levels been annualized. IGUA also submitted that Union began to experience additional long-term debt cost savings in the amount of $1.7 million effective March 1, 2000 which, when "annualized", would increase the adjustment from $17.4 million to

approximately $19.5 million for year 2000. IGUA also remarked that the adjustment for year 2000 would be further augmented by the decrease in provincial income taxes effective May 2, 2000.

2.137 IGUA disputed Union's contention regarding the unsustainability of the O&M decreases realized in 1999 by citing evidence to the effect that there was a $5 million reduction in labour costs realized in the first quarter of 2000 and a further $2 million in labour cost savings possible in 2000. IGUA continued that if cost reductions in excess of $17 million are sustainable, Union's claimed revenue deficiency of $14.3 million for year 2000, would be more than offset.

2.138 CAC strongly objected to the use of 1999 Board-approved rates as the base for Union's price cap plan citing Dr. Bauer's testimony: "The most important thing in a forwardly going PBR plan is that the base is correct. Because any mistake made in determining the base is compounded over the duration of the plan." CAC stated that the success of a PBR regime depends on stakeholders' belief that the plan is credible and that the PBR plan's credibility depends on starting at a correct base.

2.139 CAC submitted that ECG's PBR regime suffered from a lack of credibility "in large part because stakeholders are not convinced that the base was a correct one and believe that ECG is, as a result, achieving savings which are disproportionate to the benefits ratepayers are to receive."

2.140 CAC commented that the rates approved by the Board in EBRO 499 were initially developed in 1997 and that these rates were the outcome of negotiations and not subjected to detailed Board scrutiny. Further, CAC stated that "[p]arties to that proceeding and Union agreed that acceptance of those numbers for 1999 would not prejudice their position in any future cases, particularly in the determination of a PBR base."

2.141 CAC argued that Union was not the same company operationally that it had been when 1999 rates were established. CAC also disputed that any cost reductions made by Union subsequent to EBRO 499 should be considered productivity gains noting that "[c]ost of service regulation is still in place."

2.142 CAC rejected Union's claim that using 1999 actual financial results to set a base constituted retroactive ratemaking. CAC remarked that its proposal was not to use 1999 actual results to set 1999 rates but rather to use the actuals as a factor in establishing a base on which to move forward.

2.143 CAC submitted that it was essential, especially for a multi-year rate setting plan, to use the most current information available. CAC urged that if the Board were to approve a PBR plan, the most appropriate way to set base rates would be to have a full cost-of-service review for 2001 with the PBR plan to commence January 1, 2002. This approach would allow the Board to "assess the full impact of the restructuring efforts and the extent to which the underlying cost structure of the utility has changed as a result of those efforts."

2.144 CAC strongly opposed the application of PBR retroactively to January 1, 2000. However, if the Board were to approve Union's proposal to do so, CAC submitted that the 1999 actuals should be used "on a normalized basis to reflect staff reductions and other reductions" which CAC identified under specific issues.

2.145 LPMA argued that a number of the cost reductions achieved in 1999 would be sustainable, citing the following examples: the reduced costs of $0.75 million by reading meters bi-monthly rather than monthly in its Southern Operations Area; actual 1999 capital spending below the Board-approved level resulting in a depreciation expense that was $2.677 million below the 1999 Board-approved level; actual consulting and general expenses were lower by $5.4 million and other expenses were lower by $0.9 million; and $3.4 million in savings resulting from the reduction of 356 employees through the early retirement program. LPMA commented that total sustainable savings exceeded the $8.242 million reduction in base delivery revenues attributable to the 1999 normalized actual financial results.

LPMA observed that Union was unable to identify which programs or studies were deferred in 1999 that resulted in consulting and general expense savings and commented that "if Union does not know what it did not do, there is a high probability that it doesn't have to do it at all."

2.146 LPMA addressed each of Union's five proposed adjustments and argued for further changes to set base rates. LPMA proposed that the appropriate starting point is the weather-normalized actual 1999 financial results with initial adjustments to remove costs that no longer existed in year 2000. LPMA's position was that certain costs should appropriately be removed from the normalized 1999 actual results included a decrease of $1.887 million to reflect the reduction in the provincial tax rate, a reduction of $0.5 million to account for the difference between the EBRO 499 O&M estimate of OEB fixed costs for 1999 and the actual 1999 assessment, a reduction of $0.375 million for reduced meter reading costs due to the change to bi-monthly reads, and reductions associated with wages and benefits of $5.162 million to reflect the 177 roles eliminated and a further decrease of $2.85 million for the higher vacancy rate. LPMA accepted Union's proposal to eliminate the DCC effective April 1, 2001.

2.147 As a general comment on methodology, LPMA quoted Union's testimony that pass-through items should receive the same treatment under price cap regulation as they do under cost-of-service regulation. Therefore, LPMA argued that the appropriate way to treat pass-through items is to use deferral accounts to track the difference between forecasted and actual costs. LPMA submitted these costs should not be inflated by the price cap.

2.148 In the event that the Board decides to implement PBR in 2001, Schools position was that the following adjustments to Union's PBR Proposal Summary would be appropriate: base delivery revenue should be $783.8 million; if the proposed ROE pass-through is denied, equity return and income taxes should remain in base delivery revenue to which the price cap is applied; with respect to gas cost pass-through items totaling $46.4 million, Schools stated that it is not "appropriate for Union to obtain a price cap-related escalation of these amounts, as they are not susceptible to management."; the base delivery revenue should be adjusted by using either the 1999

actual results normalized for year-end staff levels or, if the plan is to commence in 2001, using the 2000 budget.

2.149 Schools proposed that adjustments be made to Union's base delivery revenue, noting that: the 1999 Board-approved figures are based on out-of-date estimates prepared in late 1997; the elimination of 177 positions in late 1999 would yield ongoing savings of approximately $9.2 million; with respect to vacancies, the $3.4 million offset for "positions held vacant in 1999" applies only to savings in 1999; and current vacancies are above normal by 57 roles (2%) which would yield salary plus benefit cost savings of $2.8 million in 2000. Schools submitted that base delivery revenue for the purpose of applying the price cap should be $721.6 million.

2.150 From the base rates derived from the 1999 actuals, VECC proposed additional changes to account for the impact of lower provincial income taxes, cost savings to reflect the full year impact of staff reductions, and meter reading efficiency gains.

2.151 CEED, Comsatec, Enbridge, Enron, Fullerton, GEC, OAPPA, Pollution Probe, and TCPL did not comment on this issue.

2.152 CENGAS supported Union's proposal.

Union's Reply - One-time Adjustments to Base Rates

2.153 Union disagreed with the proposition advanced by IGUA, CAC, and others, that EBRO 499 rates are based on costs that are unreflective of current operating conditions, noting in response that all rate proposals are based on forecasts developed prior to proceedings: this point was also used in support of Union's argument of the position taken by various intervenors that a cost-of-service study (subsequent to the last one filed by the applicant in the EBRO 499 proceeding) should be undertaken before approval of a PBR plan is granted. Union described the position of intervenors advocating an updated cost study as "without foundation" on the grounds that the intervenors' position would preclude the adoption of every PBR plan for "as

soon as cost-of-service rates were approved the forecast on which the rates were based would become an out of date forecast of business activity."

2.154 Union submitted that: the EBRO 499 rates were approved for the year immediately preceding the start of the proposed PBR plan and, the only proposed changes to these rates for which Union seeks approval arise from either costs beyond management's control (and hence would qualify as non-routine adjustments) or from changes in the existing methodology. Union also described its proposal as "... to take rates that are, by definition, just and reasonable in 1999 and adjust them to ensure that they remain just and reasonable in the first year of and through the PBR plan."

2.155 Regarding CAC's comments on the credibility of the base rates under ECG's targeted PBR regime, Union characterized the comments as "premature and misplaced", arguing that there has been no decision by the Board as to whether Enbridge's PBR plan is appropriate. Union further indicated that controversy has arisen because Enbridge did not disclose its restructuring plans (including outsourcing) to the Board until after the targeted O&M PBR plan had been formulated. Given the disclosure of Union's 1999 restructuring, including the cost-of-service reductions realized and the expenses incurred to attain those reductions, and the provision of actual information and year 2000 budget information, Union claimed that there are no comparable non-disclosure or credibility issues in this proceeding.

2.156 Union also disputed the contention of some parties that productivity gains attained by the utility in fiscal 1999 should be a ratepayer credit via base revenue adjustment, citing the definition of productivity improvement, accepted by Union's expert and VECC's expert, as an increase in output growth that exceeds the increase in input growth, adding that this definition is independent of the regulatory regime under which the utility is operating. Union interpreted its proposal by intervenors to both adjust base rates and use a stretch factor as double counting to the benefit of ratepayers and to the detriment of Union. Further, Union asserted that "to deliver on the productivity commitments it is prepared to make for 2000 it had to begin to take action in 1999. The same would hold true for any given year in a PBR plan." Union submitted that if base rates were adjusted to reflect the cost savings associated with

the 1999 restructuring, then the restructuring costs of $15.8 million that have not yet been recovered in rates should be recognized as "a prudently incurred cost appropriately recovered in rates."

2.157 With respect to CAC's argument that Union differs operationally from the company it was during the EBRO 499 filing, Union replied that it is engaged in the same business lines and anticipates the same results for the year 2000 as in 1999.

2.158 Union replied specifically to each of IGUA's PBR principles. With respect to IGUA's principle that pass-through items should not be subject to escalation under the price cap, Union's position was that price caps "apply to prices, not revenues and not costs". Union argued that adoption of IGUA's position with respect to pass-through items would result in a plan "virtually indistinguishable from a targeted O&M PBR such as that of Enbridge." Union cited the evidence of Dr. Bauer that comprehensive PBR plans outperformed targeted PBR plans. Union also noted that the Board has approved a comprehensive PBR plan for the electricity distributors. Union refers to IGUA's "mistaken belief that, for each year, only certain elements of cost may be escalated to yield the expected total cost for the year." Union continued by describing IGUA's position on this principle as being "cost-of-service".

2.159 Replying to IGUA's stated second principle, that the base should represent current operations, Union's position is that the EBRO 499 rates, adjusted as per its proposal, are "a reasonable representation of current operations", and wereaccepted by the Board as just and reasonable for 1999 "just prior to the commencement of PBR."

2.160 To IGUA's third principle, that neither the delivery revenue base nor the base rates should be adjusted for changes in methodology introduced to recover costs from previous test years, Union responded that IGUA's rejection of the applicant's proposed changes in UFG and pension accounting methodology was "unsupported by any evidence", and that IGUA "failed to identify any fundamental reason why the Board should adopt this principle as a guideline." Further, Union asserted that "IGUA's position in refusing any change in methodology is untenable. Accepting

IGUA's "principle" would mean that Union could never effect changes to correct inadequate or erroneous methods."

2.161 Union also emphasized that there is a fundamental mismatch if actual costs are compared with weather normalized revenues, noting that the mitigation of actual revenue reductions due to warmer than normal weather requires actual cost reductions; on this basis Union challenged IGUA's assertion that both the normalized 1999 revenue excess of $8.2 million and the $4.5 million adjustment for annualizing staff vacancies as at December 31, 1999, are relevant and indicate utility "headroom" currently embedded in existing rates. Also, Union cited the testimony of Ms. Elliot that "these vacancies must eventually be filled." Continuing, Union remarked on the lack of evidence that any vacancies in the first quarter of 2000 were the same vacancies that existed at December 31, 1999, or that they could be eliminated without deleterious consequences with respect to service and operations. Union also disputed intervenors' arguments that $4.7 million savings for CIS payments not made in 1999 is an appropriate reduction, remarking that the CIS savings in 1999 were attributable to a delay in implementation of the Banner system and are therefore unsustainable. Further, Union stated that the CIS costs currently in rates, $6.9 million, are less than the anticipated CIS costs of $9.3 million. Based on the foregoing Union's position was that the $17.4 million of headroom, alleged by IGUA, does not exist.

2.162 Union disputed IGUA's claim that an adjustment should be made to reflect interest cost savings accruing to Union as a result of the refinancing at lower rates of the long-term debt which will mature over the course of the plan. Union argued that these savings are needed for capital additions. Union argued that the additional interest costs savings are needed to support the increase in rate base from the Board-approved 1999 level of $2.706 billion to the forecast 2000 level of $2.901 billion. This increase of $195 million, assuming 65% debt financing and cost of incremental debt of 7.2%, results in additional interest costs of $9.1 million. Interest costs embedded in existing rates, using 9.61% as the embedded cost of long-term debt for 1999, are $169 million. A price cap escalation of 1.9% represents increased revenues of $3.2 million, an amount less by $5.9 million than the increased costs to the Company.

2.163 Union argued that if the Board found it appropriate to make adjustments to reflect the cost savings from corporate restructuring in 1999, the adjustments should be net of the $15.8 million of costs incurred by Union to effect the restructuring.

Board Findings - One-time Adjustments to Base Rates

2.164 The Board observes that, had Union submitted its PBR Plan proposal early in 1999, supported by a test year forecast of costs and revenues for 2000 with the first price cap increase to occur in 2001, many of the arguments that intervenors had raised and the concerns of the Board would have been allayed. Instead, Union submitted, late in 1999, a plan based on a 1999 test year with an initial price cap increase to occur January 1, 2000. Even with Union's best efforts, it was unable to complete its discussions with intervenors and its submissions to the Board before August 2000. The Board therefore appreciates the difficulty parties have had in accepting Union's proposal.

2.165 The Board believes that it is important to establish a realistic base set of data at the commencement of price-cap PBR plan and that such data must be representative of the current operations of the utility. In 1999 Union was operating under a traditional cost-of-service method of rate regulation. Productivity improvements realized in 1999, net of relevant costs, should be for the benefit of ratepayers in future years when rates are changed to reflect the new costs. They should be recognized in rates set for the first year of the new PBR plan and they would have been, had the company provided a consistent set of operating date for the first year of the plan.

2.166 With respect to 1999 financial results, the Board accepts that Union took measures to mitigate the effects of warmer weather and continued declining use per customer. The Board is of the view that some of these measures were temporary in nature and others are more permanent.

2.167 While the Board is not able to quantify the contribution of the "temporary" measures towards the achievement of the $8.242 million weather-normalized revenue excess in 1999, the Board is satisfied that the excess revenue, in the main, can be attributed to Union's mitigation measures. The Board therefore does not make an adjustment for this item to the delivery revenue base of $811.1 million for 2000.

2.168 However, the Board accepts the position of several intervenors that a number of the cost reductions that have been realized by Union in 1999 are indeed sustainable and will carry forward to subsequent years. The Board believes that the following cost reductions are sustainable: meter reading, staffing, OEB fixed costs, provincial income tax and long-term debt costs. The Board accepts Union's position with respect to increased CIS costs. The Board makes a one-time adjustment of -$8.1 million to incorporate the above findings to the delivery revenue base for 2000 broken down as follows: annualized meter reading (-$1.125 million), staff reductions (-$5.162 million), OEB fixed costs (-$0.5 million), provincial income tax (-$1.887 million), long-term debt (-$1.769 million), and CIS costs (+$2.4 million).

2.169 The Board also makes a further adjustment of $ 0.9 million to base delivery revenues for 2001 for the annualization of changes in provincial income tax.

2.170 The Board believes that staff vacancies are temporary in any given year and that other costs, such as consulting costs are discretionary and may be deferred or avoided. Depreciation expenses may be reduced as a result of deferred capital expenditures and other timing differences. Such cost reductions may not be sustainable and therefore the Board does not make an adjustment for these items.

2.171 The Board also does not accept Union's argument that the restructuring costs of $15.8 million , classified by Union as non-utility should offset any reductions that the Board might make to base delivery revenues.

2.4.2 Unaccounted-for Gas Variances from Prior Periods

2.172 Union proposed to increase base rates by $4 million (for each year of the five-year plan). The $4 million increase to year 2000 base rates would be escalated in each subsequent year by the price cap. In this manner, Union proposes to recover over the term of the proposed PBR plan a $22 million notional deferred cost balance related to historic UFG under-recovery.

2.173 The cumulative under-recovery has arisen because of differences between the ratemaking provision for UFG and actual experience. The provision was based on a 3:2:1 weighting of actual UFG volumes for the three most recent years for which data was available. Since UFG has been increasing year over year recently, the estimated UFG included in rates has been consistently less than the actual UFG experienced by Union. Union agreed that under the current methodology under-recovery for any given year would ultimately be collected by the utility; however, as long as actual UFG costs continues to increase, cumulative under-recovery will grow. Union's evidence is that the proposed recovery of the UFG balance in rates would have been sought by Union had they filed a cost-of-service application for 2000 rates.

Positions of the Intervenors - Unaccounted-for Gas Variances from Prior Periods

2.174 AMO opposed Union's proposal to clear the accumulated UFG deficit balance through an increase in base rates.

2.175 CAC opposed Union's proposal to recover the accumulated UFG deficiency in PBR starting rates on the grounds that: the $4 million will be subject to the price cap going forward; and, recovering past deficiencies prospectively through an adjustment to rates is inappropriate inasmuch as other items, for which Union has over-recovered in the past, are not being brought forward for ratepayer rebating.

2.176 IGUA opposed Union's UFG proposal and also the proposed change in methodology for estimating UFG for the following reasons: the $6.4 million ratepayer impact in 2000, due to the $4 million increase in base rates and the $2,4 million resulting from Union's proposed change in methodology; the inappropriateness of selective cost changes contemporaneously with a regulatory regime switch; and the unfairness of increasing shareholder return in the absence of any improvement.

2.177 IGUA stated that neither of the proposed changes would fit Union's definition of a non-routine adjustment, making neither recoverable if the plan were already running. IGUA noted that recovery of past UFG variances is a timing issue. IGUA stated that the ratio method by itself would increase the amount included in rates and quicken the rate of recovery. Therefore, IGUA argued that if the ratio method is accepted, Union's proposal to recover $4 million in base rates should be rejected.

2.178 Kitchener opposed the addition of $4 million to base revenues to accelerate the recovery of past UFG variances, advising caution regarding increases to base revenue at the outset of PBR. If allowed, Kitchener proposed treatment of UFG variances as a straight pass-through, arguing that it is inappropriate to include these costs into base revenues where they will be subject to price cap escalation.

2.179 LPMA opposed Union's proposal to recover the accumulated UFG variance on the grounds that it represents a retroactive change to the Board-approved methodology, going back prior to 1999, and also submitted that if Union's UFG "catchup" proposal is accepted, then intervenors ought to have the right to go back and review the forecast methodology with respect to other forecasted items, e.g., volumes, rate base, O&M, et cetera. Should the Board approve the "catchup", LPMA urged that it be treated as a pass-through and not put in base revenues to be escalated by the price cap.

2.180 Schools opposed the "catch-up" on the basis that: it is unrelated to the introduction of PBR; the current methodology has been in use for at least 20 years and has, in past years, at certain times resulted in overcollection, at other times resulted in undercollection, tending to "average out"; and does not qualify as a non-routine adjustment and is only a proposal to adjust base rates to reset the starting point for PBR. Schools also noted that the inclusion of the $4 million adjustment in base rates would be escalated by the pricing formula under Union's proposal .

2.181 VECC did not accept the "catchup" recovery of accumulated UFG variances citing Mr. Johnson's evidence regarding the impropriety of the change prior to PBR inception.

2.182 Alliance, OAPPA, Pollution Probe, and TCPL made no comments on this issue.

2.183 CENGAS supported Union's proposal.

Union's Reply - Unaccounted-for Gas Variances from Prior Periods

2.184 Union submitted that regardless of the regulatory regime under consideration, it would have proposed the recovery in base revenues of the accumulated UFG deficit balance; as such, Union disputed that this methodological change would make ratepayers worse off under PBR than they would be under cost-of-service, since the Board has already approved the volumetric recovery of the UFG and that it is to no party's benefit to continue accumulating the UFG deficit.

2.185 Union characterized the argument that the proposed UFG recovery would make ratepayers worse off in 2000 than they had been in 1999 as "no principle at all ... being simply an expression of a desire for no rate increases of any kind." Union contended that the UFG balance arose because of a deficient methodology for estimating UFG, a methodology that contained a "systemic error that resulted in consistently under recovering the amount of UFG.". Union also noted that IGUA's witness confirmed that the NEB allowed TCPL to change its UFG methodology and also allowed a "catchup" in its RH-1-91 decision. Union stressed that its UFG

performance "is unparalleled when compared with similar North American utilities" and that it should not be penalized for "a systemic error in the Board-approved method of accounting for UFG".

Board findings - Unaccounted- for Gas Variances from Prior Periods

2.186 The Board accepts that Union's existing method of determining an allowance for UFG in rates has fallen short of actuals in recent years. However, the Board considers the recent shortfalls to be the manifestation of risks assumed by Union. The same methodology, under differing circumstances, could have resulted in over-recovery. Hence, the Board will not include in base rates the proposed $4 million per annum adjustment to reflect recovery of UFG variances from prior periods.

2.4.3 Accounting for Pension and Post Retirement Benefits

2.187 Union proposed to implement, effective year 2000, an accounting change to account for pension and other post retirement benefits on an accrual basis rather than on a cash basis. This proposal is in accordance with a change in Generally Accepted Accounting Principles ("GAAP") as adopted by the Canadian Institute of Chartered Accountants ("CICA") in 1999. Union's evidence was that the EBRO 499 provision for these expenses in 1999 totaled $6.3 million, comprised of $5.1 million for pensions and $1.2 million for non-pension benefits, whereas the 1999 actual spending totaled $1.1 million: $1.2 million for non-pension benefits and -$0.1 million for pensions. Under the new accounting standard, Union's year 2000 forecast for these items totals $7.9 million, comprised of $1.3 million for pensions and $6.6 million for non-pension benefits. On the basis that the year 2000 forecast total exceeds the year 1999 actual total spent by $6.8 million, Union proposed to add $6.8 million as an adjustment to year 2000 base rates and that this item be escalated by the subsequent years' price caps.

Positions of the Intervenors - Accounting for Pension and Post Retirement Benefits

2.188 AMO accepted Union's proposal contingent on "... acceptance of the weather normalization for 1999 and consequently no rate increase in 2000 ...".

2.189 CAC accepted the accounting change on the basis that GAAP is external to the utility, subject to the exact amount being included in base rates for 2000 and being based on the result of the Towers Perrin study.

2.190 IGUA and NOVA interpreted Union's proposal to change from a cash to an accrual method of recording these items as adjusting the Board-approved budget, and hence base rates, by $6.8 million. IGUA also noted that the actual underspending in 1999 for 1999 pension expenses contributed to a result in which the actual 1999 Human Resources expenditures of $40.9 million were significantly below both the budgeted expenditures of $47.8 million and also less than the reallocated Human Resources budget figure of $42.3 million for 1999. IGUA cited the evidence of the Applicant's witness that, with regard to the $6.8 million increase, Union treated "its actual expenditures as if they were the Board-approved amount"; IGUA submitted that this constituted an admission by Union of the appropriateness of using 1999 actual results in the determination of the PBR base, in which case IGUA argued that for consistency, all of the line item actual expenses should be treated as though they were Board-approved for the PBR base. IGUA accepted that the proposed accounting change would increase year 2000 costs by approximately $6.8 million above actual 1999 costs but submitted that increasing Base Rates to reflect a discrepancy between actual costs from year-to-year in one item would make sense only if all other items are similarly adjusted.

2.191 Kitchener took the position that since $6.3 million was the amount approved in EBRO 499, and the cost under GAAP is $7.9M, regardless of the fact that Union only spent $1.1 million in 1999, Union should only be allowed to increase the year 2000 base rates by $1.6 million, representing the increase between the EBRO 499 Board-approved amount and the amount under the GAAP change. In support of its

position, Kitchener cited evidence to the effect that the expense of $6.3 million originally forecast in the EBRO 499 proceeding was reduced to an actual of $1.1 million by Union; the fact that this reduction was not based on the decision of an outside benefits administrator reduces the credibility of Union's proposal in Kitchener's view. Furthermore, Kitchener noted that the evidence in this proceeding was that the expenditure of $1.1 million was not sustainable: $6.3 million was more reflective of these on-going costs. However, Kitchener indicated that it would find Union's proposal acceptable if base revenues were adjusted to reflect 1999 normalized actuals.

2.192 LPMA's submission echoed the concerns of Kitchener. LPMA added that if the year 2000 rates were being set via the customer review process then these changes would be non-routine adjustments. LPMA argued that this change ought to be disallowed unless the base rate change related to provincial tax changes is made. Further, LPMA submitted that the price cap should not be applied to the $6.8M, if it is allowed, as "there is no need to apply the price cap to the 1999 revenue base for an increase that takes place in 2000."

2.193 Schools supported Union's proposal on this issue only if the base rates for the PBR plan are to be based on normalized 1999 actual results.

2.194 VECC opposed switching to the accrual method for the following reasons: cash accounting has been accepted elsewhere, citing a British Columbia Utilities Commission ("BCUC") order to Pacific Northern Gas ("PNG"); GAAP compliance is not mandatory; GAAP non-compliance does not have any negative financial consequences; and the impact of Union's proposal on ratepayers is and increase of $6.8 million or approximately 1% in distribution rates. VECC cited Mr. Warren's cross-examination of Ms. Elliot to assert the existence of a direct relationship between pension and post-retirement expenses and the level of employees; as the employee level has been declining since 1999, VECC argued that Union's proposal would allow the escalation of an inappropriately high amount thereby constituting "profits for a non-routine item". VECC submitted that if the Board were to approve a change in the accounting treatment that it not be escalated by the price cap. VECC

stated that it is appropriate to allow changes to rates only insofar as the actual costs change.

2.195 Alliance, COMSATEC, ECG, CEED, Energy Probe, Enron, Fullerton, GEC, HVAC, OAPPA, Pollution Probe, and TCPL took no position on this issue.

2.196 CENGAS supported Union's proposal.

Union's Reply - Accounting for Pension and Post Retirement Benefits

2.197 Union noted that CAC's condition for acceptance of this proposal, the filing of the Towers Perrin review, had been met.

2.198 Union contested IGUA's interpretation of Union's proposal to treat actual 1999 pension expenses as Board-approved as lending credibility to the usage of actual 1999 expenditures to set the PBR base, citing IGUA's argument as flawed due to its "over inclusiveness". Union reiterated that it "was obliged to make discrete reductions to its O&M budget" on account of the EBRO 499 Settlement Agreement requiring a $6 million reduction to its 1999 O&M budget.

2.199 Union cited two reasons why the 1999 costs should not be taken as representative of normal operations and why the actual 1999 O&M spending was below the approved settlement agreement amount of $258 million and adopted by the Board in EBRO 499: first, Union had used the flexibility available with respect to the assumptions made for the purpose of calculating pension expenses; and secondly in response to warmer than anticipated weather management initiated further cost reductions.

2.200 In response to VECC's position that Union retain the current cash accounting treatment of this item, Union noted that neither the specific circumstances of the PNG order, nor any other cases in which the BCUC reached a similar decision, were in evidence. Union concluded that there is no basis for inferring that the BCUC "or any other Canadian regulator, has taken a general view that refusing to follow GAAP

and the new CICA Handbook rules in respect of post retirement benefits is an appropriate principle which utilities should now follow."

Board Findings - Accounting for Pension and Post Retirement Benefits

2.201 The Board recognizes that Union's proposal to change from a cash basis to an accrual basis for accounting for pensions and post-retirement benefits reflects a change in GAAP that has been adopted by the CICA and accomplishes the objective of matching the costs to the period in which the obligations arose. There was limited opposition to this change and further, in the Board's view, this may remove some potential variation in this expense. The Board accepts this changed practice for rate-making purposes.

2.202 The Board notes that the EBRO 499 revenue requirement was based on a provision for this expense of $6.3 million. Since the Board has accepted the EBRO 499 revenue requirement as the base from which to make adjustments, the Board finds an increase of $1.6 million to base rates for 2000 is appropriate since it represents the increase between the EBRO 499 Board-approved amount and the amount Union calculated under the new GAAP.

2.203 The Board notes that this expense will be subject to escalation under the price cap in years subsequent to 2000.

2.4.4 Deferred Tax Amortization

2.204 Due to the method of tax accounting adopted by the Board for rate-making purposes for Union prior to EBRO 494, the Company has an accumulated deferred tax balance which, in the EBRO 499 settlement agreement, all parties agreed should be drawn down to reduce the cost of service. The agreed approach was to draw down different amounts for different years. Union's approach results in a higher level of drawdown, over the period of its price cap plan, than the amount currently reflected in1999 rates. Union has proposed to levelize the drawdown over the five-year term of the PBR plan, thus reducing the 2000 base rates by $10.263 million, an amount that reflects

the higher level of drawdown proposed by Union and determined by averaging the subject drawdown in equal amounts over five years.

Positions of the Intervenors - Deferred Tax Amortization

2.205 IGUA, NOVA, Schools, AMO, CENGAS, Kitchener, LPMA, MECAP, VECC, WPSPG and CAC accepted Union's proposal.

2.206 Alliance, COMSATEC, ECG, CEED, Energy Probe, Enron, Fullerton, GEC, HVAC, and TCPL took no position on this issue.

Union's Reply - Deferred Tax Amortization

2.207 Union observed that no parties opposed this proposal.

Board Findings - Deferred Tax Amortization

2.208 The Board finds it appropriate to reflect the drawdown of the deferred tax balance in rates. However, since the amount calculated by Union was based on a PBR plan with a five-year term, the Board finds the amount should be adjusted to reflect the shorter three-year period that the Board has approved. The Board accepts the amount of $7.8 million for 2000, and $9.2 million for each year of the next three years representing and average of the amounts presented by Union in evidence for those three years.

2.209 The Board also directs Union to maintain an accounting of the deferred tax drawdown so that a determination of the outstanding balance can be made at the end of the term of the trial PBR plan.

2.4.5 Y2K Costs

2.210 In its EBRO 499 Decision, the Board approved an amount of $7.6 million in rates for Y2K remediation and established a deferral account to record the variance between actual Y2K costs and the $7.6 million provided for in rates. Union proposed to continue this treatment for the year 2000 after which the $7.6 million would be removed from rates and the deferral account balance would be cleared.

Positions of the Intervenors - Y2K Costs

2.211 AMO, CAC, CENGAS, Kitchener, LPMA, MECAP, WGSPG, Schools and VECC accepted Union's proposal.

2.212 HVAC agreed with the mechanics of Union's proposal insofar as the relationship between Y2K spending and the price cap was concerned, but opposed the recovery of Y2K costs in rates on the basis that: there was no evidence as to the prudence of the expenditures; there was no evidence as to the success of the program; and there was no evidence as to the appropriate level of non-utility elimination.

2.213 IGUA took the position that the $7.6 million should be removed from base rates for 2000 submitting there is no reason to collect this amount from ratepayers in recognition that credit balances owing to ratepayers from revenue deferral accounts are approximately $7 million. IGUA suggested that the Y2K deferral account be continued with the expectation that the Y2K debit owed by ratepayers would be offset by the credit owing to ratepayers from their share of storage-related revenue deferral account balances.

2.214 Alliance, Comsatec, ECG, CEED, Enron, Fullerton, GEC, Pollution Probe, and TCPL took no position on this issue.

Union's Reply - Y2K Costs

2.215 Union challenged IGUA's position that any debit balance in the Y2K account could be offset by balances in storage-related revenue deferral accounts and argued that a one-time charge for these costs would be necessary.

Board Findings - Y2K Costs

2.216 The Board notes the evidence of Union that, under Union's proposal, by the end of 2000 there would be a credit balance of about $2.8 million in the Y2K deferral account. The Board accepts Union's proposal to retain $7.6 million in base rates for 2000 and to remove this amount for 2001, and notes that clearing any balance in the Y2K deferral account will be subject to a customer review process.

2.4.6 Regulatory Cost Savings

2.217 Union indicated that direct regulatory costs, including cost awards paid to intervenors, associated with a rates proceeding and recovered in rates amounts to $2.7 million on average. As Union recovers these costs over a two-year period, the relevant amount per year is $1.4 million (rounded). Union estimated savings of $0.8 million resulting from partial replacement of the standard rates hearing process with a customer review process. To allow recovery of the costs of developing the price cap proposal, the year 2000 hearing, and the customer consultation process, Union proposed to defer the implementation of the $0.8 million reduction to base rates until January 1, 2002.

Positions of Intervenors - Regulatory Cost Savings

2.218 CAC took the position that regulatory cost savings should be seen as reducing transaction costs that would benefit ratepayers who were ultimately responsible for the payment of regulatory costs, and not as a productivity gain.

2.219 CAC contended that Union has overstated the level of its current regulatory costs and has also understated the regulatory savings expected to be realized under Union's PBR proposal. In this respect, CAC noted: Union's regulatory staff has been reduced from 31 employees to 7; actual assessed OEB fixed costs for the period ended March 31 2000 were $1.7 million, significantly less than the $2.2 million figure, claimed by Union; and 1999 actual regulatory department costs for Union were $6.54 million, $0.97 million below the 1999 forecast cost of $7.5 million, included in rates. CAC proposed two options: that regulatory costs should be reduced by a total of $5.05 million, comprised of a further reduction to the base of $3.75 million, $0.5 million to reflect the Board's lower fixed cost allocation, and $0.8 million attributable to Union's adjustments; or adopt Dr. Bauer's proposal to eliminate all regulatory costs from the base revenues, passing through actual regulatory costs as non-routine adjustments.

2.220 HVAC disputed Union's calculation of regulatory costs currently collected in rates, because the average direct regulatory costs of $2.7 million per year are recoverable over a two year rate period, or approximately $1.4 million per year, and because there are two cases whose costs are being recovered in any given year. Based on the Company's estimate of a 60% reduction in these costs, HVAC proposed a $1.62 million total reduction in the PBR base revenue.

2.221 IGUA took the position that removal of $1.7 million in regulatory costs on January 1, 2002 would be more appropriate. IGUA accepted Union's approach with respect to determining in advance the amount to be removed in 2002, subject to the Board's approval. Alternatively, IGUA would accept Dr. Bauer's suggestion that all regulatory costs incurred by Union be removed at an appropriate time, with actual costs treated as a pass-through item.

2.222 LPMA argued that for consistency the 1999 cost forecast should be the starting point in determining the appropriate level of regulatory costs of $1.5 million per year. The reduction to be applied in 2002., using the Company's 60% estimate, is $0.9 million. LPMA suggested an additional reduction for January 1, 2001, to reflect the savings of $368,000 due to a reduction in Union's regulatory staff. Finally, LPMA adopted

the position that a deferral account be set up to track the difference between actual regulatory costs and the costs embedded in 1999 rates.

2.223 Kitchener's position was that since regulatory costs are only partially under Union's control, the forecast costs should be removed from the price cap and the difference between the actual and forecast costs be captured in a deferral account. Kitchener supported LPMA's position that an additional reduction in regulatory costs of $368,000 is appropriate.

2.224 Schools accepted Union's proposal "in part because it [Schools] does not believe there will be large regulatory cost savings as a result of moving to PBR. Moreover, Dr. Bauer's evidence suggests the jury is still out on the issue of regulatory cost savings". Schools submitted that regulatory cost reductions should not be considered as productivity gains.

2.225 VECC's position was that regulatory costs should be treated as a non-routine item and not put under the cap. VECC asserted that decreases in these costs should not be considered as productivity increases.

2.226 Alliance, AMO, Comsatec, ECG, CEED, Energy Probe, Fullerton, GEC, OAPPA, Pollution Probe, and TCPL took no position on this issue.

2.227 CENGAS accepted Union's proposal.

Union's Reply - Regulatory Cost Savings

2.228 Union disputed the recommendations of Kitchener and CAC that regulatory costs should be further reduced, stating that there is no evidence supporting these positions. Union contended that the its rate applications group will be utilized and hence incur costs for such tasks as: supporting the annual customer review process proposed in the current application; supporting the billing unbundling application; supporting facilities and franchise applications; and participating in industry task forces and generic proceedings. In addition, Union remarked that the evidence showed that in

some cases activities that were in the past performed by the regulatory group (e.g., upstream regulatory) are being performed by other groups within the restructured utility; therefore, utility resources will still be required.

2.229 Union disputed the evidence, given by Mr. Johnson on behalf of IGUA, that $1.7 million in regulatory costs should be removed from base rates effective January 1, 2002, on the basis that it is arbitrary and unsupported by the evidence. Union also cited Dr. Bauer's evidence that "it is a recurring observation that regulatory costs under PBR decline less than anticipated.".

2.230 With respect to CAC's position, supported by Dr. Bauer, that regulatory costs be removed from rates and captured in a deferral account, Union asserted "that while such an approach is possible there is little demonstrated need for it. Further, each cost item which is afforded deferral account treatment moves the PBR plan closer to cost-of-service treatment and reduces the incentives of the company to improve performance".

Board Findings - Regulatory Cost Savings

2.231 The Board finds, based on the evidence in this hearing, that it is very difficult to estimate the appropriate level of regulatory costs to apply during the term of this trial price cap plan. The Board is also mindful of the testimony of Dr. Bauer. The Board understands that setting up a variance account for regulatory costs may be seen as assuring full recovery of regulatory costs reasonably occurred; however, the Board recognizes the importance of Union's efforts in ensuring a productive customer review process and appropriate reporting of utility operating results under the PBR approach and preparing for a second generation PBR plan.

2.232 Although there may eventually be savings for customers under a price-cap PBR plan, a PBR plan with proper safeguards and risk mitigation measures to permit a four or five-year plan may involve more complexity and judgement than a cost-of-service approach. Although the Board expects that PBR will generate benefits, the Board is not convinced that it will result in reduced costs of "regulation". Therefore, the Board

finds that the base revenues should not be adjusted commencing in 2002, as proposed by Union, to reflect potential regulatory cost savings. The Board directs that actual regulatory costs be tracked, so that the issue of a potential rate adjustment can be addressed through the customer review process.

2.5 PRICING FORMULA

2.233 Union's plan, as noted earlier, was based on the price cap formula:

PCI = I - X ± Z ± Pass-Through Items = 1.9% ± Z ± Pass-Through Items

where the price cap index ("PCI") is determined by adjusting prices for the forecast growth in inflation ("I") offset by a productivity factor ("X"), adjusted as required for the impact of external factors beyond reasonable expectation of management's control. Such external factors are considered either non-routine and called "Z" factors, or relatively routine, predefined and are referred to as pass-through items.

2.5.1 Inflation Factor "I"

2.234 Union proposed to use as the measure of inflation the simple average of the forecast annual growth of the Canadian Gross Domestic Product Price Index ("GDPPI") over the period 2000-2004, as published in the Standard and Poor's DRI October-November 1999 issue of Canadian Forecast Summary, for the term of the proposed PBR plan (2000 to 2004). Thus, the value of the inflation factor would be fixed at 1.6% per year over the five-year term. Union stated that this is an appropriate measure of inflation as it represents an economy-wide index that is representative of the trend in input costs external to the utility in that it is not influenced by the Company's actions, is stable, readily available and understood by customers, and is widely accepted in other jurisdictions for PBR. Further, Union proposed that the use of GDPPI better reflects the mix of goods and services used by a utility than does the mix of consumer products represented by the Consumer Price Index ("CPI"). Union also suggested a fixed inflation factor provides greater predictability in annual price changes.

Position of the Intervenors - Inflation Factor "I"

2.235 VECC and CAC both relied on the evidence of Dr. Bauer:

> Union's proposal differs from other indexing plans in that it does not adjust the price cap as more accurate annual inflation forecasts become available. This approach has two [dis]advantages. First, it unnecessarily relies on long-term estimates of input price changes. The input price inflation measure should reflect inflationary pressure as good [sic] as possible. The accuracy of the plan could be improved by taking advantage of annual inflation forecasts and by adjusting the cap on a forward-going basis. In addition, the price cap could be trued-up annually to reflect the annual inflation rate.
>
> Second, the proposal to fix I at a constant rate significantly weakens the comprehensiveness of the price plan. The fixing of the input of the price inflation measure entails an adjustment of the ROE to reflect changes in the cost of equity capital. Essentially this takes the capital side out of the incentive mechanism.
>
> One of the goals of comprehensive incentive regulation plans is to give a utility an incentive to manage its capital inputs efficiently. O&M PBR plans have repeatedly been criticized for creating incentives for inefficient factor substitution between O&M and capital. Union's plan has a similar effect. Not only is the company essentially indemnified related to its capital basis, under the proposed plan the OEB would not have an effective means to review the prudence of the capital investment. If the input price inflation measure were adjusted on an annual basis, no such ROE adjustment would be required as the overall inflation rate also reflects the cost of capital in the economy.

2.236 Schools noted that most price cap plans use an annual inflation measure, as opposed to a factor which is fixed for several years in advance. However, Schools indicated it would accept a five-year fixed inflation rate if the GDPPI were appropriately adjusted for an input price differential. Schools indicated that acceptance of the fixed inflation rate would not justify the treatment of the cost of equity as a partial pass-through.

2.237 Although IGUA expressed reservations about the reliability of a single five-year forecast, IGUA was prepared to accept Unions' proposed annual inflation rate of 1.6% for each of the years 2000 to 2004 inclusive.

2.238 Alliance supported the use of the GDPPI as the appropriate measure of inflation for the price cap but argued that fixing the inflation factor at 1.6% is less accurate than either using the annual inflation forecasts as they become available or truing-up the price cap to reflect the actual annual inflation rate. Alliance asserted that every price cap plan, other than for Boston Gas, is adjusted for actual inflation, and also noted that Union's consultants advised that the inflation factor should float with actual inflation.

2.239 Energy Probe submitted that an annual determination of inflation be used, and pointed out that Union's proposal includes an off-ramp should the utility suffer a serious decline in financial position but not one should the utility benefit from lower than expected inflation.

2.240 LPMA opposed the use of a fixed inflation rate, noting Dr. Bauer's comments that the fixed inflation rate is unusual and not best practice for PBR plans. MECAP added that the use of a fixed inflation factor adds considerable risk to the price cap plan as inflation can vary significantly from year to year. MECAP questioned the use of Union relying on only one forecast to support the fixed inflation factor.

2.241 CENGAS and Kitchener supported Union's proposal.

Union's Reply - Inflation Factor "I"

2.242 Union argued that a fixed inflation factor would facilitate predictable and stable rates, one of Union's objectives for the PBR framework. In its pre-filed evidence, Union noted that this would allow the utility and its customers to generally know what rates can be charged over a reasonable period of time. Union also noted that customers and the utility find it difficult to manage price volatility and therefore it should be minimized.

Board Findings - Inflation Factor "I"

2.243 The Board observes that parties agreed that the GDPPI was an appropriate measure of overall price inflation for use in determining the price cap. The Board therefore adopts the GDPPI as the appropriate measure of overall price inflation, or I-factor, for Union's PBR plan.

2.244 The Board notes that most PBR price cap plans do not fix the inflation factor over their terms. As many parties have noted, price cap plans generally use an inflation factor that is revised annually, based on actual inflation performance, as is the case with the PBR plan approved by the Board for electricity distribution utilities. The Board also notes that the use of a variable inflation factor was recommended by Union's consultants.

2.245 While Union argued that a fixed inflation factor would facilitate predictable and stable rates, intervenors commented that the total bill, which includes the cost of the commodity, would continue to be subject to significant fluctuations in the current environment of volatile gas commodity prices. The Board therefore finds that the benefit to the customer of such a fixed price cap on the delivery component of rates is limited in this respect.

2.246 Union identified fairness and promotion of efficiency as objectives for its proposed PBR framework. However some intervenors argued that fixing the inflation factor may require the use of an ROE pass-through and this ROE adjustment could weaken the incentive for efficient capital management. In this respect, the Board notes that it is not persuaded by the evidence in this proceeding that a PBR plan with a fixed inflation factor would require an ROE pass-through adjustment.

2.247 Under Union's proposal, there would be information filings and rate changes implemented on an annual basis. As such, the Board expects that the cost of obtaining a readily available price index and incorporating it into the price cap escalator will be minimal. Further, the Board finds that fixing the inflation factor at the outset for the entire term of the PBR plan would visit inflation risk unnecesarily

on both Union and its customers. Lastly, as a forecast of the behaviour of the economy in the near future, the Board believes that more recent price index data series is superior to older price data. Therefore, the Board determines that reflecting a more current measure of inflation in the price cap is preferable to Union's fixed inflation factor approach.

2.248 The Board finds that the inflation factor should be determined annually. For the purpose of determining the annual price cap index, the Board adopts the use of an annual inflation escalator based on year-over-year growth over four quarters of actual data, published by Statistics Canada for the Canadian Chain Gross Domestic Product Price Index.

2.5.2 Productivity Factor "X"

2.249 Union has provided an historical productivity study of the Company's Southern Operations Area for the ten-year period ended in 1996. The Company submitted that information necessary to carry out this analysis on the Northern and Eastern Operations is not available. In addition, the analysis included functions that are no longer part of the regulated monopoly's core functions, such as sales programs, financing programs and rental programs. These programs were included because they were part of Union's operations during the time period of the analysis and Union and its consultants stated they could not make adjustments to remove these operations from the study.

2.250 In addition, Union and its consultants submitted that more recent information is not available in a form that is readily comparable to the historical data. The Company and its consultants were unable to adjust the historic data or the recent data to make them comparable for the purposes of a productivity study.

2.251 Using the number of customers as the measure of distribution output, Union's consultants calculated the Company's average annual historical total factor productivity ("TFP") growth to be 0.1% for the period 1987-1996 inclusive. However, using the volume of gas as the measure of distribution output, the average annual TFP growth for the period was -0.8%. Union submitted that approximately 60% of its distribution revenues are volume related and 40% are from fixed customer charges. If this revenue weighting is reflected in the TFP calculation, then Union's TFP growth would be approximately -0.4%.

2.252 Union also submitted that the differential between economy-wide productivity performance and Union's own productivity performance must be taken into account when calculating an X-factor for the price cap, because Union's price cap index formula is based on a general measure of inflation for the whole national economy, GDPPI, rather than on Union's own rate of change of input prices. Union's position was that an input price differential of zero would be appropriate.

2.253 Union submitted that the average annual national economy TFP growth for the subject ten-year period was 0.3%. Incorporating this differential, Union's X factor would be -0.7%. However, Union suggested incorporating a "stretch factor" of 0.4% within the X factor to reflect that under PBR, utility productivity performance will be enhanced. Therefore, Union suggested the X factor be set at -0.3% for the term of the plan. Combined with the proposed fixed inflation factor of 1.6%, Union's proposal was that the price cap escalator (i.e., I - X) be fixed at 1.9% for each year of the plan.

Positions of the Intervenors - Productivity Factor "X"

2.254 Schools noted that the GDPPI is an economy-wide index and does not reflect the actual price experience of the inputs of labour, materials and capital used by the gas distribution industry in Canada. Schools argued that the economic basis of price-cap regulation is that it mimics the operation of the competitive market on an industry basis; therefore the GDPPI must be adjusted by the input price differential and then the total factor productivity differential applied. Schools observed that Union's

analysis of the input prices of the Company versus the Canadian economy during 1987-96 time period showed Union's input price inflation was less than inflation in the Canadian economy by an average of 1.1% annually, indicating that an input price differential of -1.1% was appropriate.

2.255 Schools noted that Union's position that the use of -1.1% as the input price differential was statistically inappropriate because of the volatility in input prices. Instead Union used 0% as the input price differential. Schools argued that Union's position was arbitrary and unsupported by any logical analysis. Schools noted:

> The Federal Communications Commission ("FCC") reached a similar conclusion at paragraph 96 of p.46 of FCC 97-159 (Fourth Report and Order In the Matter of Price Cap Performance Review For Local Exchange Carriers). The Commission stated, 'We found that the USTA's conclusion that the long-term price differential was zero was theoretically unsound and unsupported by the data.' The United States Court of Appeals for the District of Columbia remanded the case to the Commission on the issue of the FCC's choice of 6.0% as the first component of the X-factor. The Court of Appeals did not disagree with the Commission on the issue of the input price differential.

2.256 Schools also questioned the appropriateness of the time period for the TFP study in that it did not cover the years beyond 1996. Schools argued that events such as mergers, shared services and restructuring would make the utility more efficient. Schools also noted that Union admitted that the ten-year period 1987-1996 was one of the Company's least productive periods, and was less productive than the previous 20 years. Schools added that in late 1999 Union eliminated 177 positions. Also, Schools' argued that business use per customer would increase over the next few years due to the increased use of natural gas for power generation and the proliferation of inside-the-fence gas fired power plants across Ontario.

2.257 Schools also noted that none of the 26 PBR plans summarized by Union's consultants for Canada, USA, UK and Australia had a negative productivity factor, let alone one that combined a negative productivity factor with the absence of an earnings-sharing mechanism.

2.258 Schools stated that Union could only cite one historical example of a negative productivity factor, i.e., the initial (1990-93) X-factor for the 12 regional electric distribution companies in the UK. Schools commented that, however, in August 1994 the regulator in the UK announced that distribution rates would be reduced from April 1, 1995, by between 11% and 17% in real terms, to be followed by a reduction of 2% in each of the next 4 years. The regulator subsequently announced real reductions of between 10% and 13% effective April 1996 and a further 3% a year for the subsequent 3 years.

2.259 Schools proposed an X-factor, including a stretch factor, in the range of 1.25% to 1.5%, and submitted that the resulting price cap of 0.3% to 0.1%, derived by Union's I -factor of 1.6%, would be appropriate.

2.260 VECC and CAC submitted that there are several technical deficiencies in the TFP analysis provided by Union. Their consultant, Dr. Norsworthy, noted that the calculation of productivity for Union would change if measures of output, capital input and service price were modified. He also noted that there is considerable uncertainty regarding the methodology used by Union and its consultants to calculate the capital input and service price.

2.261 Dr. Norsworthy also noted that the authorized rates of return differ from the actual rates of return used by Union to calculate the value of capital input and that this inconsistency should be resolved before a final PBR target is prescribed.

2.262 Dr. Norsworthy also advocated the use of the Fisher Ideal Index, rather than the Tornqvist Index, for TFP calculations for Union's PBR,. He asserted that the Fisher Ideal Index possesses superior properties for aggregation of prices and quantities for productivity purposes and is used by leading index number theorists and agencies, such as Statistics Canada.

2.263 Dr. Norsworthy suggested that a productivity target of 2.3% would be fairly generous to the Company, considering the gains expected from growth of demand on Union's current distribution network, economies of density, general economic growth, and a modest stretch factor of 0.5%. Dr. Norsworthy proposed an X-factor of 2.53% which also takes into account differentials in input price and productivity.

2.264 Dr. Bauer noted that comparison of the proposed productivity offset against other existing plans as well as against Union's own past performance raised doubts as to the accuracy of the estimated X-factor. Dr. Bauer suggested that a more reliable productivity offset would be in the range of 1.4 to 1.8 per cent. Dr. Bauer also suggested that an earnings-sharing mechanism should be introduced as a safeguard against mis-specification of the plan parameters.

2.265 IGUA cited the testimony of Dr. Norsworthy and Dr. Bauer, questioning whether the negative TFP calculated by Union for the ten-year period is representative of its current and prospective level of TFP growth. IGUA commented that the period selected ended more than three and a half years before the proposed start of the PBR plan. IGUA urged the Board to consider the fact that Union and Centra merged in 1996 and that Union was able to achieve significant savings in 1999 despite warmer than normal weather. IGUA disputed Union's contention that its TFP is negative and will continue to be negative.

2.266 IGUA commented that the volume growth information for 2000 provided by Union during the hearing showed significant growth in the contract service rate classes. IGUA submitted that this growth will tend to offset any decline in average use per customer. IGUA submitted that the Board ought to find the X-factor to be between

1.1% and 1.6% resulting in an I-X value between 0.0% and 0.5%, derived by using Union's I-factor of 1.6%.

2.267 Energy Probe noted that Union did not provide a forecast of use per customer and that Union assumed that the past experience would continue over the term of the PBR plan. Energy Probe argued that, given the subjectivity involved in selecting a method and data set for determining productivity, the Board should be skeptical of Union's proposed productivity factor.

2.268 Alliance, noting that Union did not use the most recent data (1997 to 1999) to develop the productivity factor, commented that a number of power plants that will use very large amounts of gas are being built or are in the planning stages in Union's franchise area. These new large customers will increase the average usage per customer during the PBR period, improving Union's measured productivity. Alliance, relying on evidence of others, proposed that the productivity factor for Union should not be less than 1.6%.

2.269 HVAC questioned the analysis underlying Union's negative productivity factor and, based on Dr. Bauer's recommendations, proposed a 1.6% productivity factor. HVAC suggested the Board also consider including an earnings-sharing mechanism.

2.270 LPMA disputed Union's estimated productivity factor: firstly, the TFP estimated by Union is based on a company that essentially does not exist; and, secondly, Union's calculation used data only for its Southern Operations Area, for the ten-year period ending in 1996. LPMA rejected Union's argument that including the Northern and Eastern Operations Area data into the analysis would have increased the total input growth or decreased the total output growth. LPMA also commented that the nature of Union's business activities had changed; for example, ancillary services had been transferred to Union Energy at the beginning of 1999. LPMA further noted that Union had undertaken a number of initiatives in 1997-1999 to increase productivity, initiatives not reflected in Union's TFP calculation. LPMA argued, therefore, that using the 1987-1996 results, proposed by Union, is unreasonable.

2.271 LPMA stated, " ... the weighting of the TFP calculations based on volumes and customers should not be weighted by fixed and variable revenues. LPMA believes that the weights used should be the allocation of costs between fixed costs and variable costs. Since Union under-recovers fixed costs through fixed revenues, the weighting using fixed versus variable costs would be shifted towards the customer component that has a higher TFP than the volume component. The result would be an increase in the overall weighted TFP."

2.272 MECAP submitted that the Board should, together with including an earnings sharing mechanism, use a stretched productivity factor of 1.6%, based on the mid-point of the range provided by Dr. Bauer. In the absence of an earnings sharing mechanism, MECAP suggested a TFP of approximately 2.0%.

Union's Reply - Productivity Factor "X"

2.273 Union argued that the volatility of the input price data, that yielded a calculated input price differential of -1.1%, was so high that the result was "not statistically valid". Union also cited Dr. Bauer's testimony that there was "no basis for differentiating Union's input price differential from zero".

2.274 Union argued that the Board has no evidence before it as to the reasons for the rejection of a zero input price differential by the FCC and CRTC. In response to the submissions of intervenors that the FCC decision was not overturned on the input price differential issue, Union argued that "the issue of the predictability of the input prices due to volatility was, in fact, at the heart of the Court of Appeal's concern in the FCC case." With respect to the CRTC decision, Union submitted that the regulator had 33 years of data on which to base its decision. Union concluded that the evidence relating to the FCC and CRTC decisions were of "no assistance to the Board in this issue."

2.275 Union argued that its proposal of a partial ROE pass-through would give the Board additional comfort with respect to approving an input price differential of 0%, noting, for example, that, if interest rates decreased, the input price differential could be negative due to the high capital intensity of Union's operations.

2.276 Union stated that the use of 1997-1999 data for calculating productivity is inappropriate because: the period began with Union and Centra sharing services, which was followed by the merger of Union and Centra, and then by the elimination of ancillary businesses. Union submitted that while the effect of these changes might have been to increase productivity, other factors, such as declining average use per customer, tended to decrease productivity.

Board Findings - Productivity Factor "X"

2.277 The Board is concerned that the productivity study presented by Union does not include the years 1997, 1998 and 1999, years in which substantial productivity gains may have been realized, through the sharing of services, the merger of Union and Centra, and the reduction in personnel. Also, the study includes services which are no longer part of the regulated Company's activities.

2.278 It would have been helpful to the Board if the Company had incorporated the recent data. If this data could not be integrated into the historical study, a presentation of the TFP performance of the "new" Union for the 1997-1999 period would have been helpful.

2.279 It is the Board's view that a properly constituted price cap index for Union must include an input price differential. The Board notes that Union's consultants agreed that a proper formulation of a price cap index using an economy-wide measure for the inflation escalator should include an input price differential.

2.280 A major issue is the value of the input price differential. Union argued that the input price differential is not statistically different from zero and due to the high degree of input price volatility the historical data does not provide any basis for determining the likelihood of a future positive or negative input price differential.

2.281 The Board does not accept Union's contention that an input price differential of zero is appropriate and notes Union's contention elsewhere in its argument that the Company's input usage is significantly different from input usage in the Canadian economy overall.

2.282 The Board notes that Union calculated an average input price differential of -1.1%. While noting the variability of the data, the Board adopts -1.1% as the input price differential for the trial PBR plan.

2.283 Intervenors pointed out that the price cap index should be derived from industry-specific parameters, rather than from a company-specific productivity measure and an economy-wide inflation escalator. Union has indicated that it wishes to develop an industry specific index. The Board recognizes that Union, with storage, transmission, and distribution functions, is not readily comparable with a gas distribution utility that does not have storage and transmission businesses. Since the productivity performance in these business lines may differ significantly, the Board expects Union in following through on its commitment to develop separate industry productivity indices for each of these businesses for its next PBR plan.

2.284 Changes that have occurred in the Company have likely affected measured productivity over the period 1986 to 1996 and especially over the period since 1996, especially for the larger merged distribution system. This reason alone casts doubt on the reliability of Union's productivity study results as a predictor of productivity for the term of a PBR plan. Other criticisms of the study and its results add to this doubt.

2.285 The Board expects Union to address the impact of such changes and the potential for related improvements in measured TFP in its next PBR plan.

2.286 The Board notes comments by intervenors that increased use of natural gas for power generation and the proliferation of inside-the-fence gas fired power plants across Ontario, together with increases in customer numbers, will likely increase volumes on Union's system. The Board also notes that Union has undertaken a number of initiatives, such as corporate utility restructuring, labour force reductions, and reduced frequency of meter readings, to improve its efficiency. Further, the Board notes Schools' uncontroverted assertion that Union was unable to point to a single existing PBR plan in the gas or electricity industry with a negative productivity factor. For these reasons, the Board expects that Union will be able to achieve positive productivity growth under its PBR plan. The evidence of experts in this proceeding indicates that it is reasonable to expect a stretched productivity offset for Union in the range of 1.4% to 2.3%. For the purposes of Union's trial PBR plan, the Board finds that a stretched productivity offset of 1.4% is appropriate.

2.287 The Board's findings with respect to the stretched productivity factor of +1.4%, combined with the input price differential of -1.1%, yields an X-factor of 2.5%. This X-factor will be combined with the Chain Canadian GDPPI to derive the price cap escalator for 2001 and for each year thereafter for the term of the trial PBR plan.

2.288 The Board has calculated that using the most recent data that would have been available for GDPPI, if the price cap had been set in October during a customer review process. Union's price cap index for 2001 would be as follows:

Canadian Chain GDPPI (1997 = 100) 2nd Quarter 1999 to 2nd Quarter 2000						
	1999 Q2	1999 Q3	1999 Q4	2000 Q1	2000 Q2	Annual Change
Index	100.8	101.6	102.0	103.1	104.7	3.9%

Source: Statistics Canada, cat no. 13-001 CANSIM D100465: IMPLICIT CHAIN PRICE INDEX, GROSS DOMESTIC PRODUCT AT MARKET PRICES, USING SEASONALLY ADJUSTED DATA, 1997=100.

Price Cap Escalator (I-X) for 2001 = 3.9% - (1.4% - (-1.1%)) = 1.4%

2.289 In summary, Union's approach was based on a fixed I-factor of 1.6%, an input price differential of 0.0%, and an X-factor excluding input price differential of -0.3%, resulting in a price cap escalator before Z-factor and pass-through considerations of 1.9%.

2.290 Based on the evidence in this proceeding, for the first year of the price cap plan the Board finds an I-factor of 3.9%.

2.291 For the term of the trial price cap plan, the Board finds, based on an input price differential of -1.1% and a stretched productivity factor of 1.4%, an X-factor of 2.5%.

2.292 Therefore, for year 2001, the Board finds a price cap escalator, before Z-factor and pass-through considerations, of 1.4% for the first year of the plan.

2.293 For purposes of comparing components of Union's price cap determination with the electricity distribution price cap for Ontario, it should be noted that the I-factor for electricity is an input price index for the electricity distribution industry in Ontario. Since in the Union proposal the price inflation factor is represented by an index for the economy in general, it is necessary either to adjust the I-factor or to adjust the X-factor in the formula by the input price differential.

2.5.3 Non-routine adjustments (Z-Factors)

2.294 Union has proposed the inclusion of a number of non-routine adjustments (Z- factors) to adjust prices over and above the application of the price cap index as a result of circumstances currently unforeseen and therefore not contemplated within the price cap. Union suggested that should a non-routine adjustment be necessary, it would require some form of regulatory process. Union believed that it is unlikely that customers would be willing to pay a risk premium within the price cap to compensate Union for managing these unpredictable circumstances. Union also suggested that it is in the interest of all parties to minimize the number and frequency of non-routine adjustments, and to make such adjustments only when material impact occurs.

2.295 In the event of a non-routine adjustment, Union would request a deferral account to record the financial impacts and then prepare a report for consideration in the next customer review process.

2.296 Union has proposed the following non-routine adjustments:

- Stranded costs associated with upstream transportation capacity and with customer billing and related activities;

- Significant cost impacts resulting from changes in generally accepted accounting principles, federal or provincial income tax legislation, municipal taxes, other charges resulting from the provincial government's restructuring efforts, federal or provincial regulatory legislation, rules or decisions, and environmental legislation;

- Significant cost impacts arising from any judgment against Union with respect to delayed payment revenue;

- The costs to provide East-end deliverability on the Dawn-Trafalgar transmission system at Parkway for customers who are returned to system gas after being served under a direct purchase contract; and

- The rate decreases related to the impact of unbundling customer billing and related activities.

2.297 Union proposed a threshold for individual items of $1.5 million and a threshold of $3.0 million for cumulative items.

Positions of the Intervenors - Non-routine adjustments (Z-Factors)

2.298 Dr. Bauer, on behalf of CAC and VECC, submitted that Z-factors in PBR plans are intended to provide a safeguard against factors that are entirely outside of management's control and against which no meaningful precautions exist. Dr. Bauer submitted that several of the non-routine adjustments proposed by Union are too broad-based. Dr. Bauer noted that the main legitimate non-routine adjustment factors are related to legislative and regulatory changes as well as changes in generally accepted accounting principles. However, Dr. Bauer noted that only changes specifically affecting gas distribution utilities, and not changes affecting the entire economy, should be considered. Changes that affect the entire economy are reflected in the inflation rate incorporated in the price cap. Dr. Bauer also noted that it is important that non-routine adjustments be factored in based on actual numbers and not based on forward-looking estimates.

2.299 Dr. Bauer submitted that several of Union's proposed non-routine adjustments cannot be legitimately considered. This is particularly true for costs to provide additional deliverability or flexibility to customers. Such costs should be recovered from those benefitting from these measures. Likewise, the impacts of lawsuits against Union should not be included in a list of non-routine adjustments. Dr. Bauer also submitted that stranded costs should not be treated as non-routine adjustments, except after close OEB review. Dr. Bauer noted that if stranded costs were to qualify regularly as such adjustments, Union would not have a strong incentive to manage its unbundled operations effectively as costs could be recovered from its rate base. Whether such recovery is justified should not be decided in the streamlined customer review process but only in a detailed hearing process.

2.300 CAC was also concerned about the threshold issue as it relates to non-routine adjustments. CAC submitted that it would be more appropriate to bring the items forward and let intervenors and Union, and ultimately the Board, decide whether adjustments are necessary. CAC believed that the inclusion or exclusion of items should be subject to consideration by the parties. CAC did not support the thresholds as proposed by Union. CAC also questioned Union's approach of relying upon forecasts of non-routine items rather than actual amounts; noting that, if these items are unforeseen and largely beyond the control of management, they should be subject to cost recovery or refunds that are based on actual numbers.

2.301 VECC submitted that non-routine items should be based on actual costs and that parties should have the opportunity to scrutinize them and that non-routine adjustments should only relate to events unforseen and outside the control of management. VECC opposed the use of a materiality threshold on grounds of equity. An item that did not meet the threshold would not be considered, yet it might be applicable to a single rate class and have a significant impact on the rate were it to be flowed through. VECC and CAC both agreed with the Company that federal and provincial income tax reductions should be considered as non-routine adjustments.

2.302 VECC submitted that while all parties in the Settlement Conference supported the 20% system-wide solution for delivery point flexibility, it was agreed that the cost would be treated as a non-routine adjustment and that the rate adjustments to recover the costs would be separate from any rate adjustments arising from the Board's decision on the price cap plan proposal. VECC argued that by calculating the rate adjustment for delivery point flexibility using EBRO 499 volumes, Union may over-recover its actual costs if volumes increase. VECC noted that the flexibility agreed to was not related to PBR and further, as a non-routine item, only the actual costs should be recovered.

2.303 LPMA and MECAP advocated the use of a variance account to capture the difference between the actual costs (or savings) and forecast costs (or savings), arguing that this would lead to reduced accumulations for subsequent rate treatment.

2.304 LPMA and MECAP also noted that Union has not made any provision in its evidence for the reduction in the provincial corporate income rate that became effective May 2, 2000. LPMA submitted that the Board should direct Union to record in a variance account the difference between actual and the forecast provincial income taxes payable in 2000.

2.305 LPMA and MECAP did not support Union's proposal for materiality thresholds, arguing they will only result in "accounting games" and an increased amount of time and cost in the customer review process.

2.306 Alliance submitted that the proposed Z-factors are too broad based and should be limited to legislative and regulatory changes, and changes to GAAP that are specific to natural gas utilities.

2.307 IGUA submitted that non-routine items should not be escalated by the price cap in subsequent years unless they represent recurring costs, the amounts which may change as a result of economic forces that the price cap is intended to cover.

2.308 IGUA argued that delivery point flexibility costs in 2000 and 2001 will not increase and therefore should be removed from the base and base rates prior to applying the price cap.

2.309 Schools argued that the proposed Z-factors are too broad. Schools submitted that in general stranded costs should not be an automatic Z-factor. Schools accepted as Z-factors: changes to GAAP, changes to federal or provincial income tax legislation, changes to municipal tax structure or charges as they apply especially to the natural gas distribution business, and changes in federal or provincial regulatory legislation, including environmental legislation, insofar as they directly affect the natural gas

distribution businesses. In Schools' view, litigation should not be a Z-factor since it is largely within the control of management.

Union's Reply - Non-routine adjustments (Z-Factors)

2.310 Union stated that the elimination of materiality thresholds would make its plan closer to cost-of-service than PBR and also would be inconsistent with the materiality threshold of 0.25% for electrical distribution utilities set out in the Board's Distribution Rate Handbook.

2.311 With respect to the argument that recovery of non-routine adjustments should be on an actual cost basis because the costs are outside of management's control, Union responded that the Board has, for many years, set rates to recover other costs that are outside of management's control, such as municipal and income taxes, on a forecast basis.

2.312 Union cited the testimony of Dr. Bauer in support of its proposal that "one-time" non-routine adjustments would not be escalated by the price cap but recurring ones would. The costs of one-time items would be removed from rates in the following year and not be subject to the price cap. For recurring items, Union proposed that additional changes in recurring costs associated with non-routine adjustments would be brought forward after escalation by the price cap.

2.313 Union asserted that it knows the costs of delivery point flexibility for 20% of existing demand. However, the Company did not know the costs of its commitment to provide delivery point flexibility for 20% of new demand because the incremental capacity to provide flexibility for new demand may not be available at the M12 rate, which is the unit cost of providing delivery point flexibility for existing demand. Commenting that the price cap applies to prices and not costs, Union added that if the flexibility agreement with TCPL is not renewed, the costs would be removed from rates at the applicable M12 rate.

2.314 In regard to VECC's concern that flexibility costs may be over-recovered, Union submitted that the concern was unfounded since costs are measured by foregone M12 revenues. Should volumes increase, there will be an increased need for M12 capacity or a substitute and therefore, delivery flexibility costs would increase as revenues increase.

Board Findings - Non-routine adjustments (Z-Factors)

2.315 Most parties agreed that a provision for non-routine items is appropriate for a price-cap plan. The Board accepts this and the view of Dr. Bauer that Z-factors provide a safeguard against events entirely outside of management's control and against which no meaningful precautions exist.

2.316 The Board agrees with the intervenors that the use of Z-factors limited to changes in legislative and regulatory requirements and generally accepted accounting principles specific to the natural gas business is appropriate.

2.317 In principle, the Board believes that in the long run economy-wide changes are captured in economy-wide indices, such as the GDPPI, and therefore are captured in the price cap. It must be noted, however that the GDPPI is a Canada-wide index, whereas ideally, if the index is to reflect the changes in costs to Union, the Board would want an index for the region of Ontario served by Union. Furthermore, the Board recognizes that changes in costs can take some time to be reflected in the GDPPI. In determining base rates, it is important to reflect the impact of known changes. In setting rates for subsequent years under the PBR plan, some cost changes related to unforeseen externally driven events which are not specific to the industry and have an economy-wide impact may be appropriately considered to be covered by revenues resulting from application of the price cap. The introduction of thresholds, off-ramps, and the customer review process provide a protection for both the Company and the customer in the instance that there are significant major impacts resulting from such changes.

2.318 For example, in the case of changes in provincial income taxes, the Board doubts that this will be fully reflected in a Canada wide GDPPI and in any event would be concerned about a time lag involved. The Board directs Union to track the effect of changes in the Ontario Income Tax and to bring forward the cost changes to be considered through the customer review process as an adjustment to rates.

2.319 Several parties questioned the propriety of including stranded costs in a Z-factor mechanism without a more detailed regulatory review. The Board shares this concern.

2.320 The Board will not pre-approve either stranded costs or litigation costs in general as Z-factors. However, the Company is free to bring before the customer review process any proposals related to the recovery of stranded costs or the recovery of litigation costs that the Company could not have reasonably foreseen.

2.321 Union has proposed that costs to provide east-end deliverability on the Dawn-Trafalgar transmission system at Parkway for customers who are returned to system gas after being served under a direct purchase contract be eligible for Z-factor treatment. The Board notes that in the Settlement Agreement related to unbundling issues parties agreed that the costs associated with managing the east-end obligation for return to system would be recorded in a new deferral account and that all prudently incurred costs would be recovered from system customers. In the case of an "abnormal" return to system Union would immediately inform the Board and other parties and make proposals for an alternative treatment, should one be required.

2.322 Union has also proposed that under certain circumstances costs to provide additional flexibility for customers respecting the gas that is subject to the 22-day call at Parkway, and rate changes related to the impact of unbundling customer billing, be considered for Z-factor treatment. The Board notes that parties agreed that recovery of the costs for the 20% system-wide solution "meets the definition of a non-routine adjustment and that rates will be adjusted to recover these amounts separate and apart from any rate adjustments arising from Board's decision on Union's PBR proposal." The Board accepts this agreement, but is not prepared to pre-approve the Z-factor

treatment of any further costs related to the impact of additional delivery point flexibility or further unbundling and notes that the Company and other parties may make proposals through the customer review process.

2.323 Intervenors expressed the view that Z-factors should be based on actual numbers, not a forecast value. LPMA and MECAP suggested using a variance account to recover non-routine adjustments, asserting that this would allow a true-up to actuals. The Board is of the view that non-routine adjustments relating to events or changes should reflect actual costs to the maximum extent possible. By definition, non-routine events are unusual and unexpected, and the ability to forecast them is poor at best. However, the continuing flow of costs relating to a non-routine event once it has occurred may be more easily forecast from then on, and incorporated into rates. Other events may not give rise to continuing costs. In both cases, the costs of such events should be tracked until they can be dealt with through the customer review process at which time it may be appropriate to permit the recovery of actual costs and a provision in rates for any continuing effect. Costs of these events should be tracked in a deferral account, and their recovery should be subject to meeting stringent criteria. The Board expects Union to bring forward any proposals for consideration in the customer review process.

2.324 In the Board's view criteria for the recovery of non-routine costs would include: that the expense is clearly outside of the base upon which rates were derived; that the cost is material and has a significant influence on the Company's operation; that the cost must be attributable to some event outside of management's ability to control; and, that the costs must have been prudently incurred.

2.325 Some intervenors believed there should be no materiality threshold, and the costs of all non-routine events should be brought forward in the customer review process, arguing that individual items of relatively small costs could have a large impact on a particular group of customers. In general, the Board sees benefit in specifying a materiality threshold and accepts Union's proposal, subject to the caveat that, where a rate class is particularly affected by a cost change of a smaller amount, the

Company will identify this and be prepared to address this through a customer review process.

2.326 In general, the Board finds it inappropriate to escalate Z-factor adjustments under the price cap, the Z-factor being a temporary adjustment to rates only for the period of time necessary to recover the associated costs. Once the costs have been recovered, rates would revert to what they would have been had no Z-factor been applied. However, the Board accepts that some events which arise as non-routine may have continuing effects in that they represent structural changes and may merit escalation under the price cap. The Board expects the Company to bring forward proposals for such treatment for consideration in the customer review process.

2.5.4 Pass-Through Items

2.327 Union proposed three pass-through adjustments to reflect: the impact of current pricing on delivery-related gas costs of operations , these being unaccounted-for gas, inventory carrying costs, and compressor fuel; changes relating to return on equity; and unaccounted-for gas volumes.

2.328 Union's proposal, for any given year of the plan, is to apply the price cap escalator to existing rates prior to adjusting for pass-through items. After other adjustments such as pass-throughs are made, the unit prices for the year under consideration would be calculated using the 1999 approved throughput volumes. In the subsequent year, the price cap would be applied to the unit price that was calculated for the previous year prior to adjusting for the subsequent year's pass-throughs.

2.5.5 Gas Costs

2.329 Union stated that gas cost pass-throughs are divided into two categories: commodity costs and delivery related gas costs. Union proposed that the pass through of gas commodity costs for system customers would continue under the existing deferral account and quarterly rate adjustment mechanism process. Delivery-related gas costs

that are recovered through delivery rates include inventory carrying costs, unaccounted-for gas and compressor fuel.

2.330 The delivery-related gas costs are affected by changes in the weighted average cost of gas (“WACOG”). Union proposed that the impact of the changes in WACOG, resulting from the December 1, 1999 QRAM, be passed on to customers in rates for 2000. In future years Union proposed to pass through the impact of the most recent QRAM annually through the customer review process. Union did not propose that these costs be passed through quarterly. Union proposed the use of 1999 Board-approved volumes for calculating the unit price impacts of changes in the WACOG.

2.331 For 2000 Union requested pass through of an increase of $5.597 million for unaccounted-for gas, an increase of $4.077 million for inventory carrying costs, and a net decrease of $0.829 million for compressor fuel and company used gas, totalling $8.845 million.

Positions of the Intervenors - Pass-through Items, including Gas Costs

2.332 Alliance submitted that pass-through items “need to be narrowly defined.”

2.333 CAC argued that, to the extent possible, the actual costs of these items should be recovered from the customers responsible for incurring them. CAC submitted that there be no change in treatment of these gas cost items. CAC cited the importance of recovering the actual costs incurred, noting that Union’s proposal of including these in base rates would lead to inflating them under the price cap. CAC endorsed Mr. Johnson’s position that the price cap should only be applied to operating and maintenance expense, taxes other than income taxes, and the cost of debt and preferred equity that will be reissued during the term of the plan.

2.334 IGUA submitted that pass-through items are cost-of-service "holdovers" and their recovery should be limited to the actual amounts incurred. IGUA also criticized Union's definition of pass-through costs as "inappropriately broad" and proposed that eligibility for pass-through treatment be limited to items whose volatility is such that it is not captured by the price cap formula.

2.335 IGUA accepted pass-through treatment for gas commodity costs and gas delivery-related costs. However, IGUA submitted that under most comprehensive PBR plans the price cap formula covers changes in capital costs.

2.336 IGUA expressed concern with Union's proposed method to recover pass-through costs, arguing that if their volatility is not captured by the price cap formula then it is inappropriate to escalate these costs in years following their incurrence since it would result in providing "an annual commission" to the shareholder. Further, IGUA submitted that the amount to be recovered in a year should be based on the given year's costs and volumes, not the approved volumes of a previous year.

2.337 IGUA noted Union's contention that IGUA's proposal would yield the same outcome as Union's proposal. IGUA argued that if this were the case, Union should be willing to accept IGUA's proposal.

2.338 IGUA also submitted that basing the recovery of pass-through items on 1999 approved volumes would result in the Company over-collecting for these costs if actual volumes were to increase.

2.339 IGUA accepted Union's proposal to recover gas commodity charges and its proposal to change the trigger for gas supply transportation in the deferral account from $15 per residential customer to $20 per residential customer. IGUA expressed concern with Union's proposal to determine unit prices for delivery related commodity costs based on approved 1999 volumes, arguing that the volumes in future years will undoubtedly differ from the 1999 approved volumes. IGUA's position was that current information with respect to inventory levels and class causation are appropriate for determining current gas cost pass-throughs. IGUA observed that

Union's proposal to use the December 1999 WACOG, rather than the June 2000 WACOG, for gas cost related pass-throughs for year 2000 would result in Union foregoing the recovery of between $1 million and $1.5 million, depending on the choice of UFG methodology, in year 2000.

2.340 Kitchener submitted that Union's pass-through items were "limited in time and are not subject to reduction by efficiency initiatives". Kitchener concluded that these items should be regulated as in the past and not priced under the price cap, and that they should be removed from base delivery revenues before applying the price cap.

2.341 LPMA, MECAP, and WGSPG took the position that the current deferral account treatment be used to track the variance between the forecast amount included in the revenue base and the actual costs so that the variances can be cleared by passing the actual costs to customers.

2.342 LPMA, MECAP, and WGSPG supported Union's proposal to maintain the gas supply deferral accounts and the QRAM to reflect changes in commodity prices. LPMA submitted that the inventory carrying cost for year 2000 of $4.077 million should be reduced to $4.043 million to reflect the decrease in corporate income tax rate from 43.50% to 42.83%. LPMA submitted that this item be re-calculated annually given that corporate income taxes are scheduled to be reduced over the next four years. Subject to adjusting the inventory carrying costs, LPMA accepted Union's proposal on the condition that deferral accounts are maintained to track the gas cost related pass-through items to ensure that actual costs are recovered.

2.343 Schools argued that, since by definition pass-through costs are neither subject to nor have to be managed under the price cap, they should not be escalated.

2.344 In Schools' view the gas cost related pass-through items should be adjusted to reflect changes in both prices and volumes. Subject to this qualification, Schools accepted the proposed adjustments for inventory carrying costs and fuel of $4.0 million and -$0.8 million respectively but argued that based on the currently approved UFG methodology, the adjustment for UFG should be $5.1 million.

2.345 VECC quoted Dr. Bauer's view that whether or not pass-through items should be escalated depends on whether their impact is temporary or permanent. In the case of the gas cost related pass-through items, VECC argued that they are temporary and should not be escalated, that the adjustment should be cost-based and limited to the period during which the factor has an impact on operations; further that a deferral account approach based on current volumes was preferred.

2.346 VECC argued that since Union claims that there would be no windfall gains or losses if the Company were to base unit price changes on approved 1999 volumes, then Union should be indifferent between its proposal and VECC's position that actual volumes be used to calculate unit prices for these items.

2.347 AMO, CEED, Comsatec, Enbridge, Energy Probe, Enron, Fullerton, GEC, HVAC, OAPPA, Pollution Probe, and TCPL did not comment.

2.348 CENGAS supported Union's proposal.

Union's Reply - Pass-Through Items, Including Gas Costs

2.349 Union submitted that the items in question "are really items over which Union has little or no management control. They nevertheless represent costs of carrying on business - costs which, although they vary from year to year, are clearly recurring and should be embedded in rates."

2.350 In response to arguments that the use of 1999 base volumes would result in over-collection with increased throughputs, Union commented that in their view it was equally likely that actual volumes could decrease as increase with respect to the 1999 approved volumes.

2.351 In support of its proposal not to eliminate current year pass-throughs prior to subsequent year price cap escalation, Union claimed that gas costs, UFG, compressor fuel, inventory carrying costs, and cost of capital affect Union's operations over the term of its PBR plan; hence excluding these items from subsequent escalation is "inappropriate". Union disputed IGUA's interpretation of escalating prior years' pass-throughs as giving Union a "commission" by comparing the proposed treatment to what would occur with application of the price cap to items for which Union holds fixed price multi-year contracts. Union continued: "The complete price cap plan is intended to capture, at a company wide level, the balance between revenue and cost pressures. Some costs [sic] elements will rise at a faster pace than the price cap, others will rise at a slower pace. These individual cost changes are relevant to cost-of-service regulation, not price cap regulation."

2.352 Union submitted that its proposal reflects the fact that while gas costs are not under management's control, the level of inventory, compressor fuel, and UFG are partially under management's control: its proposal puts Union at risk for variances from forecast during the year and provides an incentive for the Company to manage these costs.

2.353 In support of its proposal to use the 1999 Board-approved volumes to calculate pass-through rate adjustments, Union stated: "Gas costs are dealt with on a unit basis so recoveries will generally self adjust, rising or falling with changes in gas throughput. The inventory carrying costs and compressor fuel will be calculated by applying the unit cost to the 1999 approved volume of average inventory and forecast compressor fuel. Again recoveries will rise and fall with throughput, which should generally self adjust."

Board Findings - Pass-Through Items, Including Gas Costs

2.354 With respect to the application of the price cap to gas cost-related items, the Board is not persuaded that it is appropriate to escalate under the price cap specific items which are forecast annually and dealt with through the customer review process. Therefore, the Board directs, for the term of the trial plan, the removal of these gas cost related items embedded in delivery revenues prior to escalation by the price cap. The forecasted amounts are then added after application of the price cap. For the year 2000, the Board finds Union's proposed pass-through adjustment for delivery-related gas costs of $8.845 million to be appropriate.

2.355 The Board is prepared to accept adjustments to reflect changes to gas prices and thereby reduce this risk to which the Company would otherwise be exposed. The Board deals with the methodology for the treatment of unaccounted-for gas volumes separately below in Section 2.5.7. With respect to inventory carrying costs and compressor fuel the Board accepts Union's proposal that these be dealt with annually through the customer review process on a forecast basis. The Board believes that it is appropriate for Union to be at risk for volume variances in these items, at least a year at a time as they have proposed. However, since the Board believes that gas prices are largely beyond management's control it directs that price variances be tracked and dealt with annually through the customer review process.

2.356 The Board accepts the Company's proposal for the term of the trial PBR plan, to pass through the impact of the most recent QRAM for the gas cost-related items - inventory carrying costs, unaccounted for gas, and fuel - annually in the proposed customer review process.

2.5.6 Return on Equity Adjustments (ROE Adjustments)

2.357 Union proposed to pass-through adjustments resulting from changes in the Board allowed ROE calculated by applying the Draft Guidelines on a Formula-Based Return on Common Equity for Regulated Utilities, dated March 1997. This adjustment is computed based on the equity supporting rate base approved for 1999 in EBRO 499. Union proposed that base rates for 2000 be adjusted to reflect an allowed ROE of 9.95%, giving rise to a dollar adjustment to base revenues of $5.7 million including a provision for income taxes. Union asserted that the inflation factor in the price cap formula does not capture the full impact of changes in Union's cost of capital, since Union is much more capital intensive than the economy as a whole.

2.358 Union proposed that during the term of the PBR it would not ask for adjustments to reflect cost changes associated with new capital investment and changes in the cost of debt with respect to existing capital.

Positions of the Intervenors - ROE Adjustments

2.359 CAC's position was that "if an annually adjusted inflation factor is applied, the ROE should not be subject to the Board's ROE formula. If the inflation factor is fixed, the formula should apply."

2.360 VECC and CAC quoted Dr. Bauer, "if the input price inflation measure were adjusted on an annual basis, no such ROE adjustment would be required as the overall inflation rate also reflects the cost of capital in the economy".

2.361 Schools agreed with Dr. Bauer "that the price of equity capital (all or part thereof) is not an appropriate pass-through item in a price cap plan". Schools submitted that "allowing changes in the price of such an important input [as capital] to be a pass-through factor, under a price-cap form of PBR is inconsistent with the underlying economic rationale of the price cap formula. It would be equivalent to allowing the changes in the price of labour to be a pass-through item. ... The proposal,

inadvertently or otherwise, reduces the incentive for management to operate at peak efficiency in the financial areas."

2.362 Schools supported Mr. Johnson, IGUA's expert, that the ROE pass-through represents double recovery. Schools disputed the separate approach to the treatment of the debt and equity components of Union's capital, noting that a large majority of PBR plans summarized in the evidence do not have such a pass-through.

2.363 IGUA also stated it was inconsistent to propose a pass-through for cost of equity, but not for debt, highlighting its view that Union's cost for long-term debt would decline. IGUA submitted that were an ROE adjustment to be approved it should not be escalated by the PCI. IGUA was prepared to accept the adjustment pass-through to give Union some flexibility to operate under a first generation price cap plan, provided that the pre-tax cost of equity and all other pass-through items were excluded from the Delivery Revenue Base prior to application of the price cap.

2.364 Kitchener proposed that an ROE pass-through be applied for year 2000 only, arguing that year 2000 is a transition year and this approach would be consistent with the Board's approach in the electricity distribution PBR decision.

2.365 LPMA and MECAP, accepted the ROE pass-through for year 2000 subject to a reduction in the amount from $5.699 million to $5.632 million to reflect the reduction in income tax rate in year 2000 from 43.50% to 42.83%. However, LPMA and MECAP opposed Union's plan for an ROE pass-through for subsequent years, noting that Union proposed to manage the impact of interest rate changes on debt under the price cap and submitting that the treatment of debt and equity costs should be the same. LPMA noted Union's estimate that the expected impact of refinancing long-term debt on the existing rate base amounts would result in a saving to Union of more than $14.6 million over the proposed term of the PBR plan.

Union's Reply - ROE Adjustments

2.366 Union argued that its ROE adjustment pass-through proposal served as a proxy for the input price index that was used in the electricity distribution PBR and would recognize the higher than average capital intensity of the gas distribution business. In addition, Union stated that the ROE adjustment pass-through would allow it to manage increased risks, including the impact of interest rate fluctuations on the debt component of its capital. Union also stated that the evidence did not support the contention that lower debt costs would offset foregone return on equity adjustments through the PBR period if the pass-through were denied.

Board Findings - ROE Adjustments

2.367 The Board is of the view that an ROE or debt rate pass-through mechanism is not consistent with a comprehensive price cap PBR plan for a number of reasons. The Board notes that an ROE pass-through is not a typical feature of a comprehensive PBR plan.

2.368 The Board notes that the effect which inflation might have on the determination of a fair allowance for ROE is, to a significant extent, captured by annual changes in the GDPPI component of the PCI. The impact of the differences in capital intensity between Union and industrial companies in general is captured in part through the appropriate determination of the input price differential. In the Board's judgement, the components of a fair ROE, which reflect the risks to which the utility is exposed, are captured under a PBR approach, to a large extent, through the application of an appropriate price cap escalator that includes the I-factor and the X-factor.

2.369 The Board is of the view that in a comprehensive PBR plan, the escalation of the factor inputs (such as materials, labour and capital) should be captured by the price cap escalator. The Board notes that there is no mid-term adjustment or pass-through proposed for inputs such as labour and materials, nor for the debt component of the cost of capital. A PBR plan is intended to provide incentives for the Company, over the term of the plan, and subject to constraints on quality of service, to maximize

profits by minimizing costs, profits here being the difference between revenues and non-equity costs.

2.370 The Board observes an inconsistency in the arguments brought forward by Union insofar as Union argued that a zero input price differential was appropriate while, at the same time, arguing that to reflect the higher than average capital intensity of the gas distribution business, an ROE pass-through adjustment was required, thus implying a non-zero input price differential.

2.371 The Board accepts intervenors' arguments that allowing a pass-through or adjustment pass-through of ROE would weaken the incentive for the Company to manage its capital inputs more efficiently. Further the Board notes that the Company proposed to manage the debt component of the cost of capital under the price cap.

2.372 The Board questions the validity of Union's argument that there is no provision in the PBR plan for the capital costs of new plants and the "adjustment pass-through, even in combination with the application with the price cap escalator on prices inclusive of the ROE, does not fully compensate Union for the cost of equity incurred on capital additions after 1999". The Board notes that Union did not address the additional revenue that may result from capital additions; nor did it address operating cost savings that may result from other new investment. The Board also notes that if new investment is required to deal with a non-routine event, Union would have the opportunity to deal with this through the customer review process.

2.373 Since 2000 is a transition year for which adjustments have been approved and no price cap is being applied, the Board will allow an ROE pass-through adjustment for 2000. The Board has determined that the adjustment to be applied in developing rates for 2000 shall be $5.632 million pre-tax. This adjustment reflects the actual income tax rate in 2000. There shall be no ROE adjustment for the subsequent years of the trial PBR plan.

2.5.7 Unaccounted-for Gas

2.374 Union proposed to change the methodology that it uses to calculate the allowance for UFG in rates. Currently, Union calculates the volume allowance for UFG by weighting the three most recent years of actual UFG volumes. Going forward, Union has proposed to apply a UFG ratio to the approved 1999 throughput volume. The ratio would be calculated by dividing the weighted average of the three most recent years actual UFG volume by the weighted-average actual volume handled for the same period. Union proposed to continue to use a 3:2:1 weighting with heaviest weight on the most recent year. The impact of this change on year 2000 revenue is an increase of $5.6 million. Union's evidence was that its proposal to change the methodology for estimating UFG from the current weighted-volume approach to a ratio approach would avoid the "accumulating UFG deficit problem" in the future. Union also submitted that the ratio approach was approved by the NEB for use by TransCanada to more rapidly recover unaccounted-for variances.

Positions of the Intervenors - Unaccounted-for Gas

2.375 The Alliance urged that no change be made to the treatment of unaccounted for gas.

2.376 Kitchener, OAPPA, Pollution Probe, TransCanada, and VECC made no comments on this issue.

2.377 AMO, CAC, CENGAS, LPMA, MECAP, and WGSPG supported Union's proposed change in UFG forecasting methodology.

2.378 Schools opposed the proposed ratio method for estimating UFG on the basis that the choice of methodology is unrelated to the introduction of PBR and, further, the proposed methodology would remove the incentive for Union to reduce UFG under the PBR plan.

2.379 IGUA opposed Union's proposal to change the methodology for the reasons discussed earlier in Section 2.4.2. IGUA argued that if the Board approves the change in methodology it should not allow the recovery of prior period variances.

Union's Reply - Unaccounted-for Gas

2.380 Union submitted that a blanket prohibition on methodological changes in the context of a change in the overall regulatory approach to determining rates was unreasonable and that its new methodology would correct a systematic problem of under recovery when UFG volumes are increasing.

Board Findings - Unaccounted-for Gas

2.381 The Board accepts Union's proposal to change methodology for estimating UFG, noting that in a period of increasing UFG, the proposed method would lead to lower accumulations of UFG variances Accordingly, the Board approves the inclusion of $5.6 million as a pass-through item for rates in 2000.

2.382 The Board notes that Union's UFG performance was superior when compared with other gas distributors. However the Board notes that there have been significant increases in Union's UFG volumes over the past ten years, including a large spiked increase in 1998. The Board directs Union to provide an explanation of its UFG performance in the customer review process. Further, in the context of developing a second generation PBR plan, the Board expects Union to consider managing UFG under the price cap mechanism.

2.5.8 Summary of Board Adjustments to Delivery Revenue

2.383 A summary of the Board's findings with regard to adjustments to base delivery revenues, base rates, one-time adjustments and pass-through items for 2000 and 2001 is shown in Appendix C. The parameters for the PBR plan for 2001 are also shown.

2.6 MONITORING AND REFLECTING CHANGES IN THE GAS SUPPLY PORTFOLIO UNDER THE QUARTERLY RATE ADJUSTMENT MECHANISM

2.384 Union proposed that commodity rate changes, reflecting Alberta border commodity costs and recovered in Union's gas supply commodity charge, continue to be implemented over the term of the PBR plan through the Board-approved QRAM process. The other gas supply costs are recovered through gas supply transportation rates and, for load balancing and flexibility in the Southern Operations Area, in delivery rates. Union has proposed to maintain the current treatment of flowing through the costs of these items.

2.385 Union proposed to use the customer review process to provide information on items that are not addressed by the QRAM, such as upstream transportation allocation, the status of the gas supply deferral accounts, and details of the gas supply portfolio. This information would include details of Union's upstream transportation portfolio and a proposed vertical slice allocation of upstream transportation.

2.386 At the customer review process Union would also provide information on the year-end gas supply deferral account balances. Union proposed to increase the trigger from $15 to $20 per residential customer, which will, if exceeded, initiate a proposal by the Company for changes in rates and for disposition of balances. The information package would also contain: the gas supply plan for the next year, including the major drivers of the plan; the impacts of demand growth and movement to direct purchase; and how rates would be adjusted. The information package would also include the following schedules: Gas Purchase Expense, Summary of Transportation Contracts, Alberta Border WACOG Pricing Calculation, Reference Price Summary, Derivation of Gas Supply Charges for Rates 01, 10, 16, 20, 100,

Derivation of Gas Supply Charge Zone Differentials, and schedules showing how gas costs have been allocated. Union proposed to distribute the information package to parties in June of each year, meet with parties in July of each year to discuss the information, and report to the Board during the first week in August of each year on the degree of consensus achieved and request adjudication of the unresolved items.

Positions of the Intervenors and Union's Reply - Monitoring and QRAM

2.387 Union noted that no parties opposed its proposal.

Board Findings - Monitoring and QRAM

2.388 The Board accepts Union's proposal to continue the use of the QRAM, to change the trigger, and to provide the suggested information package to customers. The Board directs Union to notify the Board if the trigger of $20 per residential customer is exceeded and bring forward any proposed changes to rates, associated deferral account reference prices, and disposition of deferral account balances.

2.7 PRICING FLEXIBILITY

2.7.1 Pricing Flexibility and Service Basket Design

2.389 Union's pricing flexibility proposal would allow different rate changes to apply to different rate classes, resulting in changes in revenues-to-cost ratios, whether the costs are allocated on the basis of EBRO 499 data or on current data. Union argued that its pricing flexibility / service basket design proposal balanced "the objectives of predictability, simplicity, and allowing Union the ability to manage asset utilization risk".

2.390 Union supported its request for pricing flexibility for the following reasons: to be able to respond to increased competition from alternative energy sources ("manage the risk of reduced utilization"and "bypass threats"); to permit harmonization of rates arising from the Union-Centra merger; to "create and maintain reasonable price relationships between rate classes and equivalency among comparable service options"; to "manage the rate impact" of gas costs, ROE, and UFG pass-through items; and to reduce the number of rate classes, enhancing administrative efficiency.

2.391 Union also submitted that its proposal would allow the Company to take into account relative price changes among rate classes, current price levels and magnitude of price change, equivalency of comparable service options, customers' expectations of price stability and predictability, and the impact of price changes on the attractiveness of services to customers.

2.392 Union proposed to divide rate classes into two service baskets: basket 1, for all in-franchise services, and basket 2 for all ex-franchise services. Basket 1 would be further subdivided into 2 baskets: 1(a), for customers consuming less than 5 million cubic metres annually, and basket 1(b) for those whose annual consumption is5 million cubic metres or more. Union advised the Board that it determined this threshold by analyzing load profile information and revenue-to-cost comparisons filed with the Board in EBRO 499.

2.393 Basket 1(a) for in-franchise storage and delivery services for small volume customers would include: Rate Classes M2, U2, 01,10, and 16 (general service rate schedules); M4, M5, M6, U5, 20, and 25 (commercial and industrial contracts); and M9, U9, T3, M10, and 77 (wholesale service).

2.394 Basket 1(b) for in-franchise storage and delivery services for large volume customers would include: Rate Classes M4, M5, M6, U5, 20, and 25 (commercial and industrial contracts); and M7, 25, U7, T1, and 100 (major industrial contracts).

2.395 For rates applicable to customers in both baskets 1(a) and 1(b), the same rate would continue to apply until the rates were redesigned to split services into separate rate schedules. Until then rate changes would have to comply with the pricing flexibility constraints on each basket.

2.396 Basket 2 for storage and transportation services for ex-franchise customers would include Rate Classes M12, M13, M14, M15, and C1.

2.397 Union proposed that the price cap would apply to the average price of all cost-based storage, transportation and distribution services, currently provided under its rate schedules. Union proposed that ex-franchise storage contracts would be renewed at market prices, and therefore, upon renewal, would not be subject to the price cap. For all other individual services within any basket, the maximum annual increase in any basket would be limited to twice the price cap.

2.398 For basket 1(a), for all classes except for M4 and 20, Union proposed to limit the maximum increase in any one year, to twice the price cap, subject to the further limitation that the cumulative increase in the average price of services in the basket not exceed 1.5 times the cumulative impact of the price cap. Union referred to available pricing flexibility as the cumulative sum of prior years' unused flexibility, where each year's unused flexibility equals 1.5 times the price cap, less the actual price increase for basket 1(a). For example, if the price cap were 1.9%, then the earliest year in which escalation of basket 1(a) could be 3.8% would be the second year, and this would only occur if the actual price increase in the first year for basket 1(a) were 2% or less (resulting in "banked" flexibility of 0.9% or more). In its Argument-In-Chief, Union proposed "to limit the cap on the annual increase in the total price of any customer classification within basket 1(a), other than rates M4 and 20" to twice the price cap, subject to sufficient banked flexibility.

2.399 Union proposed to expedite rate harmonization between customers in the Northern and Eastern Operations Area and those in the Southern Operations Area by applying 6% price cap for Rates M4 and 20 in basket 1(a). Union's evidence in EBRO 499 in respect of load profiles and revenue-to-cost relationships indicated that these low volume customers had a revenue-to-cost ratio of below 1, while the revenue-to-cost ratio for high volume customers was approximately 1.2. Union's proposal, accepted in the EBRO 499 settlement proposal, was to allow the customers to remain in the M4 and 20 rate classes, but to redesign the rate structure (i.e., demand and commodity components) so that the 5 million cubic metre threshold effectively established the boundary between general service and firm contract rate classes. As a result, low volume consumers would not find the contract rate classes attractive in comparison with the general service rate class. Union expects that "approximately 184 M4 customers and 32 rate 20 customers will be moved into general service".

2.400 For basket 1(b), although individual services (storage, transportation, and distribution) could increase up to twice the price cap on average, the basket could only increase overall by the price cap.

2.401 For basket 2, the price cap would apply to the annual increase in the average price of cost-based storage and transportation services currently provided under rate schedules that apply to customers outside of Union's franchise area.

Positions of the Intervenors - Pricing Flexibility and Service Basket Design

2.402 Alliance objected to any additional pricing flexibility beyond the Board-approved price cap on the grounds that: flexibility constitutes protection for the Company that is unnecessary with a well-designed plan; flexibility would permit Union to, for example, give some sub-basket1(a) customer classes rate increases of less than the price cap (or even rate decreases) while other classes in the same sub-basket would be exposed to increases only limited to twice the price cap; Union's proposal would not allow the Board to control subsidization of one class by another; and the smallest captive customers in sub-basket 1(a) would potentially be exposed to double the price increase to which large in-franchise and ex-franchise customers would be exposed,

despite the fact that the smaller customers could not exploit either the direct purchase option or the opportunities arising from the unbundling of upstream transportation and storage to the same extent as larger customers.

2.403 CAC submitted that the main driver behind the pricing flexibility proposal is the retention of large loads. CAC echoed the concerns of Alliance with respect to the vulnerability of residential captive customers who have neither the fuel switching ability nor the opportunity, available to large loads, to negotiate rates.

2.404 CAC also noted that without Union's flexibility feature, a price cap formula would allow some degree of flexibility insofar as the Company would have the option to charge a rate below the rate cap. CAC noted that Dr. Bauer agreed that retention of large loads via pricing flexibility benefits all customers, subject to the caveat that the rate decreases are not greater than what would be required to avoid the loss of the load. CAC quoted Dr. Bauer on this matter: "what I am concerned about is this implicit ability to increase prices for the most vulnerable groups of customers. It is very unique in the current proposal. It is nothing that you would find in other price cap proposals in that way, that the flexibility range is larger for customers who have less choice. It is usually the other way around. It also makes economic sense to be the other way around."

2.405 CAC submitted that there was no evidence to support either the need for pricing flexibility (beyond that provided under the price cap) or the degree of flexibility sought; therefore no additional pricing flexibility, other than that available under the terms of the basic price cap, should be approved.

2.406 If the Board is concerned about the Company's ability to respond to significant load loss, CAC's view was that an application to the Board would be required for approval of any rate increase above the basic rate cap. If the Board were to approve some additional pricing flexibility, CAC argued that Rates 01 and M2 should be put in one service basket with its increase limited to the size of the price cap. CAC also noted that Union had provided no evidence on price elasticity of demand in support of its service basket design.

2.407 CEED, expressed concern that pricing flexibility might lead to cross-subsidization between monopoly and competitive services such that appropriate price signals for competitive services would not emerge and that "no flexibility should be permitted with respect to shifting of costs and prices between monopoly services (such as distribution and transmission) and competitive services (such as storage)". Also, in order to to facilitate future unbundling CEED urged that the "cost-price relationship continue to be tracked and reported".

2.408 CENGAS supported Union's proposal with respect to this issue.

2.409 Energy Probe expressed concern that under the PBR proposal the Company could use pricing flexibility to increase prices to its customers with inelastic demands while decreasing prices to its customers with more elastic demands, thus increasing the Company's revenues. Therefore, Energy Probe argued that Union's proposal for pricing flexibility be denied. Energy Probe observed that this enhancement of net revenues through pricing flexibility would not be allowed under cost-of-service regulation.

2.410 Energy Probe noted that under the Distribution Rate Handbook for Electric Utilities, a utility seeking to change relative prices must support the request with a cost-of-service study. Energy Probe proposed that the same standard be required for gas distributors seeking to implement relative price changes.

2.411 IGUA accepted the service basket design and pricing flexibility proposed by Union, noting that if the overall price cap were similar to the 0.35% proposed by IGUA, then the upper limit of twice the price cap, i.e., 0.70%, would be significantly below Union's estimated rate of inflation of 1.6%. IGUA submitted that it is vital for Union and ratepayers to have information on current revenue-to-cost ratios, current year revenues, and cost allocation summary in order to properly constrain pricing flexibility. IGUA's position was that this information be made available in the customer review process.

2.412 Kitchener opposed Union's pricing flexibility and service basket design proposals. Kitchener, expressed concern that Union's proposal would allow the respective shares of revenue recovered to be altered significantly between sub-baskets 1(a) and 1(b), submitted that the proposed pricing flexibility was inappropriate for wholesale distributors and for M2 residential customers, as both groups have the least ability to switch to alternative fuels. In support of its position, Kitchener cited historical revenue-to-cost ratios to demonstrate the flexibility that was available under cost-of-service regulation.

2.413 Kitchener also noted that M9 and other wholesale distributors (M9, T3, M10, and 77) must compete not only with alternative energy sources for all customers, but also with Union for industrial customers. As such, Kitchener submitted that it would be inappropriate to ask wholesale distributors to bear a higher share of costs, giving Union a competitive advantage. Further, wholesale distributors are "absolutely dependent on Union's transportation facilities and no less dependent than other customers on Union's storage facilities. Indeed, as public utility providers, the wholesale distributors do not have a competitive option to Union's cost-based storage."

2.414 Kitchener, referencing Dr. Bauer, submitted that "the proper use of a basket design is the protection of customers without choice, that is the customers in basket 1(a). Union's basket design therefore achieves the antithesis of regulation in that it protects customers with competitive choices from monopoly power and exposes those without competitive power to monopoly pricing."

2.415 Kitchener also remarked that even limited pricing flexibility will quickly dissolve the relationship between allocated costs and rates, i.e., flexibility effects rate redesign. Further, Kitchener submitted that the electrical distributors, with whom Union competes as an alternative energy source provider, are required to confirm rate reasonableness by reference to cost causality. Allowing Union the proposed pricing flexibility would give Union a competitive advantage over the electricity distributors. Kitchener added that Union has provided no evidence to support the requested

pricing flexibility in terms of either establishing that greater flexibility is required than is embedded in EBRO 499 rates or establishing the possibility of load loss.

2.416 With respect to Union's argument that pricing flexibility was required for the Company to manage the risks under PBR and unbundling, Kitchener maintained that the threat of declining asset utilization under unbundling has not been demonstrated by the evidence. Kitchener argued that Union could expect an increased demand for its facilities under unbundling. Finally, Kitchener asserted that most of the risks Union lists in support of Union's proposal "have been part of the company's risk profile for many years. The record in these proceedings does not support the suggestion that the magnitude of any of the listed risks has increased. Secondly, it is blatantly unfair to cast the burden of these risks onto the customers in basket 1(a). These are the customers most in need of regulatory protection. Moreover, from Exhibit 7C.35, it can be seen that they create a lower risk for Union than the customers in basket 1(b)."

2.417 Kitchener also opposed Union's banking proposal on the basis that it would increase rate unpredictability. Kitchener proposed that wholesale distributors (rate classes M9, T3, M10, Rate 77) and the M2 residential customers should not be subject to pricing flexibility, since they have no competitive offerings available that could moderate Union's prices, and that the possibility of increases in the 1.5 times or 2 times price cap range would not provide these customers with adequate regulatory protection.

2.418 Kitchener asserted that M9 customers would be worse off under PBR with the proposed pricing flexibility than they have been under cost-of-service, noting that for the past 5 years under cost-of-service regulation that the average annual increases such customers have faced have been 1.1% (as compared to the 2.9% - 3.8% raange under the current proposal).

2.419 LPMA accepted certain of Union's proposals, namely: those that allow Union to negotiated rates, to offer long-term fixed prices, to raise prices for some customer classes by less than the overall price cap, and to increase rates to low volume customers in rates M4 and 20.

2.420 However, LPMA opposed that part of Union's proposal that would allow the prices to some customers to be increased by up to twice the price cap. LPMA assumed current rates to be "just and reasonable and fair". Quoting Mr. Johnson's testimony that "[i]t is by limiting the flexibility that you maintain the fairness", LPMA asserted that Union's proposal would compromise the fairness of the rates, echoing concerns of other parties regarding protection of captive customers and potential for cross-subsidization.

2.421 LPMA opposed the banking provision stating that it violates Union's criteria of simplicity, predictability, rate stability, and minimization of retroactivity. LPMA also maintained that, due to the compounding effect over five years, a significant difference would arise between those rates that had increased at twice the price cap and those rates that increased at the price cap.

2.422 LPMA argued that if pricing flexibility is rejected, the requirement for different service baskets disappears. However, LPMA submitted that the price cap on basket 1(a) be limited in magnitude to the overall price cap in the event that the Board approves some form of pricing flexibility. Finally, LPMA took the position that no rate increases above the price cap ought to be approved without the support of cost-based evidence.

2.423 MECAP accepted pricing flexibility insofar as Union could increase some rates by less than the overall price cap. However MECAP, all of whose members are in basket 1(b), expressed concern that although the overall increase for basket 1(b) is limited to the price cap, individual rate classes within the basket could be subjected to increases exceeding the overall cap so long as the basket increase did not exceed the price cap. MECAP feared that given the difference in revenues generated from each of the different classes in this basket, a large increase for a small rate class (e.g.,

M5) could be offset by a small increase for the larger classes (e.g., M7, T1, and 100). For these reasons, MECAP urged that no increases above the overall price cap be allowed in the absence of supporting evidence brought by the Company.

2.424 Schools argued that there should be no pricing flexibility for the following reasons: Union's proposed pricing flexibility together with a volume weighting methodology would permit increases of 3.5% to small and mid-sized customer classes in the first year of the plan; inequality in existing revenue-to-cost ratios would be exacerbated under Union's proposal; Union provided no evidence supporting its claim of the threat of fuel-switching; Union could meet bypass and fuel-switching threats by long-term contracting at discounted rates; and the flexibility that has been experienced under the traditional cost-of-service pricing is tempered by being subject to Board review.

2.425 TCPL, as an ex-franchise M12 transmission customer grouped in the same basket with ex-franchise storage customers, expressed concern that the potential exists for Union to increase transmission rates by up to twice the price cap in order to cross-subsidize "discounted" storage service rates, while still adhering to the overall price cap. To address this concern, TCPL urged that M12 storage and transmission customers be placed in separate service baskets.

2.426 VECC urged the Board to reject the proposed service basket design because of concerns regarding the impact on customers with the least choice, cross-subsidization and the disconnection between rates and costs. VECC proposed that the number of service baskets be increased and that further restrictions be placed on the pricing flexibility for customers without competitive options.

2.427 Were the Board to approve some measure of pricing flexibility, VECC supported LPMA's proposal regarding a separate basket for Rates 01 and M2 with maximum increases limited to the price cap. VECC, citing the evidence of Drs. Bauer, Hemphill, and Schoech, supported the creation of more baskets to maintain an acceptable level of homogeneity within each basket. VECC stressed that including interruptible and firm customers in the same service basket was inappropriate.

2.428 VECC challenged Union's evidence that the proposed flexibility was similar to that approved for Atlanta Gas Light Company, noting that the banking of increases was not approved.

2.429 VECC also submitted that the Company should not be allowed to institute rate design changes, such as using pricing flexibility to increase the fixed monthly charge, on the grounds that there would be a further adverse rate impact on low volume customers.

2.430 WGSPG agreed with Union's proposal regarding the negotiation of rates and the offering of long-term fixed prices on the basis that this flexibility would allow the Company to respond to bypass or fuel switching threats and would not increase rates to other customers on the system. WGSPG also accepted Union's proposal to increase rates to some customers by less than the price cap but took no position on Union's proposal to increase rates by up to 6% annually for Rate M4 and Rate 20 customers, in order to expedite rate harmonization between customers in the Northern and Eastern Operations and those in the Southern Operations Area.

2.431 WGSPG urged that the Board reject Union's proposal to allow the increase in rates to some customers by up to twice the price cap, responding separately to each of the five reasons provided by Union in its Argument-in-Chief.

2.432 With respect to Union's first argument concerning the risk of losing load to alternative energy sources, WGSPG noted that Union's evidence identified the residential water heating market as the market segment "most vulnerable" to competition from energy alternatives. WGSPG argued that if the Company truly believed that a portion of its residential and general service market were at risk, then it would be irrational to propose the ability to increase rates to those customers by twice the overall price cap. A more rational approach would be to treat these customers in a manner similar to industrial customers that may be lost to other fuel alternatives, by increasing class rates at less than the overall price cap. WGSPG argued that "the real reason that Union wants to be able to increase rates by up to

twice the overall price cap is that Union views the basket 1(a) customers as captive customers, whose fuel-switching alternatives are minimal".

2.433 WGSPG argued that Union's second reason for price flexibility, to harmonize M4 and 20 rates in the former Union and former Centra areas, is completely unrelated to the general proposal to permit price escalation by up to twice the price cap.

2.434 WGSPG took issue with Union's third reason, "to create and maintain reasonable price relationships between rate classes and equivalency among comparable service options." WGSPG commented that since Union had agreed that current rates were just and reasonable, this flexibility was not required to achieve reasonable price relationships and that exercising this flexibility would change the relationship among rate classes. Further, WGSPG observed that Union could alter the price relationships by simply raising prices to some customers by the full amount of the cap while raising other prices by less than the price cap.

2.435 Union's fourth reason that pricing flexibility was necessary "to manage the rate impact from the gas costs, return on equity and unaccounted for gas pass-through items" was challenged by WGSPG. WGSPG noted that pass-through items are outside of the cap so that the overall impact on a customer could be more or less than the price cap. WGSPG submitted that there was an asymmetrical aspect to Union's proposal in that it provided an advantage to Union and a disadvantage to customers.

2.436 In response to Union's fifth reason, "to continue to streamline the number of rate schedules over the price cap term to capture opportunities for administrative efficiency", WGSPG submitted that, while other pricing flexibility was provided to harmonize Rates M4 and 20, there was no evidence to suggest that the general ability to increase rates by twice the overall price cap would streamline rate schedules.

2.437 WGSPG urged that the "banking" proposal be rejected by the Board on the grounds that it violates Union's principles of simplicity, predictability and stability of rates, and minimization of retroactivity. WGSPG submitted that the impact of the banking proposal on T3 customers (NRG and Six Nations) would be approximately $15 per customer in additional delivery costs over the term of the PBR plan and that similar effects would be felt by M9 and U9 customers.

2.438 Finally, WGSPG objected to the pricing flexibility proposal on the basis that its application to the wholesale rate classes (M9, M10, U9, T3, and 77) would give Union a competitive advantage with respect to attracting customers.

2.439 WGSPG echoed LPMA's view that if the pricing flexibility proposal is rejected, then the design of service baskets becomes irrelevant. However, if the Board does approve some form of flexibility, WGSPG submitted that a separate basket be created for in-franchise wholesale customers and that this basket be subject to only the overall price cap. In support of its argument, WGSPG noted that all wholesale customers were included in basket 1(a), despite the fact that the largest of these customers receives deliveries of almost 300 million m^3 per year, far exceeding the 5 million m^3 per year threshold proposed for the purpose of distinguishing firm contract from the general service rate class.

2.440 In respect to Union's claim that all customers in basket 1(a) have the same load profile, WGSPG noted that Union did not cite load profile as a factor in the service basket design, and that Enbridge, with the same load profile as the wholesale customers in basket 1(a), has been assigned to basket 2 (as an ex-franchise customer) with a maximum increase limited to the overall price cap.

2.441 AMO, Comsatec, Enbridge, Enron, Fullerton, GEC, HVAC, and Pollution Probe presented no arguments on this issue.

2.442 CENGAS supported Union's proposal.

Union's Reply - Pricing Flexibility and Service Basket Design

2.443 Union cited the evidence of Mr. Packer that the impact of pricing flexibility on residential customers is limited to 60 cents per month per customer. Union reiterated its position that limits on (as opposed to prohibiting) pricing flexibility affords reasonable protection to ratepayers. Union took issue with parties who argued that the ability to negotiate rates to meet bypass and related threats of decreased asset utilization did not justify the proposed flexibility with respect to captive customers. Union responded that whereas it had in the past managed the risk of decreased asset utilization during a test year, at a subsequent proceeding the largest share of rate adjustments are carried by the captive customers. Union further argued that absent pricing flexibility the Company could not meet bypass threats without incurring adverse revenue impacts.

2.444 Union further noted that the proposed pricing flexibility would preclude such practices as predatory pricing. Although at the initial stage driving out competition by deep price discounting would be possible, the second part, raising prices to attain supernormal profits (the reason for step one), would not be possible under the proposed price cap. In Union's view, where competition exists, its presence will constrain the Company's pricing: where it does not, the side constraints on flexibility provide adequate consumer protection.

2.445 Union also criticized the CAC's suggestion that specific Board approval be required for increases below the cap, claiming that this represents a reversion to cost-of-service regulation. Union stressed that, should the Board accept the limits on flexibility included in its proposal, these could be relied upon to ensure just and reasonable rates.

2.446 With respect to Kitchener's cross-subsidy concern, Union asserted that the concept of a cross-subsidy is only meaningful under cost-based rate-making, not under PBR where prices are decoupled from costs. Union disagreed with Kitchener's contention that the varying revenue-to-cost ratios for M2, M4, M7, and M9 rate classes demonstrated the pricing flexibility embodied in the rate design and stated: "[P]ricing flexibility concerns the difference between the average company rate and the average increase for a rate class. Therefore CCK's conclusion that limited pricing flexibility was applied to M9 in the past is not demonstrated by Ex. G3.5. Union submits that there is no reason to treat M9 any differently than the other classes in the same basket." Union also stated that the proposed flexibility was similar to that which had occurred under cost-of-service and, that Union would use the same principles in setting prices under PBR as they had used under cost-of-service except for undertaking a cost allocation.

2.447 With respect to certain parties' view that the banking proposal, because of its complexity, ought to be denied, Union responded that its proposal mimics the behaviour of competitive markets and that the side constraints offset potential abuse of the banking feature.

2.448 Union urged that the Board give no weight to Schools' arguments about how revenue-to-cost ratios would change under its proposal. Union submitted that the exhibit relied on by Schools only shows "an escalation of revenues and costs by different amounts".

2.449 Union also submitted the following comments with respect to service basket design:

- protection of customers does not imply zero flexibility;
- the basket design grouped homogeneous rate classes;
- interruptible services were not separated from firm services for reasons of materiality;

- the VECC proposal to split the M2 rate class should be informed by the fact that "92% of the customers in the M2 rate class consume less than 6,000 m*3 per year";

- there is no evidence that bypass can be dealt with by negotiated rates only;

- in the case of the Atlanta Gas Light Company, although residential customers were placed in a separate basket, rate elements could increase by up to 150%;

- the evidence is that Union could not manage declining average use risk by increasing fixed charges;

- pricing flexibility constraints are not intended to constrain revenue-to-cost ratios, rather the purpose is to relieve the Company of the burden of justifying each proposed rate design after the Board has determined "just and reasonable parameters";

- in the RP-1999-0001 Decision (Enbridge Targeted O&M PBR), the Board "found that, once PBR has been adopted, it is inappropriate to require the utility to produce information needed for cost-of-service.";

- distributors such as the City of Kitchener and others served under rates M9, T3, M10, and rate 77, do have alternatives to Union's storage, such as developing their own storage, purchasing storage services from other providers in Ontario or Michigan, or using substitutes such as transmission capacity;

- the rejection of pricing flexibility for electricity distributors does not set a precedent for a similar Board finding in this case since the Board had not previously determined cost-based rates for electricity distributors;

- Union should not be required to produce revenue-to-cost ratios under PBR;

- "discounting cost-based ex-franchise storage and recovering the shortfall from ex-franchise transmission will not occur because Union would then have to discount all in-franchise cost-based storage services" (single price for similar services regardless of the rate class); and

- the reason that the Board allows market-based rates is that ex-franchise storage and transmission customers have alternatives to Union's service. For example, TCPL "could build through the northern route" as an alternative to contracting with Union for transmission services.

Board Findings - Pricing Flexibility and Service Basket Design

2.450 The Board approves the 6% pricing flexibility as applied for by Union for the purposes of harmonizing M4 and 20 rates in the Northern and Eastern Operations Area and the Southern Operations Area. The Board recognizes that parties had agreed in the EBRO 499 Settlement Agreement that these rates required adjustment and this was previously accepted by the Board.

2.451 The Board notes that pricing flexibility is not a common feature of PBR plans. Further, the Board notes that it did not adopt pricing flexibility as a feature of the PBR plan recently introduced for electricity distributors.

2.452 The Board is not persuaded by Union's arguments that its proposed pricing flexibility is necessary at this time. The Board observes that a price cap plan is in itself a form of pricing flexibility since the Company is not required to raise the prices by the price cap. Further, the Board has granted Union the authority to negotiate rates and offer long-term fixed prices.

2.453 The Board is particularly concerned about the impact that Union's proposed pricing flexibility might have on captive customers with no competitive alternatives and little or no bargaining power.

2.454 The Board notes Union's position that it requires some measure of pricing flexibility in order to achieve, over time, harmonization of rates between its Southern Operations Area and its Northern and Eastern Operations Area. The Board has already granted Union approval to continue the harmonization process by allowing a 6% cap for Rates M4 and 20. The Board would be prepared to consider further initiatives advanced by Union to complete the rate harmonization objective.

2.455 With respect to Union's objective of creating and maintaining reasonable price relationships among rate classes and equivalency among comparable service options, the Board would be concerned if existing rates do not reflect such relationships. The Board expects Union to identify any relationships which are inappropriate and bring forward proposals on a timely basis to correct any deficiencies.

2.456 Accordingly, the Board does not approve Union's proposed pricing flexibility scheme.

2.457 The Board is also not prepared to accept the argument that there is no need to provide revenue and cost information on a rate class basis. The Board has generally relied on the revenue-to-cost ratio in determining that there is no unfair assignment of cost responsibility among rate classes. Evidence in this proceeding established no other basis upon which to check for cross-subsidization other than to use cost information.

2.458 The Board does not accept Union's arguments that "using a cost based measure, such as cross-subsidy is not meaningful in PBR because rates are judged just and reasonable by not being escalated beyond the restrictions approved by the Board" nor that "the approval by the Board of a level of pricing flexibility means that if Union makes rate changes anywhere within the boundaries of the flexibility constraints approved by the Board, then the result will be just and reasonable rates". The Board

can not automatically assume that the resulting rates will remain just and reasonable among classes.

2.459 In the Board's view there will be a continuing need to monitor changes in rate relationships to ensure that rates continue to be just and reasonable. The Board therefore directs Union to file with the Board and provide in the customer review process appropriate cost information, including rate class revenue-to-cost impacts.

2.7.2 Treatment of Long-term Fixed Prices / Negotiated Rates

2.460 Union proposed that customers, such as large industrials, retail marketers, and ex-franchise customers, as an alternative to receiving service under a rate schedule, should have the option of negotiating fixed rates for periods in excess of one year. Union's billing system is not currently capable of billing residential customers at rates other than by class rate; therefore, the option of negotiated long-term fixed prices would be available from the Company only "to large industrial customers, retail energy marketers, and ex-franchise storage and transmission customers." Union noted that residential customers "could access [longer term fixed prices] through a retail energy marketer."

2.461 The Company proposed to deem all volumes sold at negotiated prices to be billed at the posted rate for the purpose of proving that the annual rate changes comply with the price cap constraints. Any variance in the revenues from differences between negotiated rates and posted rates would be "managed" by the Company. Unless specifically excluded in the negotiated terms, the negotiated prices would be subject to pass-throughs and non-routine adjustments.

Positions of the Intervenors - Treatment of Long-term Fixed Prices / Negotiated Rates

2.462 CAC supported Union's proposal subject to the provision that other customers be kept whole and that their rates would not subsequently be raised above the cap. If the Board approves pricing flexibility which could increase residential rates above the cap, CAC proposed that every negotiated rate "be subject to Board review and approval."

2.463 Energy Probe, MECAP, and WGSPG supported Union's proposal as did CENGAS through its blanket support for Union's PBR plan.

2.464 IGUA accepted Union's proposal, subject to Union having to provide summarized cost allocation information for historic, current, and prospective years and information on negotiated rates and prices charged to other customers in the customer review process. IGUA argued that without access to revenue-to-cost ratio information and information on negotiated prices, customers would be at a considerable disadvantage.

2.465 LPMA accepted Union's proposal to negotiate rates and deem them to be at posted rates; however, LPMA urged the Board to direct Union to achieve, as soon as possible, the capability for negotiated rates with individual M2 and M4 customers.

2.466 VECC accepted that the ability to negotiate rates would assist the Company in meeting bypass threats, but argued that if the Board does approve this proposal it strengthens the case against any pricing flexibility. To guard against the exercise of monopoly power in the negotiation of fixed prices, VECC submitted that disclosure of the range of the negotiated rates be made in the customer review process.

2.467 The Alliance, AMO, CEED, Comsatec, ECG, Enron, Fullerton, GEC, HVAC, Kitchener, OAPPA, Pollution Probe, Schools and TCPL made no comments with respect to this issue.

Union's Reply - Treatment of Long-term Fixed Prices / Negotiated Rates

2.468 Union reiterated that no one would be disadvantaged by negotiated rates, that all customers would have access to posted rates, and that bypass threats would be mitigated. The Company submitted that "requiring Union to report actual or forecast cost as required in the cost-of-service regulation ... is unnecessary and would work contrary to goals of PBR." In response to CAC's suggestion that each negotiated rate should require Board approval, Union asserted that this would not permit a timely response to customer requests.

Board Findings - Treatment of Long-term Fixed Prices / Negotiated Rates

2.469 The Board agrees that, provided any revenue variances resulting from differences between negotiated rates and posted rates are for the shareholders account, no customers would be disadvantaged by negotiated rates during the term of the PBR plan and that bypass threats might be mitigated by negotiating long-term reduced costs. Therefore the Board grants Union the authority to negotiate rates and offer long-term fixed prices.

2.470 The rates in question, however, are for services offered by Union as a monopoly or at least in circumstances where Union has market dominance, and as such the Board continues to have a role as a surrogate for competition, in setting rates and parameters to facilitate "deals" which might make sense and might occur in a competitive market. Deals in a competitive market would reflect incremental costs as well as perhaps some recognition of shared costs. Hence, the Board cannot accept a general statement that cost allocation and information in support of negotiated rates ceases to be relevant under a PBR price cap method of regulation.

2.471 The Board accepts Union's submission that individual negotiated rates need not receive prior approval of the Board. For the trial PBR period, the Board requires Union to provide a summary of negotiated rates and associated service volumes annually through the customer review process. At the end of each PBR period there

will an opportunity to ensure that there are not unreasonable relationships or undue discrimination or cross-subsidization

2.7.3 Treatment of Market Priced Storage

2.472 Union proposed to continue to provide storage to in-franchise customers at rates based on a fully-distributed cost basis, subject to escalation under the PBR price cap. Union proposed to renew existing ex-franchise (M12) storage contracts at market prices, citing the Board's Decision in EBRO 494-03 in which the Board-approved market pricing for incremental storage provided to ex-franchise customers. Union commented that it has no obligation to serve ex-franchise customers and that these customers have access to alternative storage services.

2.473 Union proposed to close the deferral account (179-72) in which the market premium is recorded and, going forward, any premium above the cost of the service would be immediately recorded as revenue and used to manage risks to which Company operations would be exposed under the new PBR plan. Union also proposed the same treatment for any revenue streams associated with new storage pools.

2.474 Further, Union indicated that market-priced storage revenue from ex-franchise customers was required in order to "manage the risks of the further unbundling of storage in the in-franchise market, including the further allocation of storage at cost-based rates for incremental in-franchise customers." Union noted that the incremental cost of new storage exceeded the rates based on current embedded costs.

2.475 Union also referred to the evidence of its witness, Ms. Elliott, who indicated that if transactional revenues (storage and transportation) or long-term (storage) premiums were not available to Union, then it would have sought a premium or a growth factor under the cap.

2.476 Union proposed for the year 2000 and subsequent years to book to the account of the shareholder balances which would otherwise accumulate in transactional services and storage premium deferral accounts, arguing that under unbundling Union's ability to generate these revenues becomes more uncertain, given the loss of Company control over the unbundled assets. Union submitted that under PBR it would require these revenues in order to manage system growth, investment, and its commitment to provide in-franchise customers with storage at cost. Finally, Union noted that the approximately $5 million embedded in rates would remain to the benefit of the ratepayer under its proposal.

Positions of the Intervenors - Treatment of Market Priced Storage

2.477 CAC accepted M12 storage renewals at market-based rates but it opposed the elimination of the market premium deferral account. CAC argued that: Union has not provided adequate support for Union's proposal ; the development of the assets that provide ex-franchise storage services has been funded by the ratepayers; and Union and the Board have, in the past, both supported the existing treatment of the long-term storage premiums.

2.478 Energy Probe asserted that full unbundling of storage requires unbundling storage rates from distribution rates, the permanent release of storage capacity, the ability to rebundle storage services, and market pricing of storage services. Energy Probe recommended that the Board direct Union to present a study of options for storage deregulation at its next rates or unbundling case.

2.479 IGUA accepted Union's proposal to renew M12 storage contracts at market rates, but took issue with the proposed disposition of the margin. IGUA argued that since Company assets have been used to generate the revenues from both transactional services and long-term storage, and because they have not otherwise been accounted for in rate design, it is appropriate to record the premiums relating to these services and credit them to ratepayers. IGUA noted that this treatment had been agreed to in the EBRO 499 Settlement Agreement and respected the principle that ratepayers should be credited for margins above cost being realized from Company assets.

2.480 In the case of margins from transactional services, IGUA noted that in EBRO 499 parties agreed that these amounts be shared 75:25 between ratepayers and shareholders. IGUA submitted that this agreement was reached to provide an incentive for Union to make full use of the Company's assets. IGUA's position was that there is no evidence of any new circumstance that would justify any change.

2.481 IGUA estimated that the net effect of Union's proposal would be to disadvantage ratepayers by approximately $7 million in 2000 and $9.5 million in 2001.

2.482 IGUA submitted that: revenue sharing is a PBR-type feature of the existing cost-of-service regime that should be retained in transition; a PBR plan should start from a point which is representative of the Company's current situation; there is no evidence, expert or otherwise, that suggests that the elimination of the deferral account is integral to the PBR plan; and unbundling is not likely to reduce these premiums and, in any case, the risk is borne for the most part by ratepayers.

2.483 IGUA indicated that it would accept maintaining the existing arrangements for the long-term storage and transactional services accounts for the year 2000 and then, beginning in 2001, sharing the funds in the long-term storage premium account in the same ratio as the transactional service revenues are currently shared.

2.484 IGUA stated that "the Company's contention that its expropriation of the full amount of the customer share of transactional services and long-term market premium margins in the revenue deferral accounts is an integral feature of its price cap plan is ... a contention that is entirely discredited by the Company's prefiled evidence and the evidence of the Company's expert witnesses who acknowledged that they were never asked to provide an opinion on the expropriation of amounts in the revenue deferral accounts issue."

2.485 LPMA, MECAP, and WGSPG accepted Union's proposal to renew M12 storage contracts at market rates but rejected Union's proposal with respect to the disposition of the margin. LPMA calculated for the entire term of Union's PBR plan, that if the ratepayer share in the storage and transactional services deferral accounts was only 50% of the 2000 year forecasted amount, then the Company would benefit by $7 million, which is more than double the proposed stretch factor amount of $3.1 million (0.4% of base delivery revenues).

2.486 LPMA challenged Union's contention that if transactional services revenues were not credited to the Company's account then Union would have proposed a growth factor in the price cap formula, submitting that a growth factor while appropriate for a revenue cap plan is inappropriate for a price cap plan.

2.487 NOVA stated that there was no evidence that the approved existing methodology was unfair.

2.488 Schools argued that the current treatment of the long-term storage premium and transactional services deferral accounts was appropriate, since Company assets are used to generate the revenue flows and the 75:25 sharing provided an incentive for the Company to more fully utilize these assets. Schools also noted that under Union's proposal, net revenues from any new storage pools would flow to the shareholders.

2.489 VECC opposed the renewal of M12 contracts at market-based rates, arguing that it would set a precedent for moving all customers to market-based storage rates. Further, some of the M12 customers who renew at market rates (such as Enbridge and GMI) are also distributors who will then be charging their own in-franchise customers market-based storage rates, strengthening the possibility of Union, in the future, charging its in-franchise customers market-based rates for storage.

2.490 VECC urged that the Board deny the application to eliminate the storage deferral accounts. The rationale was that ratepayers, having funded the supporting Company assets should be the beneficiaries of the incremental net revenues. VECC submitted that the risk of storage prices being less than costs was very low, citing the evidence of Union's witness, Mr. Birmingham, that the market price of storage has not been lower than the cost for any extended period of time and that development of new storage is limited by the existence of feasible geological formations.

2.491 Alliance, AMO, CEED, Comsatec, Enbridge, Enron, Fullerton, GEC, HVAC, Kitchener, OAPPA, Pollution Probe, and TCPL submitted no arguments on this issue.

2.492 CENGAS supported Union's proposal.

Union's Reply - Treatment of Market Priced Storage

2.493 Union challenged VECC's argument that accepting its proposal would set a precedent for charging market-based prices to its in-franchise customers. Union argued that the Board has already approved market rates for the ex-franchise customers of its Bentpath-Rosedale and Century Pools developments, customers who have competitive alternatives and for whom Union has no obligation to serve. Union submitted that pricing for ex-franchise customers accessing the same services should be consistent and noted that GMI has agreed to renewal of its contract at market rates. Union submitted that implementing market rates for in-franchise customers would require Board approval.

2.494 Union reiterated that unbundling would transfer control of the assets presently used to generate the revenues in question to unbundled customers and, as such, the Company required the margins presently credited to ratepayers to manage the risk of decreased transactional services revenues. Union's position was that the change in regulatory framework, from cost-of-service to PBR, is a material change that justifies a change in treatment of the revenues in question: revenues are not constrained, rather, prices are capped. Union submitted that under a PBR framework rates would

not be cost-based, therefore net revenues from these services should be treated the same way as other services under the price cap.

2.495 Regarding the claim that margins generated by Company assets ought to be to the credit of the ratepayer, Union's position was that ratepayers have paid for the services from the assets, not for the assets themselves. Further, Union asserted that "a level of sharing of these margins in EBRO 499 was an agreement in light of the entire ADR package and in no way bound any signatory to the agreement from proposing alternatives at future proceedings."

2.496 Union also argued that the initial rationale for establishing the storage and transmission account was that forecasting these revenues was difficult, in part depending on the weather. Union submitted that under its PBR proposal there is no reason to forecast these revenues.

2.497 Union further disputed the contention that its proposal on deferral accounts is unrelated to its PBR plan, stating that its application is an integrated proposal. With respect to the claim that its retained experts did not provide an opinion on the treatment of deferral accounts, Union submitted that its external experts advised on the basic framework and the productivity parameters, but it was the Company's responsibility to evaluate the effect of the overall proposal. Union testified that the PBR plan would have to be changed if the deferral account proposal was denied.

2.498 As to the position of some parties that the elimination of the deferral accounts should be denied on the basis that ratepayers would be worse off under Union's integrated proposal as compared to the current regime, Union's position was that this conclusion was reached based on a selective analysis of individual components. An appropriate evaluation would require an assessment of the complete integrated PBR plan, which, in Union's view, would lead to the conclusion that ratepayers would not be worse off under its proposal.

Board Findings - Treatment of Market-Priced Storage

2.499 The Board notes that in EBRO 494-03, issued in 1997, the Board gave approval to the application of market-based rates to certain ex-franchise storage contracts, under certain terms and conditions. The Board also notes that in that proceeding Union provided, among other things, an updated 10-year peak storage availability and utilization forecast that the Board found was "reasonable under a business-as-usual scenario".

2.500 The Board notes that with the exception of VECC no parties argued against the renewal of M12 contracts at market-based rates. VECC's opposition was based on the concern that this action would open the door to the use of market-based rates for in-franchise customers. The Board notes Union's acknowledgment that this would only be possible were the Board to approve such rates for in-franchise customers. The Board has also heard concerns about the ability of parties who have "rights" to storage at cost-based rates to take advantage of the arbitrage opportunity that may exist in the market directly or indirectly. In the Board's view one potential approach might be to apply market-based rates for all storage with a mechanism to fairly distribute any premium over cost-based rates. The Board would require more complete information on the storage market before adopting such an approach.

2.501 At issue in this proceeding was the treatment of any premium that exists due to the differential between market price and the embedded cost of storage. The Board notes that in a previous hearing, EBRO 486-02, Union argued that the premiums resulting from market-based rates for storage services rightfully belonged to ratepayers because the ratepayers had "substantiated" the asset; i.e., that since the ratepayers had taken on the risk and paid rates designed to cover the costs, they should receive any reward. The Board also notes that the market price referred to in discussing this issue is not necessarily a surrogate for a market price in a competitive market.

2.502 The Board notes that it has in the recent past provided an incentive to Union, through a sharing of the premium on transactional services, to encourage the Company to pursue opportunities to increase the efficient use of the assets. The Board has not to date applied any sharing with regard to the premium on storage. The Board recognizes that there should also be an incentive to efficiently manage the existing storage capacity in Ontario. With respect to the development of new storage during a PBR plan period, incentives will be dealt with within the related applications.

2.503 The Board notes that on the one hand, if it had a reliable current forecast of service volumes for the PBR plan period and a reasonable forecast of market prices for storage during the plan period, there would be no need for any deferral account to capture the variance arising from the difference between market-based rates and fully distributed cost-based rates. On the other hand, given the service volume uncertainty and the lack of a reasonable forecast for market-based prices for storage the approach of deferring the variance (premium) seems prudent.

2.504 The Board grants Union's proposal to renew existing ex-franchise cost-based storage contracts (M12) at market prices. However, with respect to Union's proposal to eliminate the deferral account for recording the market premiums from these arrangements, the Board finds it appropriate, given the volume and price uncertainties expected during the term of the Board-approved PBR plan maintain a deferral account for recording market premiums. The Board notes that in Chapter 4 the Board denies Union's request to close the transactional services deferral accounts.

2.505 The Board recognizes that the assets necessary to provide both transactional services and long-term storage services have been paid for by Union's customers. Providing the Company with a financial incentive to maximize revenues for these services should increase benefits to both the customer and the shareholder. Consequently the Board authorizes a sharing of net revenues for transactional services and market premium for long term storage services in the ratio of 75:25 between ratepayers and shareholder as an incentive to maximize the revenue associated with both these services. The balance in the Long-Term Storage Premium Deferral Account (179-72)

shall be allocated 100% to the ratepayer for 1999 and 2000, with the incentive sharing for the long term storage premium account to be effective January 1, 2001.

2.506 Based on the evidence in this proceeding the Board is unable to determine whether storage service can evolve to become workably competitive. The Board believes that it is wise to exercise care with respect to long-term contracting of storage and to keep options open for the design and development of the storage market in Ontario.

2.7.4 Treatment of New Services

2.507 New services may be developed by Union to enhance the storage, transportation, and delivery services now offered. If the new services are regulated, they will be placed into the appropriate service basket and priced subject to the price cap parameters; if unregulated, Union would price them competitively. In either case, Union will disclose all new services, introduced or proposed, so that they may be addressed in the customer review process and then brought before the Board for disposition.

Positions of the Intervenors - Treatment of New Services

2.508 CAC stated that “as a matter of policy only when the assets and costs of a particular service are removed from the utility it is appropriate to exclude revenues from flowing to the ratepayers “ CAC submitted that since the assets have been paid for by ratepayers the revenue from those assets should accrue to those ratepayers. CAC also submitted that any new services developed by Union should be brought before the Board for determination of the appropriate revenue allocation.

2.509 CEED proposed that prior to providing new storage, transmission, or distribution services, Union should be required to obtain “either a rate order from the Board pursuant to section 36 of the *Ontario Energy Board Act, 1998* or an order from the Board to refrain from exercising its power to regulate rates for these services”. Where new services other than storage, transmission, or distribution are contemplated by Union, CEED urged that these new services only be provided after Union has received prior approval of the Board as required by the Undertakings.

2.510 Energy Probe made submissions in this regard under the issue"Unbundling Overview and Rationale".

2.511 HVAC expressed concerns, similar to those of CEED, arguing that regardless of the nature of the new services, Union would have to bring them to the Board for review either under the Act or the terms of the Undertakings. HVAC submitted that the Board should direct Union to bring all proposals for new services to the customer review process.

2.512 IGUA's position was that revenues from new regulated services for unbundled customers which are similar to services for bundled customers, should either be excluded from delivery base revenue prior to price cap escalation and from base rates in the year revenue is realized or, alternatively, the margins should be booked in the S&T deferral account.

2.513 LPMA, MECAP, and WGSPG submitted that revenue from new services using either Company assets, Company personnel, or other Company resources should be shared with ratepayers. The rationale was that the customers have substantiated and under Union's PBR proposal will continue to substantiate (in rates) these assets, personnel, and resources. LPMA indicated that sharing of these revenues would not be required if Union were to remove costs associated with new services from the Company and reduce rates accordingly.

2.514 Schools position was that the revenue from any approved new services should accrue to the shareholder subject to the proviso that the new services "do not replace, duplicate, or derogate from an existing service" and also on the condition that the current treatment of storage and transactional revenues and the long-term storage premium are maintained.

2.515 VECC submitted that if the new services utilize the rate base assets or are underpinned by costs embedded in rates, the revenues should be shared with ratepayers.

2.516 Alliance, AMO, Comsatec, Enron, Fullerton, GEC, Kitchener, OAPPA, Pollution Probe, and TCPL did not comment.

2.517 CENGAS supported Union's proposal.

Union's Reply - Treatment of New Services

2.518 Union indicated it would disclose all new services, whether proposed or introduced, in the customer review process so that intervenors and the Board "will have the opportunity to consider and comment on the treatment of these new services".

2.519 Union argued that adjusting delivery revenues in response to new revenue streams is appropriate to a revenue cap plan, but not to a price cap plan. Under its proposal average unit prices are constrained, but there is no limit to the delivery base revenues during the term of the PBR plan.

2.520 Union noted that productivity improvements can be made by increasing the output from a set of inputs as well as by reducing the cost of a given level of output, arguing that there is no reason to treat productivity improvements reflected on the revenue side differently from those reflected on the cost side.

Board Findings - Treatment of New Services

2.521 The Board finds that Union's proposal that all new services be brought forward in the customer review process for review and then before the Board for adjudication is acceptable.

2.522 The Board notes that any new regulated service will require a Board rate order. The Board also notes that it will monitor the overall earnings of the Company as part of its ongoing evaluation of the PBR plan and that revenues from new services will, together with all other revenues, be subject to the earnings sharing mechanism.

2.7.5 Earnings Sharing Mechanism

2.523 An Earnings Sharing Mechanism ("ESM") provides ratepayers with a share of the utility's over- or under-earnings. Although an ESM was not proposed by Union, many intervenors argued that if the Board were to approve a PBR plan, an ESM should be included. Also, evidence in this proceeding showed that a number of PBR plans approved in other jurisdictions contain an ESM. Finally Union, in reply, disagreed with the need for an ESM but submitted that if an ESM were approved it should be symmetrical and should only be used as a protective measure against unacceptable outcomes.

Positions of Intervenors - Earnings Sharing Mechanism

2.524 Alliance commented that this was the first application to the Board seeking a price cap for a natural gas utility. Noting that Union's experts had conceded that uncertainty was a problem for regulators, Alliance submitted that much of the expert evidence in this case on price caps, inflation, productivity, and the correct starting base was contradictory. Alliance stated that while an ESM would provide some protection to ratepayers and the Board against outcomes, such as high prices and high utility earnings, it would also provide protection to Union against outcomes such as significant under-earnings.

2.525 While acknowledging that Union would retain only part of the benefits of any realized efficiency increases with an ESM, Alliance commented that an ESM incorporating a reasonable utility share of earnings would provide appropriate utility incentives and appropriate ratepayer safeguards at a time new form of regulation was introduced.

2.526 Alliance, adding that an ESM would safeguard against mis-specification of the plan's parameters, cited prefiled evidence by Dr. Bauer and Mr. Johnson to support their position that the sharing proportions in an ESM should be linked to the productivity offset: the higher the X-factor, the higher the proportion of PBR benefits that should accrue to the shareholder.

2.527 Alliance proposed that the plan should either incorporate an ESM or have a three-year term to provide protection for ratepayers.

2.528 AMO commented that, given the possibility of substantial gains for the Company under Union's proposal, there should be a 50:50 sharing of all returns above the allowed rate of return.

2.529 CAC quoted Dr. Bauer as follows:

> Earnings-sharing mechanisms are commonly used to mitigate risks of a PBR plan that cannot be anticipated properly due to imperfect information. Most importantly an earnings sharing mechanism provides a safeguard against mis-specification of the PBR plan parameters. Such plans also mitigate the impacts of unanticipated developments that are not part of the adjustments process specified in the PBR plan. For that reason, earnings sharing plans are particularly appropriate for an industry that undergoes structural change. Lastly earnings sharing mechanisms are often used as a transitory tool during the first and perhaps second generation of performance based regulation.

2.530 CAC noted that there was a significant degree of uncertainty with respect to earnings potential under Union's proposal due to the current and ongoing utility restructuring, lack of knowledge of the Company's current cost structure, the use of 1999 Board-approved volumes, the plan's parameters, the impacts of Union's unbundling plan, and the restructuring of the electricity sector.

2.531 CAC supported a 50:50 ESM, with no deadband, applied to weather normalized ROE above or below the approved ROE. CAC submitted that if the PBR plan were deferred until January 1, 2002, an ESM more favourable to shareholders in terms of the sharing arrangement may be appropriate. CAC argued that, in the absence of an ESM, a symmetrical off-ramp should be added that would be triggered if Union's earnings significantly exceeded the approved ROE.

2.532 Kitchener stated that "the likelihood of a higher level of rate increases under PBR, the need to provide a means of mitigating against the risks faced by customers under PBR and the need to ensure a reasonable division of any advantages resulting from PBR, all make the case for maintaining the existing sharing mechanisms and introducing a further PBR specific mechanism for sharing."

2.533 HVAC proposed either increasing the productivity factor to +1.6% or including an ESM and stated that an ESM "would be a rather elegant solution to a host of legitimate concerns in respect of Union s proposal". If an ESM is approved, HVAC submitted that absent a change in the productivity factor no deadband should be employed.

2.534 IGUA's position was that to avoid excessive earnings any approved price cap plan should contain an ESM, to be applied to weather normalized "Corporate/Utility" earnings above the Board-approved ROE.

2.535 IGUA submitted that if the Board were to approve storage-related deferral accounts sharing of 75:25 in favour of the ratepayer, then it would be appropriate for the Board to approve an ESM sharing of 75:25 in favour of the shareholder. IGUA argued that "as long as ratepayers continue to receive the lion's share of margins realized from the use of utility assets and recorded in the revenue deferral accounts, then it is just and reasonable to allocate to the Company's shareholder the lion's share of Corporate/Utility normalized earnings above the Board-approved ROE."

2.536 IGUA submitted that if the following conditions were met then it would accept an earnings sharing mechanism in which the ratepayers share of normalized actual earnings in excess of the Board-approved ROE was 25%: the delivery revenue base was adjusted to reflect 1999 normalized actual financial results; pass-through items and non-routine items were not escalated; the price cap was a maximum of 0.5%; and the revenue deferral accounts that have storage-related margins were continued with the ratepayers share of the monies to be at least 75%.

2.537 LPMA and MECAP advocated the use of an ESM and in support of this position quoted Union's witness, Mr. Birmingham, that an ESM "can be put in place as a protection measure when there's an assessment made that the price cap parameters can generate some range or some individual outcomes which are unfavourable, from the regulatory standpoint."

2.538 LPMA submitted that an ESM was appropriate to mitigate the risks since Union's proposal contains a high level of price cap parameter uncertainty, due to pricing flexibility, inflation rate, productivity factor, treatment of pass-through and non-routine items, adjustments to base rates, treatment of ROE, and the unbundling proposal.

2.539 LPMA, while advocating a 50:50 sharing of weather normalized actual results in excess of the Board-approved ROE, disagreed with Union's claim that a 50:50 sharing greatly reduces incentives to increase productivity. In support, LPMA quoted Dr. Bauer wherein he was "more convinced than [he] was before that an earnings sharing mechanism would be a desirable feature in the plan" and that "clearly that the benefits of having such a risk mitigation measure included outweigh the potentially negative impacts on efficiency increases." LPMA added that an ESM would obviate the need for a symmetrical off-ramp.

2.540 Schools, citing the uncertainty in going from a cost-of-service regime to a price cap regime and the five-year term of Union's proposal, argued that if a price cap plan were approved to start before January 1, 2002 it should contain an earnings sharing mechanism based on a 50:50 sharing above or below the target ROE, with no deadband. Schools commented that "Union was unable to point to a single existing PBR Plan in the gas or electricity industry anywhere in North America or elsewhere in the world with a negative productivity factor, let alone one which combined a negative productivity factor with the absence of an earning-sharing mechanism."

2.541 Schools would also support an ESM in which the share allocated to the shareholder increases as the magnitude of the excess earnings increases. If an ESM is not approved, Schools urged that a symmetric off-ramp for excessive earnings be approved as part of the PBR plan.

2.542 Schools submitted that "[t]he earnings sharing feature will not destroy the incentive for the company to achieve savings because the shareholder will still keep a large part of the savings."

2.543 Pollution Probe submitted that if an ESM is approved, it should not include a shared savings mechanism "in order to avoid diluting Union's incentive to aggressively pursue incremental energy savings and bill reductions for its customers."

2.544 VECC supported an ESM "to address the uncertainty surrounding the parameters of the price cap, and the environment in which this proposal will be operating under." VECC identified the five-year term, the use of the approved 1999 revenue requirement, and calculation of the X-factor as issues contributing to the uncertainty associated with Union's proposal. Although VECC cited both Mr. Johnson and Dr. Bauer that approving a three-year plan would mitigate some of the risks, VECC's position was "the only way to deal with the uncertainty underpin the PBR proposal is for the Board to implement an earning-sharing mechanism."

2.545 VECC, cited the prefiled evidence of Union's experts, Dr. Hemphill and Dr. Schoech that: "ESMs are more attractive when there are substantial uncertainties over the appropriate values of price cap plan parameters, especially the X-factor. Under a pure price cap plan, these uncertainties can potentially lead to unacceptably high or low profits for the regulated firm."

2.546 VECC argued that an ESM should be adopted since Union's X-factor analysis had not reflected unbundling, restructuring, Centra Gas data, separation of affiliate businesses, or more recent data.

2.547 VECC challenged Union's claim that an ESM would dampen the Company's incentives to seek efficiencies, arguing: "The Company maintains that the presence of an earnings sharing mechanism will dampen the incentive for it to introduce efficiencies and obtain the financial rewards. As noted below, the Company plan is to avoid rebasing rates at the end of the price cap period, so that the customer dismay at the presence of this possible disincentive is limited. But even with a more realistic proposal for implementing a second generation price cap, the Company's objection is theoretical at best. Strong incentives exist for reward even when ratepayers obtain 50% of the total value of efficiencies. In any event, the risks of getting the price cap wrong far exceed the speculative claims of the presence of a disincentive."

Union's Reply - Earnings Sharing Mechanism

2.548 Although Union's position was that an ESM is unnecessary if the price cap parameters are properly set, Union accepted that an ESM, set at the threshold level of what the Board viewed to be unacceptable outcomes, could be added as a protective measure to its price cap proposal. The rationale for instituting an ESM is the uncertainty with respect to the appropriateness of the price cap parameters. Union submitted that, if included, an ESM should be symmetrical and incorporate a wide deadband to preserve the productivity incentive.

2.549 Union also argued that an ESM should be based on actual, as opposed to weather normalized, earnings on the basis that normalization is applied to revenues but not to costs and hence disadvantages the Company for cost mitigation efforts. For example, if weather is warmer than usual, revenues would be less than expected. To mitigate the revenue shortfall, the Company would typically defer some expenses with each dollar of cost savings representing an additional dollar of excess; combined with revenue normalization, this situation would result in a recorded excess to be shared with ratepayers while the Company would have experienced a revenue deficiency. In addition to being "unfair" to the Company, Union submitted that this would reduce its incentives to mitigate warmer than usual weather conditions in the first place. Union stated that using weather normalized revenues for the purposes of an ESM would similarly disadvantage ratepayers in the event of colder than normal weather. Finally, Union asserted that if there is to be a sharing mechanism, in principle weather related risks should not be treated differently from all other risks faced by the Company.

2.550 Union submitted that an ESM should not be instituted while maintaining the current storage and transportation revenue sharing arrangement because: "a revenue stream is a revenue stream" in other words, the source of the related revenue should not matter; there is no need under PBR to preserve a separate sharing mechanism for a business activity that is small in relation to the Company's operations; incentives could be distorted with different sharing arrangements for different revenue streams; and maintaining two sharing arrangements for two different business aspects creates unnecessary administrative complexity.

Board Findings - Earnings Sharing Mechanism

2.551 The Board agrees that an ESM is one way of mitigating the risk of earnings being unacceptably high or unacceptably low under the price cap plan. The Board also agrees that under Union's proposal there is significant uncertainty with respect to the price cap plan's outcomes and there are legitimate concerns that the risks of mis-specification of the parameters of the plan require mitigation.

2.552 The Board notes that many parties proposed that if a five-year term were approved an ESM should be included to mitigate risks. Several parties also proposed alternatives to including an ESM, such as: approval of a shorter term; use of a variable inflation factor; inclusion of symmetric off-ramps; adjustment of the price cap plan's parameters and of base delivery revenue; and modifications to the proposed treatment of pass-through items.

2.553 The Board has taken a number of steps in this Decision to mitigate the risks of unacceptable outcomes from Union's proposal including reducing the term, requiring annual adjustments of the I-factor, instituting an off-ramp for excessive earnings, adjusting the X-factor, adjusting base revenues, and modifying the treatment of pass-through items.

2.554 The Board notes that under the customer review process, parties will have access to actual financial results, revenue-to-cost data, and other information to enable them to monitor and evaluate the operation of the plan. If the plan is producing unacceptable outcomes parties will have the opportunity to make submissions to the Board.

2.555 The Board recognizes that as the result of the modifications that it has made to Union's proposed PBR plan it may have to some measure increased the risks to the Company while reducing the risks to the customer. The information provided by the Company in support of its proposed PBR plan has not provided the Board with the ability to simulate, on a going forward basis, how the plan might operate and the results that might occur.

2.556 With this in mind, the Board requires the establishment of an earnings sharing mechanism, effective from 2001, which is symmetric, based on actual earnings, with a deadband around Board-approved ROE (that is reset annually on the basis of the Board's ROE adjustment formula) of one percentage point after taxes, and sharing of any earnings variance on a 50:50 basis between the ratepayer and the shareholder. The dispositions of the balances in the transactional services accounts and the long-

term storage premium deferral account shall not be included in earnings to which the sharing mechanism is applied.

2.557 The Board recognizes that the actual revenues to which earnings sharing shall apply will have to be adjusted to remove the revenue effect of any rate riders which may exist from time to time in order to provide credit to customers related to over-collection in rates in past periods or to collect amounts due to the Company in respect of under-collection in past periods. Design of rate riders themselves, in the future after earnings sharing has been implemented, will have to take into account whether the over-collection or under-collection was subject to sharing; the rate rider should be based on the "net" amount. Details of these mechanisms will be worked out through the first few customer review processes and Board approvals.

2.558 Because no party has brought forward to the Board a specific mechanism for implementation of an ESM, the Board directs the Company to bring forward through the customer review process proposals for the mechanism for sharing excess earnings or recovering under earnings from year to year.

2.7.6 Off-Ramp(s)

2.559 Union proposed that in the event that the Company suffers a serious decline in its financial position, its PBR plan should be automatically re-examined by the Board. This proposed off-ramp was only with respect to a shortfall in revenues. Union submitted that customers were sufficiently protected from the possibility of excess revenues.

Positions of the Intervenors - Off-Ramps

2.560 CAC argued that, in the absence of an earnings sharing mechanism, the plan should include an off-ramp that would be invoked in the event that Union's earnings significantly exceed the Board-approved ROE. CAC cited Mr. Johnson's discussion of symmetrical off-ramps, triggered if actual ROE is above or below approved ROE by 150 to 200 basis points.

2.561 Energy Probe submitted that no specific off-ramps should be approved. Instead, Energy Probe urged that the Board should maintain the authority to terminate the PBR plan if it is in the public interest to do so. Other parties would be free to make a motion to the Board should they wish to terminate the plan before the scheduled termination date.

2.562 IGUA accepted the single off-ramp proposed by Union provided that the Board approve an earnings sharing mechanism applicable to corporate/utility earnings in excess of the Board-approved ROE. IGUA's rationale was that an earnings sharing mechanism provides a means of preventing shareholders from realizing excessive earnings over the term of the plan and mitigates the risk of an initial miscalculation of the plan's parameters.

2.563 Kitchener submitted that, to avoid the possibility of fettering its jurisdiction to set just and reasonable rates over the term of the plan in the event that the price cap formula leads to inappropriate rates, the Board should not define any specific off-ramp.

2.564 LPMA, MECAP, and WGSPG's position was that in the absence of an earnings sharing mechanism there should be symmetry in the off-ramp design by the inclusion of an off-ramp to be triggered in the event of excess earnings. LPMA indicated that it would accept Union's proposal for a single off-ramp if there were an earnings sharing mechanism approved in conjunction with the plan.

2.565 Schools agreed with LPMA's position and added that: excessive earnings be defined as earnings in excess of 300 basis points above the Board-approved ROE; and an additional off-ramp in the event that Union lost franchise rights that impacted in-franchise revenues overall by 10% or more.

2.566 VECC submitted that an off-ramp for excessive earnings be added to the plan. VECC also argued that unforeseen changes in the Company functions that impact significantly on the operation of the price cap should also trigger an off-ramp.

2.567 Alliance, AMO, Comsatec, Enbridge, Enron, Fullerton, GEC, HVAC, OAPPA, Pollution Probe, did not comment.

2.568 CENGAS supported Union's proposal.

Union's Reply - Off-Ramps

2.569 Union's view was that "the plan has well specified parameters based on a widely accepted theoretical framework" and it is not possible to get "an undesirable or bad outcome that would warrant earnings sharing." Union also noted that it is not unheard of or considered excessive under cost-of-service regulation for regulated utilities to achieve returns 200 basis points in excess of the approved ROE.

Board Findings - Off-Ramps

2.570 The Board agrees that Union should request relief in the event that the Company experiences serious financial difficulty. However, the Board expects that if the PBR mechanism incentives work as intended, Union would also achieve in some years earnings above the Board-approved target ROE. In this regard, the Board would be concerned if supernormal profits were achieved on a sustained basis because it might well indicate that the parameters of the PBR plan had not been appropriately set.

2.571 In the Board's view, a flexible approach with a balanced tolerance for variances in return is necessary at least during the initial PBR plan period and the ESM provides symmetric protection for the customer and the utility.

2.572 The Board accepts in principle that an off-ramp triggered in the event of serious financial difficulty is reasonable. The Board also agrees that if there is an off-ramp for under-earning there should also be an offsetting off-ramp for earnings unduly in excess of the Board-approved target ROE.

2.573 The Board will institute a symmetric off-ramp with an unspecified trigger should the Company, in the Board's view, experience a return unduly in excess of the Board-approved target ROE. The Board expects Union during the trial PBR plan period to notify the Board at the earliest possible opportunity when Union becomes aware of the potential for its earnings position in any given year to be outside of the deadband provided for in the ESM. Although the Board will monitor this situation, it is not the Board's intention that exceeding the deadband would automatically trigger an off-ramp.

2.574 The Board would be in a better position to establish a more definitive measurement of the trigger in a second generation PBR plan.

2.8 SYSTEM EXPANSION AND SERVICE QUALITY INDICATORS

2.8.1 System Expansion Plans and Customer Connection Policies under PBR

2.575 Union proposed no changes to existing policies with respect to system expansion and customer connection. Union indicated it would continue to ensure that the system expansion guidelines in EBO 188 were met: individual projects would have to attain a minimum profitability index of 0.8, and the total portfolio would have to maintain a profitability index of 1.0. Union asserted that it would not require a contribution in aid of construction that would raise any project's profitability index above1.0.

Positions of the Intervenors - System Expansion and Customer Connection Under PBR

2.576 Energy Probe commented that under cost-of-service regulation, the Company has an incentive "to build uneconomic expansion and/or to refrain from charging contributions in aid of construction, in order to expand rate base and resulting profits." Energy Probe submitted that the guidelines in EBO 188 mitigated the perverse system expansion incentives under cost-of-service regulation. However, under PBR the Company's incentive would be to overcharge new customers because the contributions in aid of construction are a revenue stream.

2.577 Energy Probe urged that no contribution in aid be permitted which would raise the PI of any project above 1.0 and that the Company should be required to disclose the details, including all assumptions and parameter values, of any project involving a contribution in aid.

2.578 GEC, echoing the concerns of Energy Probe, urged that any proposed changes be brought to the customer review process.

2.579 IGUA commented that under a properly designed plan, the shareholder is at risk for uneconomic expansion projects and further, it is not appropriate to compensate the shareholder for this risk by adding any "up front" compensation to base revenues.

2.580 LPMA, MECAP, and WGSPG accepted Union's evidence on this issue but submitted that in the event of a dispute between the Company and customers about the level of contribution, the Board should direct Union to provide the customers with the details, including assumptions and calculations, underpinning the project evaluation.

2.581 Pollution Probe submitted that under cost-of-service regulation, a sustainable increase in earnings per share required an increase in rate base which implies a minimum of contributions in aid (which reduce the rate base). However the situation is reversed under price cap regulation where the incentive for the Company is to maximize revenues (including contributions) and minimize its costs (including rate base).

2.582 Pollution Probe noted that Union could increase its revenues from contributions while appearing to maintain a PI of 1.0 on any given project by either overestimating costs or underestimating gas consumption.

2.583 Pollution Probe submitted that in any given time period the only details unique to any given project will be the capital costs and forecast gas consumption; other costs such as customer costs, storage costs, the discount rate, the tax rate, and variable delivery costs will be the same for all members of a rate class. Therefore, Board approval should be required before any changes, other than capital costs and estimated consumption for a specific project, are made to the input values used in project evaluation.

2.584 Pollution Probe urged that if new customers believe that Union's project specific estimates are incorrect, they should be allowed to appeal the matter to the Board.

2.585 Schools agreed with Pollution Probe about the reversal of incentives under price cap regulation, and identified as a further concern a potential for Union to under-invest in new facilities in the early years of the plan, deferring reliability and new attachment projects to the end of the plan. To address this concern, Schools proposed that Union develop a new Service Quality Indicator ("SQI") pertaining to the delay in attaching new customers, to be brought forward for review at the customer review process.

2.586 Schools also urged that Union "be directed not to change any of its generic policies with respect to the evaluation of such projects, for example the discount rate, except for the approved changes to the annual weighted-average cost of capital driven by the changing forecast of its long-term debt, and the equity cost derived therefrom, overhead capitalization practices, inflation forecasts, and the nature of its risk adjustment policy for those projects deemed to have atypical risk profiles."

2.587 Alliance, AMO, CAC, CEED, Comsatec, Enbridge, Enron, Fullerton, HVAC, Kitchener, NOVA, OAPPA, TCPL, and VECC did not comment.

2.588 CENGAS supported Union's proposal.

Union's Reply - System Expansion Plans and Customer Connection under PBR

2.589 Union submitted that there was no statutory basis for requiring Union to obtain Board approval for changes to its investment test, arguing that under section 42(2) of the Act Union has an obligation to serve only with respect "to providing service connections and service lying along the line of Union's existing distribution pipelines". Union submitted that otherwise, projects are under Union's discretion and, as such, "the Board cannot and should not grant the requested relief."

2.590 Also, because Union is at risk for uneconomic expansions during the term of the plan, it argued that there was no rate-setting issue which would justify the reporting requested by Pollution Probe and Energy Probe.

2.591 Union added that the appropriate forum to consider issues related to non-discriminatory access was the Gas Distribution Access Rules process.

Board Findings - System Expansion and Customer Connection under PBR

2.592 The Board expects Union to continue to use the criteria enunciated in EBO 188 with respect to system expansions. The Board also expects that the Company will ensure that access will continue to be provided to the existing distribution system on a non-preferential basis. Further, the Board expects that Union will comply with the monitoring and reporting requirements of the Board.

2.593 The Board accepts Union's commitment that it will not solicit contributions in aid of construction that would raise the profitability index for any project above 1.0. The Board expects that Union will, upon request from the Board, provide information regarding the assumptions and inputs used for the investment test underpinning a project evaluation.

2.8.2 Service Quality Indicators ("SQIs")

Pipeline Integrity Surveys

Telephone Response

Emergency Response

Gas Utilization Infraction

2.594 In introducing service quality indicators, Union stated the following:

> A common component of price cap proposals is the adoption and reporting of service quality indicators ("SQIs"). Since a price cap proposal allows the utility to manage its operations over a longer period with less regulatory review and provides a financial incentive to reduce costs, there is typically a concern that utilities may choose to reduce customer service or other commitments for immediate financial benefit. SQIs are primarily intended to provide assurance

to customers and other stakeholders that certain operating standards will remain in place during the term of the price cap.

2.595 Union has proposed SQIs for: pipeline integrity surveys, telephone response, emergency response, gas utilization infraction, and for demand side management ("DSM"). DSM is discussed separately below. Each SQI has its own minimum standard (100% completion of pipeline system integrity surveys, 65% of telephone calls answered within 20 seconds, utility attendance at emergency site within 1 hour in 95% of the incidents, and 100% gas shut off for infracted appliances beyond the correction date) and actual performance of the Company with respect to each would be reported annually to participants in the customer review process.

2.596 While there are no direct financial incentives, rewards or penalties, for deviations of actual performance from the minimum SQI standards, failure on the part of the Company to achieve the standard will initiate a process. The first stage would involve a Company report to participants in the customer review process giving reasons for the failure and proposed remediation to correct the situation. In the event that parties' agreement with the Company's remediation plan is not secured, the matter would be brought to the Board for adjudication.

2.597 Union argued that financial penalties for under-performance do not make sense unless accompanied by financial rewards for over-performance.

Positions of the Intervenors - Service Quality Indicators

2.598 Alliance stated that it did not take issue with Union's proposals on non-DSM SQIs.

2.599 AMO proposed that through the customer review process, some indicator of customer satisfaction with the combination of unbundling and PBR could be addressed.

2.600 CAC accepted that Union had not proposed financial penalties for failure to attain the SQI targets on the understanding that stakeholders would be able to propose financial penalties for poor performance at the annual review. CAC also cited the testimony of its expert witness to the effect that there is no need to reward the Company financially for superior performance.

2.601 CEED observed that Union regards retail energy marketers ("REMs") as customers that "should also have service quality indicators that would deal with their particular concerns"

2.602 CEED expressed concern that Union's proposal to develop SQIs for REMs through the customer review process would likely result in such SQIs not being in place until 2002 and therefore, PBR would begin with no service quality protection for REMs. CEED proposed that Union begin consultations with REMs immediately with the goal of having REM SQIs in place when unbundling is proposed to be introduced, April 2001.

2.603 Also, given that Union proposes to deal with SQIs at the customer review process, CEED remarked that there could be significant issues that are not being addressed for long periods of time. To remedy this, CEED proposed that complaints and assessments should be able to be brought forward at any time and that financial penalties to incent performance should be added to the plan. In this regard CEED suggested that an independent dispute resolution process might be useful.

2.604 IGUA argued that Union, as a regulated utility, is obliged to provide a standard of service quality and, as such, should not be rewarded for exceeding the minimum standard. IGUA argued that SQIs serve to guard against a decrease in service quality and penalties for substandard service quality are necessary for SQIs to serve this purpose. Despite its concern over the lack of financial penalties associated with failure to maintain a minimum service quality level, IGUA indicated it was prepared to accept, on a trial basis, Union's proposal.

2.605 LPMA, MECAP, and WGSPG commented that in their view, "[a]ny decline in safety, reliability or customer service would ... indicate a complete failure of the PBR mechanism." LPMA submitted that while it was appropriate not to set financial penalties in advance, parties should be able to propose financial penalties for under-performance through the customer review process and that in the absence of agreement, the matter would go before the Board for adjudication. LPMA also urged that if the Company generated a report offering reasons for under-performance and proposed remediation with respect to the non-DSM SQIs, the report should be sent to the Board.

2.606 VECC submitted that Union should retain an independent party to conduct a survey of customers' expectations in order to evaluate customers' experiences under the Union's PBR plan. VECC also submitted that financial penalties for under-performance should be incorporated in the price cap plan to make it less attractive to the Company to cut service quality in order to meet corporate financial targets. In terms of the size of the penalties, VECC adopted Dr. Bauer's suggestion that the penalties be tied to effort levels required, likely differing for different qualities of service items.

2.607 Comsatec, Enbridge, Energy Probe, Enron, Fullerton, GEC, HVAC, Kitchener, OAPPA, Pollution Probe, and TCPL did not comment.

2.608 CENGAS and Schools supported Union's proposal.

Union's Reply - Service Quality Indicators

2.609 Union noted that its proposed approach allowed for parties to ask for penalties should they be dissatisfied with Union's explanation of its performance. Union also cited the testimony of Dr. Bauer that he did not feel strongly about the need for penalties. Also, Union commented that its expert Dr. Hemphill was in agreement with Dr. Bauer on the matter of penalties being set in reference to the cost of maintaining a given SQI.

2.610 With respect to CEED's argument regarding development of SQIs for marketers, Union submitted that the Gas Distribution Access Rule, being developed by the Board, will deal with utility conduct as it relates to REMs. Therefore, Union's proposal to develop SQIs for REMs independently of the Board's rule making initiative is premature.

Board Findings - Service Quality Indicators

2.611 The Board notes that parties generally accepted the service quality indicators and standards that had been proposed by Union and therefore approves the indicators for: pipeline system integrity surveys, telephone response, emergency response, and gas utilization infraction, as proposed.

2.612 The Board agrees with Union that the development of SQIs related to service access and conduct for retail energy marketers would be more appropriately addressed after the Board finalizes the Gas Distribution Access Rule.

2.613 With regard to financial penalties, the Board notes Union's position that any party who wishes to propose the imposition of a financial penalty because of under-performance of an SQI may do so through the customer review process.

2.614 In the Board's view it would be inappropriate for minimum SQI levels to become utility targets for achievement. Financial penalties for failing to achieve minimum SQI levels may be appropriate to set service quality boundaries. Design of such penalties and consideration of whether it is necessary to also specify rewards for achieving SQIs of higher levels should be discussed through the customer review process. The Board expects a utility to strive to achieve high levels of performance, taking into account the needs and expectations of the customers and of cost implications.

2.615 The Board agrees with Union that penalties ought to be dealt with through the customer review process.

2.616 The Board is of the view that parties can raise concerns regarding Union's performance during the customer review process and provide more definition of the type of customer survey required to assist in evaluating SQI performance. The Board is not prepared at this time to require the Company to commission an independent survey without some experience under the PBR plan and without the opportunity for intervenors to comment on the primary survey requirements. The Board directs Union to bring forward preliminary proposals for design of an appropriate survey in the customer review process within one year of the date of this Decision.

2.9 DEMAND SIDE MANAGEMENT ("DSM")

2.617 Demand Side Management programs were introduced by Union in the 1990s and savings targets related to adoption of energy efficiency measures are in existence for measuring performance under these programs. These targets include customer participation measures with respect to various programs aimed at conserving gas consumption. The targets for reduced consumption have been reflected in volume forecasts for ratemaking in past rates cases. The Board-approved a Lost Revenue Adjustment Mechanism ("LRAM") to adjust for margins the Company loses if its DSM programs are more successful during the period after rates are set than was planned in setting the rates. Amounts accumulated for future disposition are recorded in the LRAM deferral account (179-75).

2.618 The Company proposed that DSM savings should be an SQI. The minimum standard for this SQI would be 75% of the target volume savings identified in Union's five-year DSM Plan. Performance would be monitored and an annual evaluation report would be prepared and provided to the DSM consultative group. The evaluation report would be audited by a third-party and the terms of reference for the audit would be provided to the consultative group for review.

2.619 Union also proposed to introduce a shared savings mechanism ("SSM") to provide a financial incentive/penalty mechanism. Union did not propose to establish a variance account for the operating budget for DSM activities ("DSM VA"). The framework proposed to implement this SQI is summarized in the following table:

SUMMARY OF THE COMPANY'S PROPOSED DSM FRAMEWORK	
Framework Element	**Proposed Policy**
(a) DSM Base Plan	EBRO 499 5-year DSM Plan (extended to 2004)
(i) Targets	Source: Base Plan, set once at the start of PBR period
(b) LRAM	To continue as it is currently operating (annual clearance)
(c) SSM	An incentive/penalty of 15% of the deviation from a pivot point of 75% of Base Plan Targets of societal net benefits (cumulative year-over-year; cleared at the end of initial PBR plan period)
(d) DSM VA	Not proposed
(e) Customer Review Process	Annual DSM Evaluation to be prepared by the Company and audited by consultant. DSM consultative-like process will be maintained.

2.620 While the Board has summarized parties' arguments on each component of the DSM framework separately, the Board's findings on the DSM framework are aggregated at the end of this section.

2.9.1 DSM Base Plan and Targets

2.621 The Company proposed to base its DSM framework on the DSM plan considered in EBRO 499, adjusted to remove year 1999 and add year 2004. The plan would be the basis for performance targets during the term of the PBR plan. The Company submitted that the construction of the 1999-2003 DSM plan was the result of significant effort and the DSM plan was thoroughly reviewed by a multi-stakeholder consultative group over a period of several years.

Positions of Intervenors - DSM Base Plan and Targets

2.622 GEC suggested that since the Board did not give unqualified approval to the 5-year DSM plan in EBRO 499, the Board may wish to indicate its views on the appropriate target level for DSM (even if it were not to approve an SSM).

2.623 Pollution Probe, GEC and Alliance argued for higher targets. CAC argued for higher targets if an SSM was to be in place, but was content to live with the existing targets if DSM was treated like all other SQIs and no SSM was approved. GEC, Pollution Probe and Alliance each argued for annual target setting. GEC also argued that an annual review and setting of targets would not mean that the whole plan was redone annually. Furthermore, GEC argued that an annual process might mitigate costs versus a retroactive assessment of a multi-year term, would promote market-responsive DSM activities, and would be more amenable to successful ADR.

2.624 Alliance and GEC proposd that targets for 2000 and 2001 should be set as a result of this proceeding. GEC proposed that pivot points for total resource costs ("TRC"), targets be set at $46.1 million for 2000 and $50.7 million for 2001. Alliance proposed that forecasts for 2000 and 2001 be reset to reflect annual increases of 10.0 10^6m^3 annually.

2.625 Pollution Probe noted that while some DSM targets have been the result of ADR negotiations, it had not endorsed the Company's proposed energy savings targets for the years 2000- 2004 inclusive.

Union's Reply - DSM Base Plan and Targets

2.626 The Company submitted that it conducted considerable analysis and consultation to develop the DSM plan and programs. The Company submitted "Mr. Neme's evidence noted by GEC and the Alliance that Union has a large untapped energy savings because of its low market share in the lost opportunities market does not support higher targets. However, there is no evidence in this proceeding that the consumers representing the lost opportunity would participate in Union's DSM

programs." Union noted that Mr. Neme did not provide an estimate of the proportion of the market that would be interested in Union's DSM initiatives and argued "the limiting constraint is the balance that Union has struck between the desire to produce societal net benefits and the business objectives and rate impacts, not a theoretical maximum achievable penetration of the lost opportunities market for energy savings." Union submitted there is no evidentiary basis for adjusting the existing DSM targets.

2.627 Union argued that while the Board might not have explicitly approved the DSM plan in EBRO 499 except for its impacts on 1999 rates, it would be wasteful if the Board were to require annual target setting, since annual target setting would require duplication of the DSM process each year and would be inconsistent with PBR. In the Company's view, the treatment of DSM savings as an SQI, including the SSM feature, makes annual resetting unnecessary. Union further submitted that the SSM would incent the Company to achieve an unlimited level of DSM savings without the need for annual target setting.

2.9.2 Lost Revenue Adjustment Mechanism

2.628 The Company proposed to continue employing the LRAM to adjust for variances the Company experiences in savings realized from its DSM program. LRAM is a revenue- neutral mechanism that is designed to keep the Company indifferent to the level of energy efficiency that is achieved.

Positions of Intervenors - LRAM

2.629 Alliance, CAC, GEC, IGUA and Pollution Probe supported maintaining the LRAM. No other intervenors commented.

2.9.3 Shared Savings Mechanism

2.630 Union submitted that historical levels of natural gas savings year by year are not sustainable throughout the DSM plan due to:

- the maturity of the programs and acceptance by the marketplace;
- the uncertainty that comes from economic cycles in the marketplace, technology evolution, competition between natural gas and electricity and the changing structure of marketing channels such as the HVAC firms and do-it-yourself stores; and
- competing management objectives.

2.631 Although the LRAM was designed to keep the Company neutral with respect to DSM-related savings, the Company argued that an SSM was also necessary to provide an incentive for Union to support its commitments to DSM during the initial term of the PBR plan.

2.632 The Company proposed that the SSM should be based on the volume savings target contained in the current DSM plan and proposed a pivot point of 75%. If actual DSM benefits (life-time net benefits based on the total resource cost test) are more than 75% of the target the Company would earn a 15% share of the incremental benefits and, if below the 75% target, a 15% performance penalty would apply.

2.633 The financial penalty or reward resulting from the SSM would be accumulated year-over-year during the term of the PBR plan. At the end of the PBR plan, the balance would be refunded to, or recovered from, customers as an adjustment in the Company's second generation PBR plan. Assuming a 5-year PBR term, the Company proposed that the rate adjustment information would be available for review in 2004, allowing the adjustment to be included in any rate change on January 1, 2005.

2.634 The Company argued that the SSM design recognizes the uncertainty in the marketplace, the need for some amount of consistency between the Company's approach and that of Enbridge Consumers Gas, the maturity of the DSM programs and the aggressive targets already incorporated into the DSM plan.

Positions of Intervenors - Shared Savings Mechanism

2.635 Alliance, CAC, GEC and Pollution Probe argued that the Company offered no analysis to support its claim that 1999 performance was unsustainable. GEC argued that Company’s evidence demonstrated that there was considerable room for highly cost effective improvement in DSM results, noting that $0.5 million of redirected effort in the last quarter of 1999 created more than $10 million in TRC net savings.

2.636 Alliance submitted that Union’s SSM should be denied for the following reasons: Union has achieved significant gas savings under its existing plan and, with a DSM VA, an SSM is unnecessary; the proposed SSM is “fatally flawed” because the term is too long to fix programs and set forecasts; the initial forecast fails to capture the lost opportunities markets; and any pivot point, other than 100% of forecast, is unacceptable.

2.637 Alliance took issue with the Company's proposal for an SSM in which ratepayers would reward the Company if it exceeded 75% of its forecasted DSM gas savings; and argued that the Board should not order an SSM in this PBR regime. In comparing the Company’s proposal with Enbridge's SSM, in which the pivot point is set at 100% and the incentive is 35%, Alliance determined that as long as the Company achieved 120% or less of its DSM forecast, its SSM is more advantageous than Enbridge’s.

2.638 Alliance proposed that if the Board determined that an SSM is necessary, the Company should be required to refile its proposal to provide for: more appropriate DSM forecasts for the PBR period, a pivot point at 100% of forecast, and an incentive/penalty rate of 15%, symmetrical around the pivot.

2.639 IGUA also rejected the Company's proposal for the approval of an SSM.

2.640 CAC stated that if the Board was content with the Company's current level of DSM activity then the base plan budget would suffice, and annual targets could be set through a consultative process and an SSM would not be necessary. However, if the Board wanted more DSM activity, CAC supported GEC's modifications to the Company's SSM proposal . If there is an SSM, the CAC argued that it was essential to clear the accounts annually to smooth the potential rate impact.

2.641 GEC's witness, Mr. Neme stated " If the Board has a choice of approving the SSM as proposed by Union or having none at all, I would choose none at all." Although GEC rejected the Company's proposal, it argued that an SSM is urgently needed, alleging that, without it, DSM performance would not improve. GEC' stated: "where no SSM is approved, but PBR is, the temptation to pocket OM&A budget of approximately $20 million over 5 years may be irresistible for the company." Therefore, it proposed the use of a revised SSM to incent cost-effective improvements in the delivery of DSM rather than reward the preservation of the status quo. With regard to the proposed 15% incentive/penalty rate, GEC referred to Dr. Bauer's testimony of relevant to how incentives should rise as programs mature and increased effort is required.

2.642 GEC proposed an SSM similar to Enbridge's with a pivot point at 100% of a reasonable target, and a higher marginal incentive/penalty rate of 35% symmetrically around that pivot. GEC cautioned the Board that the marginal incentive rate should only be increased if the Board determined that a significantly higher pivot point and annually reset targets were appropriate. GEC expressed concern about establishing an SSM for a five-year term, namely: inappropriate activities could be incented; recognition of new inputs could be gamed; inappropriate targets could lead to unfair rewards; and utility risk could rise. GEC's expert, Mr. Chernick, was unaware of any other utility with an SSM term greater than one year. GEC argued that annual clearing would not mute the incentive as the future stream of costs and benefits for the lifetime of each DSM installation would be discounted and included in the year it was installed; thus, multi-year efficiencies would be captured in a one-year SSM.

GEC also argued that there was no evidence to indicate that the Company's DSM plan would impose undue rate impacts; however, annual target resetting could keep incentives from "getting out of hand" and, with a raised pivot point, expected incentives would be constrained.

2.643 Pollution Probe argued that the Company should promote DSM or energy efficiency to reduce customers' bills, contribute to the Government of Ontario's Anti-Smog Action Plan, contribute to Canada's and Ontario's Kyoto greenhouse gas emission reduction goals, and contribute to achieving the energy efficiency objectives set out in the Act.

2.644 Pollution Probe also argued that the Company's SSM proposal was inconsistent with the objective of PBR , that is to make the Company's customers and shareholders both better off by rewarding the Company for superior performance. Further it is not the purpose of PBR to increase the Company's profits for merely achieving approximately the same level of performance that it would achieve under cost-of-service regulation. Pollution Probe argued that, under cost-of-service regulation in EBRO 499, the Company's commitment to reduce customers' bills by $192.5 million did not require any specific financial incentives, yet under its PBR proposal the Company has an opportunity to earn an additional $7.6 million for achieving similar DSM results.

2.645 Pollution Probe, noting that the Company's proposed incentive rate for DSM was actually a gross rather than a net marginal incentive rate for achieving incremental benefits, proposed a revised SSM with a raised marginal incentive rate from 15% to 35% in order to create an "alignment of interests between utility shareholders, customers and the regulator." To justify this increase, Pollution Probe quoted Dr. Bauer who stated that as the hidden costs of DSM measures tend to increase more than proportionally with net benefits, an increasing marginal incentive rate seems appropriate.

2.646 Pollution Probe also proposed a raised pivot point from 75% to 100%, arguing that the whole concept and purpose of a target was undermined if a party could achieve a very substantial reward without ever attaining the target. With regard to the Company's concern over business risk, Pollution Probe argued that the opportunity to earn superior returns comes with greater business risk. In response to the Company's concern over potential rate impacts, Pollution Probe argued that if a higher marginal incentive rate is combined with a higher pivot point and/or a higher DSM target, the net rate impact will not necessarily rise. Also, rate impacts are almost certain to be more than fully offset by the impacts on gas volumes due to economic growth, developments in generation, government policy, and other factors.

2.647 In the context of any potentially related PBR design option, Pollution Probe proposed that if the Board establishes an earnings sharing mechanism, the SSM incentive should be exempt from this formula to avoid double sharing or diluting the Company's incentive to aggressively pursue incremental energy savings and bill reductions for its customers.

Union Reply - Shared Savings Mechanism

2.648 In response to intervenors, the Company argued that, unless the Board finds that significantly more resources should be devoted to DSM by the Company, stakeholders and the Board, its proposal was reasonable and should be accepted. The Company argued that it was not clear what direction the Minister of the Environment's new initiative will take and what action, if any, will be sought of gas utilities or regulators. The Company also referenced the June 7, 2000 Minister of Energy, Science and Technology's directive noting that the facilitation of energy efficiency was not identified. Union further submitted that electricity distributors are not required to pursue DSM in accordance with the Electricity Distribution Rate Handbook, and that this demonstrated that the Board and the government have not indicated a desire for increased DSM activity. Also the Company argued that the Board must consider rate impacts, the public interest, and the interests of the Company and its shareholder.

2.649 In response to intervenor criticism of the proposed pivot point, the Company argued that its proposal to set the pivot point at 75% of DSM societal benefits was appropriate in light of how the 5-year targets were developed. The Company agreed to stretch targets, at the time they were developed, without penalties for falling short. It restated its expectation that the targets would not always be achievable during the 5-year period of the DSM plan due to a number of factors beyond the Company's control, including the timing of investment decisions made by industrial customers. Therefore, Union submitted that the 75% achievement level is a reasonable expectation of what could be achieved without significantly increasing resources dedicated to DSM. Finally, the Company submitted that if the Board is concerned that the 75% incentive level might be too low, a dead band could be placed around the pivot point. This would respond to concerns that the Company may be benefitting from a reward without having to exert considerable effort, and would respond to the Company's concern that the 100% level sets the applicability of the penalty at a point where the targets themselves are not consistently achievable.

2.650 In response to intervenor proposals to modify the SSM proposal, the Company argued that the cumulative impact of DSM during the proposed five-year period of the PBR plan exceeds $21 million from the LRAM alone; therefore, increasing the pivot or targets would result in greater DSM activity with a correspondingly larger LRAM impact. In addition, the incentive of the SSM, to the extent it results in a reward would also have a rate impact following the PBR period.

2.9.4 DSM Variance Account

2.651 The Company’s proposal did not include a deferral account for the operating budget for DSM activities. According to the Company, a deferral account is neither warranted nor needed, as it has had no impact on the Company's ability to meet its DSM natural gas savings commitments over the last four years. There is no reason to assume that the same situation would not hold over the term of the PBR plan.

Positions of the Intervenors - DSM VA

2.652 Alliance argued for the establishment of a DSM VA to discourage the Company from diverting resources away from DSM, noting that since 1995 the Company has underspent its DSM budget, especially in the industrial sector. Alliance maintained that DSM should be treated the same as the other SQIs and that with a DSM VA an SSM is not necessary. IGUA agreed.

2.653 GEC and Pollution Probe argued for a DSM VA in addition to an SSM, saying that all companies with SSMs, that Union is aware of, including Enbridge, also have VAs. They argued that the lack of a DSM VA would dampen the effectiveness of the SSM. The DSM VA would allow the Company to recover its prudently incurred DSM expenditures that exceed forecast, and ensure that its gross marginal incentive rate equals its net marginal incentive rate.

Union Reply - DSM VA

2.654 The Company argued that since the range of benefit-to-cost ratios for pursuing incremental DSM inherent in the Company's DSM proposal are all positive, such rewards are incentive enough to pursue incremental DSM such that a DSM VA is unnecessary. It further argued that DSM expenditures are just one component of the Company’s cost to manage, and that a DSM VA was inconsistent with PBR because under PBR the Company is incented to do more with less in the pursuit of greater earnings. The Company concluded that the only circumstance in which a DSM VA would be necessary, would be if the Board considered that an increased emphasis on DSM was appropriate and that higher targets were necessary.

2.9.5 Customer Review Process

2.655 The Company committed to produce an annual evaluation report, documenting the Company's DSM performance, continuing a process that began with the 1997 evaluation report. The report would be audited by a third party consultant and provided to the customer review process. In addition, the terms of reference for the audit would be provided to the consultative group for review. The Company stated that the traditional DSM consultative would continue under the umbrella of the customer review process.

Positions of Intervenors - Customer Review Process

2.656 Most intervenors expressed concern that the proposed customer review process might compromise the traditional DSM consultative review.

2.657 GEC argued it should be able to replicate the Company's results before either the SSM or LRAM account is cleared. Based on the EBRO 499 Settlement Agreement, as part of this application, GEC expected consultative development of SSM pre-filing requirements and asserted that the Company had not fulfilled its obligation. GEC argued that inputs and assumptions must be reviewed and audited annually to reflect market conditions and that their full disclosure is required in order to settle the SSM amount and clear LRAM, and that any unsupported portions of the claim should be disallowed or the penalty increased if the TRC result is below the pivot. GEC also proposed that the Board appoint an auditor to conduct an annual audit in accord with the nine points listed by Mr. Chernick in his evidence and/or direct the Company to seek an annual consensus filing of the parties to enable clearance of the LRAM and SSM accounts.

Union's Reply - Customer Review Process

2.658 The Company argued that the kind of detail requested by GEC was unprecedented compared with any other component of the Company's O&M budget. GEC is attempting to replicate all of the models and calculations of the Company. This level of detail is unnecessary precisely because an independent auditor reviews the Company's performance against the DSM plan. The Company provided assurances that the request for proposals and terms of reference for the auditor would be circulated to the DSM consultative through the customer review process and that an opportunity to comment would be provided.

2.659 The Company noted that it seemed evident from Mr. Chernick's nine-point scope that he was not familiar with the scope or intent of the Company's audit process. The Company affirmed that the scope of the audit used by the Company for its DSM audits encompassed most of the nine points identified by Mr. Chernick. The only points which the audit scope did not address, are item 4, which dealt with future planning and target setting, and item 5, which dealt with future research. The Company argued that these two items are planning activities appropriately conducted by the Company, and that the auditor is engaged to audit past performance against a previously determined plan, not to be engaged in the planning process.

2.660 With respect to Mr. Chernick's ninth point in GEC's proposed audit scope, the auditor is engaged by the Company because it is accountable for developing and implementing the plan. The Company submitted that it was unnecessary for the Board to appoint an auditor when the existing process results in an independent review of its performance. The Company argued that it is no more necessary for the Board to appoint its DSM auditor than it is for the Board to appoint the Company's financial auditor.

2.9.6 Board Findings - Demand Side Management (all sub-sections)

2.661 The Board notes that no intervenor supported the DSM framework as proposed by the Company, and that intervenors differed in their opposition to the various elements of Union's proposal . In particular, the Board notes the reservations of GEC's witnesses.

2.662 In its EBO 169-III Report dated July 23, 1993, the Board directed the three major gas utilities in Ontario to develop formal DSM plans according to guidelines set out in that Report, and to present these to the Board as part of their subsequent rate cases. In Union's EBRO 493/494 Decision, in March, 1997, the Board was not persuaded of the need for an LRAM or an SSM at that time. In the Board's decision concerning Enbridge Consumers Gas in EBRO 495 in 1997, an LRAM was authorized to keep the Company whole; however, the Board was not prepared to approve the introduction of an SSM at that time. Also in the Enbridge proceeding EBRO 497-01 in November 1998, parties settled on an SSM which the Board accepted subject to updates being required for other aspects of the Board's decision or "unforeseen events". In the EBRO 499 Settlement Agreement dated November 16, 1998, parties settled on an LRAM which the Board then accepted. There was no consideration of an SSM in the EBRO 499 Settlement Agreement. Rather, Union agreed to develop a PBR mechanism for DSM and file it as part of its PBR application.

2.663 The Board notes that utility DSM activities can affect distribution system load both for operational efficiency and for efficiency of investment in system expansion. Also, DSM measures may lead to reduction of air pollutants including greenhouse gasses, and to conservation of a possibly undervalued resource. However, the Board is concerned that a number of policy issues must be addressed within the context of Ontario's evolving energy market before approving a DSM framework like that proposed by the Company.

2.664 At issue, for example, is where the responsibility for the promotion and pursuit of DSM lies. The Board acknowledges that the facilitation of energy efficiency is one of the objectives of the Act, and recognizes that DSM measures may further such an objective. The Board also realizes that the Government of Ontario establishes energy efficiency policy and sets standards to be followed by energy market participants. The Board believes that the roles of all parties in this matter requires further examination in order to more clearly identify specific responsibilities for the Board.

2.665 There is also a question of the role of DSM within the context of a PBR plan, as well as its proper role with respect to the newly unbundled services of the utility. Given the integral relationship of DSM to the commodity, it is not clear how DSM objectives will best be met and whether there should be special treatment of DSM as an SQI for the unbundled service of distribution. There is a need for some further evidence that DSM measures and incentives can be properly balanced against the appropriate incentives for the utility under a PBR plan.

2.666 Moreover, there is a need to evaluate whether the distributor, while being charged with the responsibility for providing non-discriminatory access to services required to facilitate a competitive gas market, should at the same time engage in managing gas demand other than for reasonable efficiencies in the operation of the distribution system. There may also be a need to better understand the role of the distribution utility in DSM programs in relation to suppliers of energy services in the competitive market. In its evidence, the Company submitted that it had historically partnered with energy service companies, management firms, and end-use consumers to seek out opportunities to develop, market and implement programs and projects that promote energy efficiency; and that, as the marketplace changes, the Company's focus is shifting to working almost exclusively with channel partners rather than directly with end-use customers. The Company identified channel partners to include HVAC firms, homebuilders, architects and engineers, equipment suppliers and do-it-yourself stores. The demand for and delivery of utility-supported programs related to energy efficiency in evolving energy markets requires better understanding.

2.667 In light of these uncertainties, and lack of agreement among interested parties, particularly regarding the design of an SSM, the Board is not willing to approve the Company's proposed DSM framework. Until there is further review of certain matters such as the Board's review of energy efficiency in deregulated markets, and experience is gained with utility unbundling in the new energy arena, the Board expects the Company to continue its existing DSM programs and to only offer new programs if they can be established cost-effectively under its price cap plan.

2.668 Specifically, the Board accepts the Company's proposal that its current DSM plan be adopted as its Energy Efficiency Base Plan for the term of the PBR plan. The Board finds in agreement with the intervenors that the existing LRAM is appropriate to facilitate continued pursuit of energy efficiency, and directs that the Company continue with its current LRAM. The Board does not approve the Company's SSM proposal at this time. The Board accepts the Company's position that a DSM Variance Account is not consistent with a PBR regime. The Board recognizes that the DSM consultative process is the appropriate forum for developing DSM plans and programs. Also, the Board believes that the customer review process is the forum to seek settlement of the cost implications of such activities as they may affect rates.

2.669 With regard to the Energy Efficiency Plan, it is the Board's view that the Company is in the best position to strategically plan its course of action. With regard to the targets that frame that plan, the Board agrees with intervenors that an annual review would provide the Company with a more market-sensitive planning process and could cost less than an end-of-PBR term review. However, the Board relies on intervenor assurances that annual target setting should not require duplication each year of a full-blown energy efficiency planning process which would impede the customer review process or lend itself too readily to a requirement for annual adjudication by the Board.

2.670 The Board notes that GEC identified that there is a contradictory record on the definition of ‘net benefit'. The TRC test includes electricity and water savings; however, the Company claimed it does not take credit for these savings and proposed that the Board may wish to restate its expectation that the TRC used in the test should include all avoided costs. In light of the above comments concerning the status of DSM the Board does not believe it appropriate at this time for the Board to refine or redefine the components of the TRC.

2.10 ADDITIONAL RISKS AND BENEFITS

2.671 Union stated that it would face additional risks under its PBR proposal and that in exchange for managing these risks it required offsetting benefits. Union’s description of the additional risks and benefits are summarized as follows:

Pricing Volatility

2.672 Under cost-of-service regulation, ratepayers do not know what the rate adjustment will be until after the rates hearing is completed. Under Union’s fixed price cap plan, the maximum change in rates - exclusive of changes for commodity prices, pass-throughs, and non-routine items - will be known by customers in advance.

Asset Utilization

2.673 Under cost-of-service regulation, the Company forecasts the utilization of its storage, transmission, and distribution assets annually and, for the test year only, manages variances from forecast utilization. Unanticipated load loss in any test year, due to fuel switching or customers leaving the franchise area, can be reflected in the forecast submitted in the subsequent rate proceeding. In certain circumstances where the Company experiences unexpected load loss, e.g., bypass, the Company can apply to the Board during the test year to recover the revenue deficiency from other customers. In any case, under the current regime Union can, in any year, correct for variances from utilization forecasts in year..

2.674 Under its PBR proposal, Union assumes the risk from decreased asset utilization for the five-year term of the plan. Union submitted that these risks are substantial and heightened in the future, given: the Company's large sales volumes to industrial users with fuel switching capability; the adverse impacts of electricity deregulation on gas demand by final users and independent power producers; the threat of expropriation of utility assets by municipalities; and greater competition in the energy sector along with introduction of unbundled storage and upstream transportation services.

Costs of Adding New Facilities and Maintaining and Reinforcing Existing Facilities

2.675 Under the current regime, Union tests projects using forecasts of costs and revenues and proposes a program of capital expenditures at a rates proceeding. The Board-approved expenditures are then rolled into rates; the extent to which actual costs and revenues of projects are at variance with the forecasts can be incorporated in the next rates proceeding. Under its proposal, Union would manage the incremental revenue required to support project costs under the price cap for the term of the plan. At the same time, Union would make available storage to in-franchise customers at posted rates.

Declining Use Per Customer

2.676 Similar to the preceding item, under cost-of-service Union only has to manage the variance of actual use per customer with respect to the forecast for the test year, incorporating the variance by adjusting the estimate for the next rates proceeding. With the proposed price cap plan, Union would have to manage the variance within the parameters of the plan.

Delivery/Redelivery Toll Risk

2.677 Whereas changes in tolls for Storage Transportation Service ("STS") that Union buys from TCPL are currently passed through to customers under cost-of-service regulation, Union proposes to manage toll changes within the price cap.

O&M Expense Variances

2.678 Under existing cost-of-service ratemaking Union has to manage the variance of actual O&M expenses with respect to the forecast only for the test year, incorporating the variance by adjusting the estimate for the next rates proceeding. With the proposed price cap plan, Union would manage the variance within the parameters of the plan.

Changing Economic Conditions

2.679 Under existing cost-of-service ratemaking Union uses forecasts of economic conditions and customer growth as an input into the revenue and cost estimates used to establish rates. Variances are managed during the test year with estimates reset at the next rates proceeding. The impact of changing economic conditions are shifted to ratepayers in the long run. With the proposed fixed price cap plan, Union would manage the variances arising from changing economic conditions for the term of the plan unless the conditions trigger a review of the PBR plan.

Changes in Interest Rates Impacting on Debt Costs

2.680 Forecast interest rates are currently recovered in rates. Under the price cap plan, Union would assume the risk of incremental debt costs associated with fluctuating interest rates.

Changes in Depreciation, Property Taxes, Capital Taxes, and Income Taxes

2.681 Presently, these items are forecasted by Union and recovered in rates with the Company at risk for the test year variances but forecast levels are reset at the subsequent rates proceeding. Under its proposal, except for significant changes arising from an income tax change which would constitute a non-routine item, these would be managed by Union over the plan's term.

The Warming Trend in Weather

2.682 The present practice is to use a thirty-year rolling average of actual degree-days, updated at each rates case, to determine "average weather" for the purpose of throughput estimates. Under its proposal , Union would assume the weather-related risk for the term of the plan.

Additional Claimed Benefits

2.683 Union is seeking, as compensation for managing these risks, to appropriate all revenues from new services, the market-priced storage premium in totality, and any proceeds from asset dispositions.

Positions of the Intervenors - Additional Risks and Benefits

2.684 CAC's submission was that Union had not provided evidence to substantiate the claim of significantly increased risks and hence had not substantiated "a crucial underpinning for the price cap proposal." CAC further questioned whether risk assessment ought to affect the PBR parameters or approved ROE, citing the evidence of Mr. Fournier to the effect that if a utility asserts that under PBR there has been a change in its risk profile, the utility needs to lead evidence and offer expert testimony in support. CAC noted that Union had not done this. CAC further submitted that Union "in most cases, has substantially overstated the nature and extent of the risks it faces."

2.685 With respect to pricing volatility risk, CAC asserted that this risk mainly impacts consumers who face it through the pricing flexibility, pass-through, and non-routine components of Union's proposal and CAC added that it is the residential customer who is unable to mitigate these risks.

2.686 CAC contended that asset utilization risk refers to the risk of load loss which again CAC viewed as being exaggerated. In CAC's view, large customers are not likely to leave unless alternative fuel prices fall, a premise for which there has been no evidence. Furthermore, Union can retain these customers, and deal with bypass threats, through negotiated rates. In response to Union's position with respect to the risks posed by deregulation of the electricity sector, CAC quoted Dr. Bauer as follows: "contrary to the prefiled evidence, electricity deregulation often revitalizes natural gas rates, as new combined-cycle generating capacity is being built." CAC added that new cogeneration projects would increase load; further, the government's commitment to retain existing NUG contracts implies that existing load will be retained. Also CAC observed that there was no evidence to indicate that electricity rates would decrease as deregulation of the sector proceeded.

2.687 In respect of system expansion, CAC submitted that under the price cap there would be no incentive for Union to construct uneconomic projects and therefore the contention that Union faced a risk in this regard was unsupported.

2.688 CAC noted that the evidence of declining average use per customer was based on recent trends only; no evidence had been brought forward to indicate that the recent trend will continue in the future.

2.689 CAC took the position that there was no evidence that the risks outweighed the rewards with respect to changes in weather, managing O&M expenses, asset disposition, and bypass threats.

2.690 HVAC's position was that Union's risks under Union's proposal were minimal. HVAC submitted that Union's proposal had already factored declining average use per customer into the negative productivity factor resulting in higher prices to customers irrespective of whether declining use was experienced.

2.691 IGUA reiterated that it was inappropriate for a PBR design to include "upfront enhancements" to the Company such as: exclusion of an adjustment for 1999 normalized actuals; inclusion of pass-through items in the delivery revenue base; increasing rates to recover past UFG variances; and employing 1999 volumes to calculate unit costs related to future pass-throughs. Further, IGUA claimed that Union's requests for compensation in exchange for the risks they would have to manage under the plan were more appropriate to a multi-year cost-of-service filing. IGUA also stressed the benefits to Union's shareholders of a price cap plan that was implemented based upon the Company's current level of performance including the following items: an excess of $14.6 million over the term of the plan due to debt costs embedded in rates above estimated debt costs incurred; the compounding effect of the price cap on depreciation expenses and preferred share capital costs which will not change during the term of the plan; expected increased throughput of approximately 1.6% in 2000 and a further 16-25 Bcf when the Sarnia Generation Project begins operating; colder than normal weather (which IGUA asserts is statistically more probable); increased asset utilization; partial pass-through treatment; and non-routine adjustment protection.

2.692 IGUA argued that if the proposed plan is more risky than the current regulatory regime then Union's proposal will be more costly and should be withdrawn. IGUA urged that the Board reject Union's right, under Union's proposal to seek an increase in its return on equity to reflect an increased risk premium.

2.693 Kitchener submitted that the applicant had not met the evidentiary burden of demonstrating that its risks would in fact increase under the proposed price cap plan. In this regard, Kitchener, quoted Dr. Bauer's testimony as follows.

> ... I'm not convinced that actually the argument that Union has to operate on an increased risk under the price cap regime is correct. And I find the evidence to highlight some of the doubts that I have, and, in my view, for every argument made by Union in favour of an increased risk, one could bring up an argument in favour of a reduced risk or not an increased risk ... that is in part due to the fact that there is simply a lack of evidence and a lot of this argument is based on assessments, expectations, and we may differ in our expectations. So I think it's doubtful whether such an increased risk situation will occur.

2.694 Kitchener argued that the evidence did not allow any conclusions to be reached with respect to changes in risk due to unbundling or the PBR plan. Kitchener noted that Union had not addressed, in the pre-filed evidence, possibilities of greater asset utilization arising from electricity deregulation resulting from opportunities for off-peak utilization in conjunction with distributed generation.

2.695 Kitchener also observed that Union did not file evidence with respect to cost estimates of developing new storage and its impact on storage costs embedded in rates. Nor Kitchener added, did Union take into account incremental revenues that will accrue to the Company from renewing ex-franchise storage at market rates and the long-term storage premium. Kitchener submitted that the risks associated with economic expansion were under Union's control and, due to the change in investment philosophy under the plan, were risks that will tend to decrease.

2.696 Kitchener asserted that the Company has had experience with risks related to use per customer and warming weather trend and therefore these risks are lower presently than they were in the past.

2.697 Kitchener commented that pricing volatility is a customer risk citing evidence that over the past five years the M9 class has faced rate increases of 1.1% per year on average whereas under Union's proposal M9 customers face increases of from 2.9% to 3.8% per year.

2.698 In conclusion, Kitchener submitted the evidence did not provide a basis for altering the existing sharing mechanisms, altering treatment of revenues from new services, or granting the Company the full premium from renewing ex-franchise storage at market rates.

2.699 LPMA, MECAP, and WGSPG, citing the testimony of Mr. Fournier and Mr. Johnson, argued that if Union believed its risks were changed under its unbundling/PBR proposal, then the Company should have brought forward evidence to buttress this conclusion. LPMA, citing Dr. Bauer's testimony, argued that if Union believed its risks were increased in moving to incentive regulation, the appropriate method to adjust for this increase in risk would be by incorporating the risk effect into the ROE, in which case the question of whether the benefits of such a change in regulatory regimes outweighed the costs should be tested. LPMA expressed the view "that based on the evidence, or lack thereof, there is no basis to accept Union's position of increased risks."

2.700 LPMA also provided a calculation to show that the negative impacts on the Company of warming weather and decreased use per customer of the M2 rate class could be "totally mitigated" by an increase in the fixed monthly charge of 30¢.

2.701 OAPPA commented that one of the key outcomes of this proceeding should be that "the implementation of unbundling and PBR results in a fair balance of the risks and rewards faced by all customers of the utility".

2.702 Schools' view was that the design of a price cap plan should incorporate inflationary and competitive forces industry-wide, arguing that Union's focus on risks and benefits was not an appropriate consideration in plan design. Schools also criticized the lack of expert evidence in support of Union's position that it faced increased risks under PBR. Schools, disagreeing with Union's contention that the risks to the Company were large under Union's proposal , submitted that Union was "in a no lose position, at the expense of ratepayers."

2.703 With respect to Union's claim that deregulation of electricity posed a threat of load loss, Schools argued that underutilization of Company assets did not pose a very great risk. Schools cited the Sarnia project, the conversion to gas and planned sale of Lennox, the Windsor District Heating Project, and the Thunder Bay Regional Hospital/Lakehead University Project, as examples of planned projects which will increase the demand for natural gas and hence increase the demand for natural gas distribution assets. In addition, Schools noted that these projects were less costly and more profitable than expanding to new communities.

2.704 Schools observed that the provincial government has guaranteed that NUG contract volumes will be purchased. In addition, Schools commented that some NUGs will be able to negotiate increases in production with the Ontario Energy Finance Authority.

2.705 With respect to Union's stated concern over fuel switching, Schools commented that oil and gas prices tend to move in tandem, inferring from this that displacement of gas by oil was unlikely.

2.706 Schools argued that throughput volumes will tend to increase and therefore will tend to increase earnings under a price cap. Even if output growth does not outweigh conservation effects, Schools observed that were an SSM in place the Company could make extra profits as a result of more efficient use by customers.

2.707 Schools argued that, under Union's proposal , Union would likely retain control of most of its storage assets for system integrity and bundled service, and therefore was skeptical of Union's claim that the $5 million of transactional service revenue currently embedded in rates is at risk.

2.708 Schools argued that Union would gain $14.6 million in benefits by refinancing long-term debt at lower rates over the term of the proposed price cap plan. Schools added that Union historically has over-forecast municipal and capital taxes noting that the Board-approved amount of these taxes in EBRO 499 exceeded the actual amount by $4 million.

2.709 Schools also cited the evidence that indicated that unit labour costs are forecast to increase "less than 2% over the term of the plan."

2.710 Schools argued that there would be minimal impact of not annually adjusting the 30 year rolling average used to calculate heating degree days, since the evidence showed that while the last two years had been warmer than normal, five of the previous six years, 1991-97, had been colder than normal.

2.711 Schools argued that Union's proposal to award revenues from new services and from asset dispositions to shareholders represent a change from historical practice that is unrelated to a change in regulatory regimes from cost-of-service to PBR.

2.712 Finally, Schools commented that it was in their view unlikely that the Company would suffer a loss of a major franchise but, in the event that it occurred, it could be dealt with by an off-ramp.

2.713 VECC submitted that the risks that Union listed were conjecture and not supported by the evidence, citing Dr. Bauer's testimony to the effect that increased risk under Union's proposal is doubtful. VECC argued that there are potential benefits to the Company under its proposed price plan.

2.714 VECC noted that Union chose a fixed price cap plan and the Company argued that it was exposed to an increased risk resulting from this choice. VECC argued that voluntarily accepted risks are undeserving of compensation.

2.715 VECC proposed that the only appropriate way to address the uncertainty associated with the PBR plan is through implementation of an earnings sharing mechanism, citing the evidence of Drs. Hemphill and Schoech.

> ESMs are more attractive when there are substantial uncertainties over the appropriate values of price cap plan parameters, especially the X factor. Under a pure price cap plan, these uncertainties can

potentially lead to unacceptable high or low profits for the regulated firm.

2.716 VECC noted that Union's experts testified that Union's unbundling and restructuring initiatives were not taken into account in calculating the X-factor. In addition, Union's witnesses indicated that the calculated X-factor did not incorporate Centra Gas data, the removal of affiliate services, or more recent years' data with respect to the merged utility, all of which VECC used in support of their proposal for an ESM.

2.717 VECC concluded by arguing that strong incentives exist for shareholders even under a 50:50 sharing of excess earnings and, "[i]n any event, the risks of getting the price cap wrong far exceed the speculative claims of the presence of a disincentive".

2.718 Alliance, AMO, CEED, Comsatec, Enbridge, Energy Probe, Enron, Fullerton, GEC, Pollution Probe, and TCPL did not comment.

2.719 CENGAS supported Union's proposal.

Union's Reply - Additional Risks and Benefits

2.720 Union submitted that many of the risks the Company faces such as a fixed inflation factor for five years, no capital additions adjustments, no annual adjustments for declining use per customer or warming weather, are "self evident" rendering it unnecessary to lead expert evidence. Union added that its own witnesses "who manage risk on a daily basis" are "more credible for their areas of expertise than outside experts."

2.721 Union submitted that, ratepayer risk would decrease under its proposal because the Company would assume some risks for the whole term of the price cap plan, whereas under cost-of-service these risks were borne by the Company only for the test year between annual rate resetting.

2.722 Union disputed that asset utilization risk would be minimal, arguing that new cogeneration loads are speculative and, if they materialize, require costs to “pursue and attach”. Union also noted that these loads tend to require their own specific distribution connections and so do not assist with respect to distribution system utilization in the face of decreasing distribution asset utilization by existing customers. Union added that decreasing average use in the residential class results in loss of high margin load whereas the new industrial cogeneration loads are low margin.

2.723 Union asserted that unbundling would lead to loss of control of storage assets, impeding Union’s ability to generate transactional revenue.

2.724 Union disputed Dr. Bauer’s assertion that the risk of additional warm weather does not seem significant. Union cited the evidence of Mr. Fogwill that Environment Canada and the U.S. National Oceanographic Atmospheric Administration expect warmer than normal weather in 2001. Union said that the evidence supported its contention that the risk of warmer than normal weather was a major risk faced by the Company. Union referenced the evidence to the effect that because of the warmer weather, Union had lost more than $100 million in margin over the 1998-2000 time period and more than $90 million in margin aloneover the last ten years.

2.725 Union also noted that their asset utilization was very high and hence the potential for decreased utilization exceeded the potential for increased utilization.

Board Findings - Additional Risks and Benefits

2.726 In exchange for managing risks (and costs) associated with pricing volatility, asset utilization, costs of adding new facilities and maintaining and reinforcing existing facilities, declining use per customer, delivery/redelivery toll risk, O&M expense variances, changing economic conditions, changes in interest rates impacting on debt costs, changes in depreciation/property taxes/capital taxes/income taxes, and the warming trend in weather, the Company is seeking as compensation revenues from new services, market priced storage, and proceeds from asset dispositions.

2.727 With respect to pricing volatility risk, the Board notes that the most significant factor contributing to price volatility is the commodity price. The Board further notes that volatility in delivery rates has not recently been a source of concern. It is not clear to the Board that the pricing volatility experienced by end-users would decrease under Union's proposal, nor that pricing volatility under the PBR plan would increase the risk to Union's return.

2.728 Regarding the costs of adding new facilities and maintaining and reinforcing existing facilities, the Board understands that these items continue to be under the control of the Company. For expansions, the risk of additional costs not covered by additional revenues may be mitigated by contributions in aid of construction. In the case of maintenance and reinforcement of existing facilities, to the extent that the costs of these activities are not already provided for in the base rates, the additional costs, and the carrying costs on any additional costs that may properly be capitalized, appear to be the type of costs for which the price cap formula is designed to handle under PBR.

2.729 The Board is not persuaded that changes in delivery/redelivery toll charges ought to be treated any differently than, for example, the TCPL FT tolls underpinning system gas sales. The Board believes that any material variance should be treated either as a pass-through or a Z-factor.

2.730 Concerning delivery/redelivery toll risk, the Board notes the evidence of Mr. Birmingham that he was unaware of any particular proposals of TCPL for a change in its storage transportation service toll. While the Board understands that Union will be managing the risks within the PBR price cap, on the basis of Mr. Birmingham's statement, it appears the risk for the trial PBR period may not be large.

2.731 The Board considers that material changes in property taxes, capital taxes, or income taxes are properly considered as Z-factors and notes that, in the case of income taxes at least, there is a reasonable expectation that these will decrease over the term of the plan.

2.732 With respect to changes in depreciation, given that the Company has some discretion in its choice of accounting conventions and given that the Company also has some discretion with respect to changes to the rate base (additions and removals), and in light of the magnitude of the existing rate base, the Board is not convinced that the acceptance of this risk by the Company is deserving of additional compensatory revenue. To the extent that depreciation expense is already a significant component of base rates, the application of a price cap provides additional revenue which is not required to cover straight line depreciation on existing plant. Furthermore, there is a reasonable expectation of volume growth which will produce additional revenue.

2.733 Under its proposal, the Company is at risk for O&M expense variances over the term of the PBR plan and, to this extent, the Company's risk is increased over the level that it would have faced under yearly cost-of-service regulation. However, so are its opportunities. The Board understands operating cost reductions to be one of the essential benefits of a PBR plan from which the shareholder will receive its rewards. It is common ground that the risk of operating cost increases, if any, is borne by a utility under a PBR plan.

2.734 The Board recognizes that under its proposal Union faces risks associated with asset utilization, declining use per customer, changing economic conditions, interest rate changes impacting on debt costs, and the warming trend in weather that may exceed the risks the Company would have faced under traditional cost-of-service regulation. The Board believes that the net effect of these risk factors is likely to be positive to the shareholders rather than negative.

2.735 The Board notes that, in addition to revenues resulting from the application of the price cap, the Company will receive revenues from the long-term market storage premium, the renewal at market rates of storage contracts for ex-franchise customers, and pricing transactional services at market-based rates. In this regard, the Board also notes that the Company may benefit from the development of new service offerings brought before the customer review process, and may also benefit from certain asset dispositions, subject to Board approval. Finally, in the Board's view, the short term of the trial PBR, the annual inflation adjustment, the earnings sharing

mechanism, and the off-ramp for poor financial performance, in combination, mitigate any potentially negative impact of the additional risks cited by Union.

2.736 Hence, the Board does not approve Union's request for additional compensation beyond what has been provided elsewhere in this Decision.

2.10.1 Reporting and Monitoring Requirements and Customer Review Process

2.737 Union proposed to institute an annual customer review process for the purpose of reviewing with intervenors, and if possible resolving, adjustments required for the setting of rates for each subsequent year of its PBR plan and for the review of other matters.

2.738 Union proposed to provide an information package to parties participating in the customer review process in June of each year over the term of the PBR plan, the package to include proposals for non-routine adjustments, potential gas cost changes, forecast balances in the deferral accounts and proposed dispositions if any, formula-based pass-through items, a report of the Company's SQI performance, and actual financial results with respect to the prior year's financial performance. Union would seek consensus on this package, referring contested items to the Board for adjudication. Union would follow the June package up with an October informational package in each year which would contain items on which consensus had been attained, Board decisions, formula-based ROE adjustments, deferral account dispositions, and a demonstration to parties that the proposed rates were consistent with the approved plan.

Positions of the Intervenors - Reporting and Monitoring Requirements and Customer Review Process

2.739 CAC submitted that the information provided by the Company would be critical, arguing that in addition to Union's proposals, detailed high-level cost information sufficient to support rebasing, was necessary. CAC also urged that the provision of information include: revenue-to-cost ratios to allow parties to monitor cross-subsidization; cost and service information on affiliate transactions; and information to track and compare costs with respect to restructuring. CAC stated that although a formal interrogatory process would not be necessary, CAC welcomed Mr. Birmingham's agreement that a written process be incorporated into the customer review process. CAC submitted that Union should be compelled to provide information requested. CAC urged that, so far as possible, the Board specify in advance the information that the Company will be required to provide and, in the event of a disagreement on informational requirements between Union and parties, the Board should adjudicate.

2.740 CEED argued that all participants should be able to propose issues for the customer review process with the Board adjudicating in cases of disagreement. In addition, CEED submitted that it was "crucial" that the review process include a full interrogatory process and transcription of the proceedings, since these elements would assist in developing a full discussion, provide a record for the Board, and help to avoid unnecessary applications to the Board to get Company information. CEED also argued that the unbundling of other services would be hindered if the price-cost connection is lost.

2.741 Mr. Fullerton expressed concern that the customer review process proposal lacked "detail and specificity", adding that how the customer review panel was selected, their terms of reference, and their rights and responsibilities should be established. Mr. Fullerton urged that the Board "require Union to provide a detailed structural plan setting out exactly how the CRP will be formed and how it will function."

2.742 HVAC noted that where market comparables are unavailable, the Affiliate Relationships Code, although it does not specify the costing basis, has provided for a cost-plus approach to be utilized for transfer pricing, including a return on invested capital. HVAC submitted that it was only by "an historical accident" that Union has avoided an express direction from the Board to use fully allocated costs when undergoing non-utility eliminations, citing in support:

- the EBRO 493/494 Decision in which the Board found the fully allocated costing methodology to be appropriate for non-utility eliminations and said "[t]he methodology may also be appropriate for analyzing the impact on rates of ancillary programs within the Utilities and activities involving the use of Utility resources by non-regulated affiliates.";

- the EBRO 495 Decision in which the Board directed ECG to use fully allocated costing for ancillary programs and non-utility eliminations (upheld in EBO 179-14/15 and EBRO 497);

- the EBO 177-17 case involving the separation of Union's ancillary businesses where Union used fully allocated costing for its non-utility eliminations (but marginal costing for its ancillary programs); and

- the EBRO 499 case in which Union agreed as part of the settlement agreement to use fully allocated costing for its non-utility eliminations and for transfer pricing for services provided to affiliates.

2.743 HVAC urged that the Board direct Union to determine transfer prices in accordance with a fully allocated costing methodology.

2.744 IGUA stressed the need for intervenors to gain experience with Union's operations under the price cap plan to enable parties to discover what the requisite informational needs are in order to provide a transparent customer review process. In order to permit parties to observe the level of utility achievement and the benefits to ratepayers and shareholders under the plan, to monitor the impact of pricing flexibility on revenue-to-cost ratios, and to allow pass-through costs to be calculated and recovered based on throughput volumes in the year the pass-through costs are incurred, IGUA submitted that the information provided by Union should include the following:

- all information necessary for customers to monitor an earnings sharing mechanism;

- segregation of the historic price cap and S&T revenues information such that they can be reconciled with the Company's proposed format of adjustments to base revenues and base rates;

- information supplementary to the historic information indicating customer class specific revenues and costs with delivery and gas commodity costs broken out separately with the revenue-to-cost ratios in a format similar to the EBRO 499 Rate Order;

- in the June package, bridge year information similar to the requirements preceding on a three plus nine month basis and to permit calculation of pass-through costs based on current year throughput and also including sufficient customer class specific information to calculate bridge year revenue -to-cost ratios for comparison with historic values;

- in the October package, prospective year information comparable to the historic and bridge year information requested above along with cost allocation summaries to show the impact of pricing flexibility on revenue-to-cost ratios with performance measured with respect to

budgets and expectations. IGUA argued that proper monitoring of performance requires prospective year budget information; and

- with the October package, "until some experience is gained with the sensitivity of the revenue proof to be provided by the Company to demonstrate compliance with the price cap, the Company ought to be directed to provide with its October package, revenue proofs which are based on historic volumes, bridge year volumes and prospective year volumes."

2.745 Kitchener submitted that monitoring serves to ensure that the approved price cap plan is operating as expected and yielding just and reasonable rates. Kitchener cited sections 106 - 112 of the Act as giving the Board powers respecting the acquisition of information for the purpose of discharging its oversight responsibilities. Kitchener asserted that the Board's decision in this proceeding would not limit the scope of information it receives in the future. Kitchener argued that the requisite information in this case should show whether the Company or its customers are advantaged or disadvantaged, and that, in Kitchener's submission, such requisite information is the cost allocation study typically filed in rates hearings. Kitchener's position was that this is the best information to determine whether there has been interclass subsidization and, according to the evidence, has a cost of $246,000 which Kitchener submitted is "a small price to pay for the benefits provided."

2.746 Kitchener asserted that to show the advantages and disadvantages to the Company, the following information should be provided: annual utility financial performance including O&M costs versus the previous year; ROE for the current year and previous year; and rate base changes.

2.747 Kitchener asserted that to show the advantages and disadvantages to the customer, the following information should be provided: full annual class cost-of-service study; five-year delivery rate comparisons; and an annual SQI report.

2.748 With respect to the customer review process, Kitchener accepted Union's proposals as a starting point subject to process changes, if warranted, after experience is gained. Kitchener argued that the process should include a review of whether the plan is working fairly and not be limited solely to a determination as to whether the proposed rates are consistent with the plan.

2.749 LPMA, MECAP, and WGSPG accepted Union's proposed timetable for the process but argued that, in order to enable participants to review proposals unencumbered by a lack of information, an interrogatory process be included. This would help to avoid a number of issues going to the Board simply due to a lack of information provided by the Company. LPMA also submitted that the customer review process itself be a subject of review in the customer review process to allow for improvements as parties gain experience.

2.750 Schools stressed that it was important for the sake of credibility to review the earnings of the Company, to track utility costs and revenues, and to monitor the relationships for each rate class. Schools argued that in addition to the information that Union has indicated it will provide, the following should be included for the October package: information formatted similar to that filed at Ex. B T4 S1 pp. 1-2 (showing rate adjustments by rate class) along with a statement of Union's application of rate-making principles in the recovery of incremental revenues harvested from each rate class; forecast balances in deferral accounts and proposed dispositions; and potential gas cost changes and related pass-through items.

2.751 For the June package, Schools submitted that the following be included: stranded costs for which the Company seeks recovery; report on the past year's SQI performance and a list of new proposed SQIs; information in the format of Ex. B T2 Appx H, S 1-10 inclusive, with the PIs included for capital projects shown in Schedule 10; a detailed statement of non-utility eliminations; information on new regulated services; a list describing new services that Union plans to introduce, describing and classifying each service according to whether Union considers it competitive or regulated and, if competitive, providing the rationale regarding the appropriateness of the Company offering it and reviewing any cross-subsidy issues

which may arise; current year actual and budget information in a format similar to G2.4 p. 2; aggregate data with respect to negotiated prices and volumes, including the number of contracts and rate classes affected; and information to support the compliance of any affiliate transactions with the Affiliate Relationships Code.

2.752 For both the June and October packages, Schools' position was that the following information should be provided: Z-factor information including a rationale for allocating any credits or costs; and a report on the balances in the storage market premium and transactional services deferral accounts, both of which Schools has argued should be retained.

2.753 VECC concurred with other parties that basic information such as revenue-to-cost ratios by rate class be provided so that parties could ensure that there was no cross-subsidization and that principles of cost causality were being adhered to under the PBR plan. VECC added that this information should be provided annually but, even if it were not, the Company should be required to track it so that at the end of the PBR plan there would be a useful informational basis upon which rates could be rebased. VECC cited the testimony of Dr. Bauer in which he stated:

> I am not aware of any definition of cross-subsidization that does not use costs as a reference point.

2.754 VECC supported other parties in their request for the inclusion of an interrogatory process to assist parties in their understanding of issues prior to the actual customer review meeting and, hence, to assist in settlements and expedite Board approvals.

2.755 Alliance, AMO, Comsatec, Enbridge, Energy Probe, Enron, GEC, OAPPA, Pollution Probe, and TCPL did not comment.

2.756 CENGAS supported Union's proposal.

Union's Reply - Reporting and Monitoring Requirements and Customer Review Process

2.757 Union's position was that the information package as proposed in Ex. G 10.3 is fully adequate to administer the price cap plan.

2.758 Union disagreed with VECC's submission on the necessity of providing detailed cost information and cost-of-service rebasing at the end of the price cap plan, arguing that Dr. Bauer testified that the competitive market drives prices towards industry costs and not towards the prices of an individual firm. Union claimed that its proposal to use industry productivity and price data for the second generation plan will ensure that rates are tied to the industry's cost structure so that a specific cost-of-service rebasing based on firm specific data will not be required.

2.759 With respect to CEED's position on the reporting of price-cost relationships to facilitate unbundling of services such as metering and billing, Union indicated that these are not currently services that are provided by Union, rather they are "utility functions provided as part of the storage transportation and distribution services that Union offers." Union asserted that, while it had no plans to unbundle metering, it had filed an application to allow small volume customers to access unbundled metering and billing services through their REMs. Union stated that it will file the evidence necessary, including cost information, to support this initiative. Union argued that it was unreasonable to institute a permanent reporting requirement to support an application that the Company might bring before the Board.

2.760 Regarding parties' requests for additional financial information to be provided annually throughout the PBR plan term, Union submitted that the requests were "unnecessary and counterproductive", since PBR entails setting rates based on rules clearly stated in advance, thus making unnecessary a detailed review since all that is required is to check for compliance with the rules.

2.761 Union characterized the request for revenue-to-cost ratio information as amounting to "remaining in a cost-of-service framework while imposing on the utility the higher risks associated with accepting the PBR conditions." Union added that the desire for information beyond what is required to demonstrate compliance with the plan will divert Company resources to the task of providing such information likely at the expense of Union achieving regulatory cost savings.

2.762 Union also noted that in RP-1999-0001 the Board had ruled that Enbridge was not required to provide details on its O&M expenditures which were subject to a targeted PBR formula.

2.763 With respect to HVAC's submissions on affiliate transactions, Union responded that the existing rules governing these transactions are sufficient and that they should not be amended through utility proceedings as they may not affect all gas and electricity utilities similarly; if any party feels otherwise, Union suggested that the appropriate course is an application to the Board to amend the code.

2.764 Regarding REM issues addressed by CEED, Union observed that it has Company representatives "designated to deal solely with REM customers" and to whom any issues may be brought. Union stated that the customer review process was suited to addressing issues specific to its PBR plan, not matters which could be handled through other channels. Union added that with respect to CEED's concern for timely resolution of issues, the Company's position was that issues with respect to service be brought forward for resolution when they occur. In respect of SQIs, Union argued that a mid-year assessment is inappropriate since the SQIs are annual average standards.

2.765 With respect to parties' arguments in support of interrogatories, transcription, and procedural remedies, Union submitted that these protections are available when applications are brought to the Board and "it is premature to require their use in advance of knowing whether any issue need be adjudicated by the Board."

Board Findings - Reporting and Monitoring Requirements and Customer Review Process

2.766 The Board accepts the concept of the customer review process as a vehicle to disseminate information to stakeholders and to seek acceptance and consensus where possible.

2.767 In the Board's view, a regulator of prices for services offered under conditions of monopoly or market dominance must understand the operations of the provider of such services and have knowledge of the key service parameters on an ongoing basis. A regulator must have this knowledge in order to understand when changes in parameters and financial outcomes are reasonable and are within the bounds of normal behaviour and management's exercise of its discretion. At a high level, a regulator must be able to evaluate when revenues for a service are out of line with costs (be they embedded costs or other relevant costs) and, at a utility-wide level, when revenues have become inappropriately high or low and intervention by the regulator is required to change rates. A healthy customer review process with sufficiently knowledgeable and informed parties may reduce the need for intervention by the regulator and permit lighter-handed regulation.

2.768 The Board notes that currently under the traditional cost-of-service regulation Union files, quarterly, financial information for the year, showing statements of income, rate base and cost of capital and an indication of financial performance, with the Energy Returns Officer. Union also files comprehensive information in support of any rate application.

2.769 Given that the Board has introduced a new regulatory framework, the filing requirements need to be defined. In defining the filing requirements the Board must balance the value of the information requested against the costs of providing it. The Board accepts, as a starting point, Union's undertaking to provide certain information to the customer review process. However, the Board believes the filing of additional information is required in order to properly administer the PBR plan.

2.770 In making its determination the Board has considered the views of the parties and other factors. In addition to the information that Union has already agreed to provide, the Board directs Union to file with the Board and in the customer review process, information on revenue-to-cost ratios for rate classes, financial information segregated by line of business, and information necessary to effect the earnings sharing mechanism. The Board expects the Company to consult with Board staff to develop the particulars for the presentation of the information.

2.771 The Board views these information requirements as the minimum for the administration of the PBR plan. The Board notes that Union currently provides information, such as in the DSM consultative and requirements under EBO 188. The Board expects this to continue. In addition, the Board may require Union to file additional information from time to time.

2.772 In the Board's view the customer review process should include the following steps and target time frames:

- the Company would submit a "late June information package" which would include proposals for non-routine adjustments, potential gas cost changes, actual and forecast balances in deferral accounts and any proposed dispositions of same, information on the utility's prior year financial performance, information for the calculation of earnings sharing, customer class-specific cost information including revenue-to-cost ratios, formula-based pass-through items, and an SQI performance report;

- the Company would file information on new regulated services and on services under negotiated prices, in a manner and at a level of detail as undertaken by Union or as further developed in the customer review process;

- the Company would attempt to seek consensus with parties in July;

- the Company would file a report with the Board by the first week of August identifying the consensus achieved and specifying issues requiring Board adjudication, including stakeholder positions on the outstanding issues;

- a Board decision on the issues would be issued;

- Union would then file an "October rate package" incorporating the Board's findings and providing revisions and further detail in respect of treatment of dispositions of deferral accounts, and a detailed demonstration that its proposed rates are consistent with the plan;

- stakeholders would have an opportunity to comment and/or to make submissions on the rate package; and

- in the event of no major unanticipated issues to be disposed of by the Board, the Board would approve a new rate order.

2.773 The Board notes that, as with a settlement under the ADR process, any matter that requires an order of the Board, whether resolved in the customer review process or not, must be properly brought before the Board for disposition.

2.774 This timetable will only work if the tight timelines are adhered to. This will require complete filings by the Company to ensure stakeholders have adequate information on which to perform analysis, make comments, and reach agreement. Further, parties will have to be comfortable that the process and the plan results are fair. In the absence of these conditions, the Board doubts that there will be sufficient time to hear disputes, issue a decision, and have new rates in place for January.

2.775 The Board recognizes that due to the timing of this Decision, Union will have to apply an expedited schedule in 2001, including a limited customer review process, to establish rates.

2.776 The Board directs Union to file with the Board a plan for implementation of this Decision.

2.11 SECOND GENERATION PRICE CAP

2.777 Union proposed that the price cap plan be extended for a second generation with the onus of proof on other parties should they advocate that the price cap plan be abandoned.

2.778 Union's position with respect to the plan's parameters for the second generation was that the Canadian GDPPI be used as the inflation factor and a Canadian gas distribution industry standard be used for the productivity offset. Union also submitted that pricing flexibility be retained in the second generation plan.

2.779 Union indicated that their expectation was that the second generation plan would be reviewed commencing in the customer review process in early 2004 in an attempt to achieve consensus.

2.780 Union submitted that it would be neither desirable nor necessary to rebase using a cost-of-service methodology after the term of the plan has expired, arguing that benefits from PBR accrue in part due to the financial rewards to the utility for improved performance and the delinking of prices and costs for the PBR term. Union submitted that monopoly power is constrained and fairness ensured by the price cap. Union asserted that "if the parameters are right, there will be no need to return even briefly to a cost-of-service model. Union committed to develop, during the PBR term, industry-based total factor productivity data to allow industry performance measures to be used in the second generation plan. Union asserted that the focus for the second generation price cap plan should be a review of parameters and revisions for the purpose of fine-tuning the first generation PBR plan.

Positions of the Intervenors - Second Generation Price Cap

2.781 AMO urged the Board to leave all options open and due to uncertainty, not to commit to any second generation price cap plan.

2.782 CAC observed that Union's proposed PBR plan, if approved, would become the first comprehensive PBR plan for a gas utility in Ontario and the environment in which it would operate is not steady state. CAC took exception to Union's position with respect to the delinking of prices and costs citing Dr. Bauer that, only if the market is effectively competitive, variations between costs and prices are of no concern. CAC submitted that there should be no automatic adoption of a second generation price cap plan and that, prior to adoption of any second generation plan, an extensive review would be necessary. CAC urged that, if the Board finds the price cap plan to have been effective, new parameters for the next generation should be developed through an open process. CAC submitted that a full cost-of-service study be carried out at the time the firs generation plan is reviewed for the purpose of rebasing the plan.

2.783 CENGAS submitted that the details of a proposed second generation price cap be assessed prior to the expiry of "Union's current [sic] PBR plan".

2.784 Energy Probe disputed Union's contention that for setting rates, references to costs of service were unnecessary after a five-year term, arguing that rates periodically must be based on cost-of-service. Energy Probe also took issue with Union's proposal that the onus should be on parties proposing an alternative rate setting regime to show that the price cap plan is not in the public interest, arguing that "the Board should be free to evaluate proposals of all type [sic] in determining just and reasonable rates, and no ratesetting scheme should be presumed to be better than others."

2.785 HVAC submitted that the Board exercise caution with respect to commenting at this time on a second generation plan. HVAC's position was that next steps must be predicated on evaluation of how well the first generation plan works - something that is unknown at this time. HVAC added that the determination of how a price cap would be continued after the initial plan "would be completely inappropriate ... potentially beyond the Board's jurisdiction." HVAC echoed others' concerns with Union's proposal that the onus be on parties advocating a discontinuation of the price cap approach to justify their position, describing such an approach "as being inconsistent with basic regulatory principles requiring that the regulated entity demonstrate the reasonableness of its rates." Further to this point, HVAC added that "[t]he onus in respect of proposed rates, however determined, remains with the regulated utility under section 36 of the *Ontario Energy Board Act, 1998.*"

2.786 IGUA submitted that revenue-to-cost ratios and customer class costs were necessary to determine whether or not rates are just and reasonable, adding that with the pricing flexibility feature there was no assurance that the price cap plan would generate just and reasonable rates for each class. For this reason, IGUA took the position that a review of the initial plan prior to adopting a second generation plan must look at the relationship between rates and costs to serve a particular class.

2.787 IGUA also rejected Union's proposal to shift the onus of proof in respect of just and reasonable rates away from the regulated utility. In the event that a rebasing of rates is required, either during the initial price cap plan or upon its expiry, IGUA urged the Board to direct Union to "maintain and apply its cost allocation capability for the duration of the Price Cap Plan and thereafter", arguing that it would be premature for the Board to determine at this time whether or not rates rebasing will be required. Further, IGUA submitted that no determination should be made in this proceeding with respect to the parameters or the pricing flexibility provisions for a second generation plan.

2.788 Kitchener argued that it would be premature for the Board to set the conditions at this stage for the second generation plan and, further, the Board should not make this predetermination today to avoid fettering the discretion of a future panel. Kitchener commented that if any decision were to be taken regarding a second generation price cap plan at this time, it should be that the Company's revenue requirement be rebased to costs and rates rebased to allocated costs. Kitchener submitted that setting a proper initial base is equally important for a second generation plan.

2.789 Kitchener also argued a review of the relationships between prices and costs is necessary. In support of this position Kitchener quoted Dr. Bauer:

> Now at various points during the testimony it was emphasized that in competitive markets prices are detached from costs. That is correct but only partially correct. Because in competitive markets the forces of competition over time assure that prices convert back to costs if they deviate from costs, for periods of time. ... In a monopolistic environment like gas distribution, that function of competition will not occur unless regulation assumes that function. And that exactly what the purpose of the review of the plan is. The review has the purpose to reintroduce that discipline that in a competitive market will be introduced by competition, that is to assure that prices are again closer to costs. That doesn't necessarily mean that there should be a full-fledged cost-of-service review but at minimum what needs to be ascertained is that the level of prices is in some meaningful relationship to the level of costs for rate classes, and secondly, that no cross-subsidization occurs between rate classes.

2.790 Kitchener argued that the exercise of pricing flexibility will increase the level of inter-class subsidization with respect to the level allowed in EBRO 499, adding that rebasing to allocated costs was "necessary to confirm the movement toward cost causality directed in RP-1999-0034 for the electrical distributors."

2.791 LPMA, MECAP and WGSPG asserted that consideration of a second generation plan was premature and that putting the onus on an intervenor to justify discontinuation of the price cap plan would put the intervenor at an informational disadvantage. LPMA proposed that a separate customer review process be held about one year prior to the end of the first PBR term to see if consensus could be reached regarding the form of regulatory regime to be implemented at the end of the initial plan. At this review, the Company would be required to file full cost-of-service information, including a cost allocation and rate design study, so that parties could compare Union's rates under PBR with what its rates would have been under a cost-of-service approach. LPMA proposed that this filing of information is analogous to the Board's Decision with Reasons in the RP-1999-0034 proceeding in which the Board indicated that electric utilities will have to "undertake cost allocation studies to better align customer classes with cost causation" for a second generation PBR plan.

2.792 Schools' position was that a return to cost-of-service regulation must remain an option upon expiry of the initial price cap plan. Schools submitted that cost-of-service and cost allocation studies should be done at that time to determine the relationship between prices and costs for the rate classes. In support of its posisiont Schools relied on Dr. Bauer's evidence that in the short run a PBR plan accepts a trade-off between efficiency gains and prices tracking costs but "[i]n the long run such a situation is neither efficient nor equitable." Schools contended that in the long run prices should track costs to ensure fair treatment of captive customers, noting that most delivery rates have declined in recent years under cost-of-service regulation.

2.793 VECC too was concerned that Union's second generation PBR proposal should not in this proceeding foreclose future regulatory options. VECC urged the Board to make clear in its Decision that all aspects of the initial plan could be reviewed in the adjudication of second generation PBR, including whether it was appropriate to continue with a PBR plan. As part of the review, VECC took the position that a full cost-of-service study be filed prior to embarking on a second generation plan.

2.794 Alliance, CEED, Comsatec, Enbridge, Enron, Fullerton, GEC, OAPPA, Pollution Probe, and TCPL did not comment.

Union's Reply - Second Generation Price Cap

2.795 Union reiterated that its proposal "to use industry TFP data to set the second generation price cap parameters will ensure that Union's rates are reflective of the industry cost structure." Union also submitted that Board guidance with respect to a second generation plan would reduce the incentives of the Company to defer productivity initiatives by decreasing uncertainty especially as the first generation plan nears expiry.

Board Findings - Second Generation Price Cap

2.796 The Board is of the view that before it can provide any meaningful definition of a second generation PBR plan, it must have information and experience with regard to the operation of the first generation plan.

2.797 Nonetheless, the Board believes that rebasing will be required to establish the parameters of any second generation plan. The Board in this case has accepted on a trial basis a PBR plan, but in doing so has expressed reservations with regard to the baseline data and the information supporting the parameters chosen, that was provided by Union in this proceeding.

2.798 In preparation for a second generation PBR plan, the Board expects Union to file, in a timely manner, at a minimum, a traditional cost-of-service based revenue requirement, a cost allocation study as a guide for evaluating the cost responsibility by line of business and by rate class, and other relevant rate design evidence, for the first year of the second generation plan.

2.799 The Board also expects Union to provide, through the customer review process, the industry study of productivity and to address the weight that should be given to such results in establishing a productivity factor for a second generation plan. The Board also expects Union to provide information which will be of practical use in constructing an appropriate input price differential.

3. RATES

3.1 PROPOSED RATES

3.1 Union proposed a number of adjustments to its rates to reflect the implementation of the PBR plan and new unbundled services, including adjustments to reflect the phased elimination of the delivery commitment credit and the allocation of system integrity costs. Union also proposed changes to the existing rate schedules, including the continuation of rate harmonization between Rate 20 and Rate M4 customers, the harmonization of non-energy charges, and the phased elimination of seasonalization components in Union's Northern and Eastern Operations Areas. Union also proposed rate changes resulting from the Settlement Agreement on unbundling issues, including the provision of delivery point flexibility. Unbundling issues are more specifically addressed in Chapter 6.

3.2 This chapter provides only a very brief summary of the changes to rates proposed by Union to provide a context for those issues raised by intervenors in argument. For a complete description of the rate changes proposed by Union, reference should be made to the evidence. The Board has directed Union to file revised rate schedules, reflecting the Board's decisions, in the customer review process.

3.1.1 Allocation of System Integrity Costs (Issue 3.1.1)

3.3 In the Settlement Agreement parties agreed to allocate 9.1 Bcf of storage to be retained by Union to provide system integrity services on behalf of all customers. This space would not be available for assignment to bundled customers or for contracting to unbundled customers. The costs of the retained storage capacity, including those related to the LNG facility, delivery/redelivery capacity, Dawn-Trafalgar and STS transportation and storage space, would be allocated in a manner consistent with the Board's EBRO 499 Decision.

Positions of the Intervenors - Allocation of System Integrity Costs

3.4 VECC noted that, based on estimates for non-daily metered customers, Union proposed to allocate 3.3 of the 9.1 Bcf of system integrity storage to manage weather variances to the general service rate class. VECC argued "The result of this allocation methodology is to over allocate costs to the M2, 01 and 10 rate classes for system integrity when other classes are given a free ride by way of costs allocate to them when in actual fact this system integrity allocation for weather will be used to balance those customers to the extent they remain as bundled customers".

3.5 No other intervenors opposed the proposal.

Union's Reply - Allocation of System Integrity Costs

3.6 Union argued that the cost of the 3.3 Bcf has been included in delivery rates and Union requires this storage to manage weather variations regardless of whether the customers are bundled or unbundled.

Board Findings - Allocation of System Integrity Costs

3.7 The Board accepts Union's argument that system integrity storage is required to manage weather-related variances for customers regardless of whether they take bundled or unbundled services. The Board accepts the cost allocation results from EBRO 499 as a basis for the design of rates for 2000 and 2001, and accepts Union's proposal for the allocation of these storage costs. The Board directs Union to update the allocation of system integrity costs for discussion in the customer review process.

3.1.2 Delivery Commitment Credit ("DCC") Elimination (Issue 3.1.2)

3.8 Pursuant to the Settlement Agreement, Union proposed to remove the DCC from existing cost allocations and rates effective April 1, 2001.

Position of Intervenors - Delivery Commitment Credit ("DCC") Elimination

3.9 AMO submitted that the rationale for the DCC was to avoid system construction; therefore the elimination of the DCC should be reflected by an adjustment to the demand component of the rate and not to the commodity component.

3.10 No other parties opposed the proposal.

Union's Reply - Delivery Commitment Credit ("DCC") Elimination

3.11 Union noted that not all of its rates include a demand component, citing M2 as an example of a rate that has a fixed monthly charge but does not have a demand component. Union argued that because the DCC is a commodity-based payment it would be appropriate to reduce the commodity charge to reflect its elimination. Union observed that for some rate classes, such as M7, M9, T1 and T3, the commodity rate was not large enough to absorb the elimination of the DCC; therefore, for these rate classes the demand component would be reduced with the removal of the DCC.

Board Findings - Delivery Commitment Credit ("DCC") Elimination

3.12 In the Board's view, the elimination of the DCC should track as closely as possible the manner in which the credit is currently included in rates. Hence, the Board accepts Union's proposal for the rate treatment of the DCC elimination.

3.1.3 Price Cap Adjustments / Allocation of One-Time Adjustments and Pass-Through Items (Issues 3.1.3 and 3.1.4)

3.13 Union proposed to implement year 2000 rates using the 1999 cost allocation studies and volumes approved in rates in EBRO 499. Over the term of the plan, rate increases would be calculated using the 1999 throughput forecast. In the case of new regulated storage, transmission or distribution services that do not form part of Union's integrated system, the price of these service would be based on costs related to that service. Union submitted that there would be no impact on other customers.

Position of the Intervenors - Price Cap Adjustments / Allocation of One-Time Adjustments and Pass-Through Items

3.14 IGUA proposed that current volumes, rather than 1999-approved volumes should be used for verifying compliance with the price cap and for allocating one-time adjustments and pass-through items. IGUA argued that where a revenue adjustment is not based on 1999 volumes, over-recovery or under-recovery may result if through-puts have increased or decreased with respect to 1999 volumes.

3.15 No other parties commented on this proposal.

Board Findings - Price Cap Adjustments / Allocation of One-Time Adjustments and Pass-Through Items

3.16 The Board accepts Union's proposal to implement year 2000 adjustments using EBRO 499 approved volumes and the underlying cost allocation study results to calculate changes in rates for price cap adjustments, one-time adjustments and pass-through items.

3.17 Ideally, there should be a correspondence between the total actual costs to be recovered and the associated volumes. In other words, costs for any period should be recovered on the basis of volumes for that period. The Board expects that this principle will be recognized in the rate derivation, which will be reviewed in the customer review process, and this review will provide intervenors with an opportunity to evaluate the rate adjustment.

3.1.4 Customer Bill Impacts (Issue 3.1.5)

3.18 Union submitted that the full effect of its proposal on general service rates would be to increase the average M2 monthly bill by approximately 94 cents.

Position of Intervenors - Customer Bill Impacts

3.19 IGUA observed that Union's proposal would result in higher overall delivery rates. IGUA argued that this is contrary to a primary objective of a price cap plan, which is to provide rate reductions to customers, while allowing the Company to increase profits through efficiency gains.

3.20 No other intervenor specifically commented on this issue.

Board Findings - Customer Bill Impacts

3.21 In view of Union's evidence and the Board's findings in this Decision, the Board expects that the overall impact of this Decision on the delivery charges for a typical M2 customer will be less than 94 cents per month.

3.22 The Board directs Union to submit draft rate schedules, along with supporting worksheets and draft customer notices, indicating for all rate classes, typical bill impacts giving effect to this Decision. Further, the Board directs that as part of the customer review filings, Union will report on the customer bill impacts of the proposed rates.

3.2 UNBUNDLED RATE SCHEDULES - SOUTHERN OPERATIONS AREA (ISSUE 3.2)

3.23 In the Northern and Eastern Operations Area, the gas supply transportation charge currently recovers the costs of upstream transportation, storage, and delivery/redelivery service to and from storage. The unbundling of storage and transportation services would result in separate charges for these services and, as such, would not directly require any change in the delivery rates.

3.24 In the Southern Operations Area storage costs are recovered in the delivery charge. Therefore, unbundling of storage costs requires these costs be removed from bundled service delivery rates.

3.25 Union has proposed four new unbundled rates for the Southern Operations Area: U2 (firm service for non-contract end users), U5 (contract interruptible service), U7 (contract, for users with annual volumes of 5M m^3 or more), and U9 (in-franchise distributors with annual volumes of 700,000 m^3 or more).

3.26 M2 and M5 delivery rates are bundled rates that include storage costs. Therefore, in deriving the corresponding unbundled delivery rates, U2 and U5, the costs of the Standard Storage Service (“SSS”) have been removed from the M2 and M5 delivery rates. SSS is priced as a separate unbundled service. The U2 and U5 delivery rates include the cost of storage capacity for system integrity but do not contain any costs for gas supply related load balancing or gas in inventory.

3.27 The U2 delivery rate has the same monthly fixed charge and declining block structure as the M2 rate. The U2 delivery rate includes the costs of Standard Peaking Service ("SPS") and short-term gas supply flexibility. As a result of the Settlement Agreement Union modified its proposed U2 delivery rate to separate out the costs of SPS.

3.28 U7 and U9 delivery rates are similar to T1 and T3 delivery rates (respectively). Under these services customers must provide their own gas to fulfill fuel and unaccounted-for gas requirements.

3.29 In addition to the preceding adjustments, Union proposed the following additional changes to incorporate the effect of the Settlement Agreement on rates:

- standard storage service being optional;
- separation of standard peaking service ("SPS") from U2 delivery rates; (already referred to above);
- changes to nomination imbalance fees;
- changes to storage overrun fees;
- changes to reflect the provision of delivery point flexibility; and
- changes to reflect the deferred removal of the DCC.

Positions of Intervenors - Unbundled Rate Schedules - Southern Operations Area

3.30 LPMA submitted that Union should combine meter readings for customers on contiguous property receiving service under the U2 rate.

3.31 MECAP argued that any unauthorized delivery overrun charges for the U5 and U7 rates should be equal to the first U2 block rate and not equal to the first M2 block rate as proposed by Union.

3.32 WGSPG argued that any unauthorized delivery overrun charges for the U9 rate should be equal to the first U2 block rate.

Union's Reply- Unbundled Rate Schedules - Southern Operations Area

3.33 Union agreed to LPMA's proposal to provide combined meter readings for customers on contiguous property receiving service under the U2 rate.

3.34 Union argued that using the first M2 block rate to set unauthorized overrun charges for U5 and U7 service appropriately reflects the maximum utility revenue foregone when customers exceed their contractual entitlements. Union submitted that the unauthorized overrun charge for U9 and T3 customers should be the same.

Board Findings - Unbundled Rate Schedules - Southern Operations Area

3.35 The Board approves the introduction and the rate design as proposed by Union for the U2, U5, U7, and U9 rates.

3.36 The Board notes Union's commitment to modify the rate schedule for U2 service to include a service to permit combined meter readings for customers who receive gas from metered delivery points on contiguous properties. The Board approves this change.

3.37 The Board finds that Union's proposed unauthorized overrun rate for U5 and U7 service is appropriate, since it reflects the maximum utility revenue foregone when customers overrun contractual rights.

3.3 CHANGES TO EXISTING RATE SCHEDULES (ISSUE 3.3)

Northern and Eastern Operations Area

3.38 The proposed changes to these rate schedules include:

- the elimination of the 14,000 m^3 maximum daily volume requirement for Rate 10;

- the indication on all firm schedules that customers migrating from sales or bundled transportation service to unbundled transportation service must accept an assignment of upstream transportation capacity and an assignment of storage service. The upstream transportation assignment may be reduced to reflect reductions in Union's obligations under the terms of its "turnback policy" with TCPL;

- the elimination of optional storage gas supply service;

- the unbundling on the firm service rate schedules for Storage and Delivery/Redelivery services (which charges are currently embedded in the gas supply transportation charge or in a combined charge for storage service);

- the inclusion in storage rates of costs associated with the PBR base adjustments and the price cap escalator;

- the recovery in delivery rates of system integrity costs related to the LNG facility and delivery/redelivery capacity;

- redesign of storage service rates by adjusting the demand and commodity components;

- the separation in the unbundled storage service of storage from delivery/redelivery service with the demand component of the unbundled storage service being charged based on storage space (as opposed to deliverability);

- rate harmonization of storage commodity services in the Northern and Eastern Operations Area with the Southern Operations Area;

- the identification of storage overrun charges on the rate schedule;

- the elimination from the rate schedules of text explaining how customer and utility gas arriving at a single meter are apportioned between services in order to allow flexibility in the proportioning;

- the elimination from the rate schedules of the storage entitlement calculations; and

- the addition of text to the rate schedules to indicate that, except for gas supply charges, the rates are maximum prices for service that may change periodically. Multi-year prices may also be negotiated which may be higher or lower than the rates identified on schedules.

Southern Operations Area

3.39 The proposed changes to these rate schedules are as follows:

- the addition of text to the rate schedules to indicate that, except for gas supply charges, the rates are maximum prices for service that may change periodically. Multi-year prices may also be negotiated which may be higher or lower than the rates identified on schedules;

- the elimination from rate schedules of the references to monthly meter reads;

- the elimination of the reference on the M2 schedule to a $15 monthly charge for combining meter readings;

- the elimination from rate schedules of references to the DCC;

- the addition of text indicating that gas supply service customers who migrate to direct purchase will receive an upstream transportation capacity assignment which may be reduced according to the terms of Union's turnback policy;

- a revision to the T1 rate schedule increasing the eligibility requirement for service to 5 million m^3;
- explicit indication on the T1 and T3 schedules that customers must contract for storage and transportation service;
- revision of the T1 and T3 rate schedules to include charges for off-season injections and withdrawals;
- adjustment of the T1 interruptible range maximum rate to equal the M7 interruptible range maximum rate;
- the inclusion of all rates with a cost of gas component on Schedule A;
- revision to the T1 and T3 schedules indicating that where a customer has elected to provide its own deliverability inventory, in the event that the customer's storage balance is less than 20% of the Annual Firm Storage Space, Unauthorized Overrun and Reasonable Efforts Backstop gas rates will apply;
- change to the T1 and T3 schedules to allow charges for incremental fuel requirements in the authorized injection and withdrawal storage overrun rates;
- deletion of references to the automatic authorization of overrun in the event of interruption from the T3 schedule;

- increase in the T3 unauthorized transportation overrun rate to 36.0 ¢/m^3, consistent with the U9 and M12 rate for this service;

- a change in the units that storage rates are expressed in from ¢/MJ to $/GJ;

- changes to the text of the M12, M13, M16, and C1 rate schedules, general terms and conditions, and nominations schedules for clarification and also for consistency with Bill 35;

- increase in the unauthorized overrun rates for M12, M13, M16, and C1 ex-franchise services to $100/GJ for consistency with U2, U5, U7, and U9 charges;

- standardization of the M13 monthly fixed charges at $510 per contract.

Position of the Intervenors - Changes to Existing Rate Schedules

3.40 Comsatec raised concerns with regard to the load qualification for Rate 100. This issue is discussed separately below.

3.41 Kitchener argued that the unauthorized overrun charges for T3 service customers were too high, would impede unbundling, and were inconsistent with the overrun charge for T1 service. Kitchener alleged that Union's proposal was "an abuse of its monopoly powers in that it is a clear attempt to punish a customer for a position taken during negotiations."

3.42 WGSPG argued that it was not fair to charge 35 cents per cubic metre for unauthorized deliveries for T3 service when the overrun charge for U5 and U7 was 9.0051 cents per cubic metre.

3.43 WGSPG proposed graduated unauthorized overrun charges, with no penalty for up to 103% of the contracted daily demand, a charge of 9.0051 cents per cubic metre for overruns up to 110%, and 36 cents per cubic metre for any overrun in excess of 110%. For the fourth and subsequent infractions in any contract year, a customer would be subject to an unauthorized overrun charge of 36 cents per cubic metre on volumes above 103%.

3.44 WGSPG submitted that if the rates for unauthorized storage overruns are the same for all unbundled rate classes, then the rates for all unauthorized delivery overruns should be the same for all unbundled rate classes.

3.45 WGSPG also requested that the definition of overrun on the Rate M9 schedule should be similar to that on the M4 schedule and that "authorized overrun gas be available without penalty provided that it is authorized by Union in advance and that Union not unreasonably withhold authorization".

3.46 LPMA expressed concern that Union proposed to remove reference to the $15 charge for combined meter reads from the M2 rate schedule. LPMA was concerned that customers would not be aware of the charge and that Union might increase this charge without regulatory approval.

Union's Reply - Changes to Existing Rate Schedules

3.47 Union was concerned about customers taking advantage of a low unauthorized overrun charge by contracting for a lower-than-appropriate contract demand level. Further, Union pointed out that the charge would not be incurred by parties that contracted appropriately and that low authorized overrun might incent customers to undercontract.

3.48 In response to the argument that unauthorized delivery overrun rates should be the same for all classes, Union noted that while in-franchise customers generally pay the same rates for storage, delivery rates vary by rate class.

3.49 Union further noted that since it is currently discussing possible changes relating to overrun authorization and tolerance bands with M9 customers there is no need for Board action at this time.

3.50 Union stated that a charge for combined meter readings was a non-energy related charge that was not captured by the price cap and that customers could get information concerning this charge by calling the Company.

Board Findings - Changes to Existing Rate Schedules

3.51 The Board agrees with Union that rates for unbundled services should not encourage customers to rely on delivery overruns to support a contracted daily demand that is inappropriately low. The Board accepts Union's assertion that delivery rates generally vary by rate class and therefore overrun charges should also vary by rate class. The Board expects Union to bring forward any proposed rate schedule changes

to reflect discussions with M9 customers regarding the overrun tolerance band to the customer review process.

3.52 The Board notes that the cost of the meter reading function is included in regulated rates and therefore directs that the charge for combined meter reading should be maintained on the rate schedule. The Board accepts the other proposed changes to the rate schedule, subject to any adjustments arising from the Board's findings in this Decision.

3.3.1 Rate 100 - Load Factor Qualification (Issue 3.3)

3.53 Currently, to be eligible for service under Rate 100, a customer must, in addition to a daily contracted demand of 100,000 m^3, have a load factor of at least 70%. Union did not propose to lower the load factor eligibility for Rate 100 from 70% to 60% arguing such reduction would result in a Rate 20 revenue shortfall of approximately $700,000.

Position of Intervenors - Rate 100 - Load Factor Qualification

3.54 Comsatec noted that the requirements for Rate 20 service include a daily demand load of 14,000 m^3 while the requirements for Rate 100 service include a daily demand load of 100,000 m^3 and a load factor of at least 70%. Comsatec submitted that the 70% load factor requirement for Rate 100 has resulted in some high volume customers having to take Rate 20 service at a higher cost.

3.55 Comsatec cited the example of Falconbridge Limited's Kidd Metallurgical Division ("Falconbridge") with a firm daily contracted demand of 285,000 m^3, as being unable to qualify for Rate 100 service due to a load factor of 62%. Comsatec submitted that Falconbridge was taking twenty times the daily load of other Rate 20 customers, arguing that this demonstrated that the Rate 20 class was not comprised of homogeneous members. Comsatec submitted that Falconbridge was paying $400,000 more annually as a Rate 20 customer than it would pay as a Rate 100 customer.

3.56 Further, Comsatec commented that it was impossible for Falconbridge to increase its load factor to 70% by lowering its daily demand since this would require an increase in its use of interruptible service, exposing Falconbridge to "great hardship" in the event of curtailment.

3.57 Comsatec argued that under the existing rate structure, a 1% change in a customer's load factor, from 69% to 70%, could result in a rate difference of 46% in moving from Rate 20 to Rate 100. Comsatec submitted that this level of discontinuity between the two rate classes created the situation of over contribution by a small segment of customers.

3.58 Comsatec proposed that the load factor qualification for Rate 100 service be immediately reduced from 70% to 60% with the determination of appropriate classification for any customer to be based on 1999 actual data.

3.59 Comsatec proposed that any shortfall resulting from reducing the Rate 100 qualifying load factor should be shared by Rate 20, Rate 100, and Rate 25 customers.

3.60 Comsatec disputed Union's assertion that a customer with a daily contracted demand of 285,000 m^3 and a 62% load factor more resembled a Rate 20 customer than a Rate 100 customers. Comsatec commented that the data on which the Load Factor Curve was based appeared to be from 1997, whereas the data for Falconbridge presented in evidence was from 1999. Comsatec continued "... it is questionable whether any one customer would closely match the average Board-approved load factor for the rate class from a previous year."

3.61 Comsatec argued that under criteria, such as daily contracted demand, sole use main, location to main pipeline, and load factor, Falconbridge would appear to be more like a Rate 100 customer than like a Rate 20 customer.

3.62 Comsatec commented that the 70% load factor requirement had been proposed when the class average load factor for Rate 100 was approximately 85%. Because the evidence was that the current class average load was approximately 80%, Comsatec urged that the load factor requirement be reduced correspondingly.

3.63 Comsatec purposed three options for consideration:

- reduction of the load factor requirement to 60%;
- a new rate class with a daily load requirement of 100,000 cubic metres and a load factor between 60% and 70%; and

- a completely revised rate schedule.

Union's Reply - Rate 100 Load Factor Qualification

3.64 Union submitted that reducing the load factor requirement for Rate 100 from 70% to 60% would create a less homogeneous rate class. Union added that although the size of the facility, how it is run, annual volume, and alternative fuel capability are all relevant factors in determining the appropriate rate class, the load factor, being the major driver of unit cost, is the key factor.

3.65 Union commented that the Board had expressed concern, in its EBRO 483/484 Decision, that the load factor requirement was as low as 70%. Further, Union noted that the average load factor for Rate 100 has not changed significantly from when the rate was introduced.

3.66 Union proposed to harmonize Rate M4 and Rate 20. Union stated that this harmonization would reduce the rates paid by high volume Rate 20 customers and reduce their over contribution by approximately 15%. Union added that in general all customers with load factors greater than the rate class average over contribute and customers with load factors less than the rate class average under contribute. Union stated that the 1999 actual load factor for the Rate 20 class was 65.5% and, noting that Falconbridge's load factor was 62%, concluded that Falconbridge was likely under contributing to that class's costs.

3.67 Union commented that no evidence had been presented to indicate that any circumstances had changed significantly from the time that Rate 100 was introduced. Further, Union submitted that reducing the load factor requirement would negatively impact other customers in the rate class.

Board Findings - Rate 100 Load Factor Qualification

3.68 It is clear that the cross over from Rate 20 to Rate 100 gives rise to a significant change in rates. On the face of it, this would have the potential to treat customers at load factors near 70% unfairly. However, rate classes and their eligibility are based on additional customer characteristics which affect costs, such as annual volume; load factors in relation to system peak demands; contracted firm deliverability/ demand; specific costs to serve customers; sole use main and other facilities installed to serve the customer; location in relation to the main pipeline; operating characteristics of the Union system and the customer's facilities (affected for example by alternative fuel capability).

3.69 The Board is not prepared at this time to change the load factor qualification applicable to this rate. However, the Board believes that Comsatec has demonstrated sufficient inconsistencies at the cross over between Rate 100 and Rate 20 so as to warrant a review of the rate design of these two classes. Such a review should examine how customers may be grouped into classes based on various attributes of service, including but not exclusively load factor. The Board directs that such a review be undertaken and included in the second annual customer review. In the interim, the Board urges Union to work with Falconbridge and other such affected customers to mitigate the rate impacts.

3.4 RATE HARMONIZATION

3.70 Union proposed to implement the second phase of the Rate M4 and Rate 20 redesign that was approved in EBRO 499.

3.71 For the purpose of harmonizing terms and conditions between Rate M4 and Rate 20 and to give practical effect to the 5 million m^3 boundary between firm general service and contract classes, Union proposed that the price cap for these two classes should be 6 percent.

Board Findings - Rate Harmonization

3.72 The Board notes that the only intervenor to comment on Union's proposal for harmonizing terms and conditions between Rate M4 and Rate 20 was IGUA who supported the proposal. The Board accepts Union's proposal that the price cap for these two classes be 6 percent in order to allow for the continuation of the rate harmonization.

3.5 RESPONSES TO OUTSTANDING DIRECTIVES

3.73 In EBRO 499, the Board directed Union to consider and to report its findings in its next rate case on using the new information provided by the inventory emissions model as a basis for allocating UFG costs among storage, transmission, compression, and distribution. Union solicited and received an opinion from its consultant, Radian International, to the effect that emissions inventory data was not sufficiently accurate to allocate UFG and further, there is no basis upon which to change the present UFG cost allocation methodology.

3.74 In EBRO 499, the Board directed Union to examine the allocation of advertising costs in conjunction with harmonizing cost allocation study methodologies and to review the allocation of town border and sales meter station costs in the Northern and Eastern Operations Area. Union stated it "has not pursued these directives at this time given the use of the rates approved by the Board in EBRO 499 as the base for the purposes of PBR". Union commented that it was the Company's view that the approved 1999 rates represent an appropriate base upon which to launch a five-year PBR plan commencing in year 2000.

Position of Intervenors - Responses to Outstanding Directives

3.75 IGUA submitted that Union should comply with any cost allocation directives contained in prior decisions of the Board. IGUA argued that the Board should require Union to maintain its cost allocation capability and to file any changes in the cost allocation methodology in the customer review process.

Union's Reply- Responses to Outstanding Directives

3.76 Union argued that it would not prepare cost allocation studies in the future, since in its view, such studies were not necessary under a PBR price cap plan. Union stated that "the effort required to complete cost allocation studies, identify methodology changes, and then communicate, defend, and have the Board rule on them is inefficient and unnecessary."

Board Findings - Responses to Outstanding Directives

3.77 The Board notes that Union has responded to the outstanding directives concerning investigation of methodological improvements to the allocation of UFG costs and seasonalization, The Board accepts Union's position that the data from Union's emission inventory model is not sufficiently accurate to justify relying on it to allocate UFG among storage, distribution and transportation.

3.78 The Company did not, however, comply with the Board's directive to examine the allocation of advertising costs in conjunction with harmonizing cost allocation methodologies and to review the allocation of town border and sales meter station costs in the Northern and Eastern Operations Area. While the Board is not satisfied with Union's rationale for non-compliance, the Board notes that no intervenor indicated a specific harm that has resulted from this failure to comply with the Board's directive. While Union is not required to provide these studies at this time, in the future, the Board expects Union to comply with all Board directives or seek an appropriate exemption.

3.6 RATE SEASONALIZATION

3.79 In EBRO 499, the Board stated its expectation that Union would make a rate seasonalization proposal in the context of rate harmonization in the subsequent main rates case. In response Union has proposed to eliminate the existing 1 cent per m^3 seasonal differential in the Rate 01 gas supply transportation charge. For Rate 10, Union has proposed to reduce the existing 3 cents per m^3 seasonal differential in the gas supply transportation charge by 1 cent per m^3 per year until the differential is eliminated.

3.80 Union argued for the elimination of seasonalization for the following reasons: customers had not requested seasonalized rates; twice yearly changes were confusing to customers; equal monthly billing lessened the impact of seasonalized billing; there is a paucity of evidence regarding the impact of seasonalized rates on consumption patterns; seasonalized rates do not follow proper cost causality principles; the simplicity of unseasonalized rates; and the inconsistency of seasonalized rates with PBR price stability.

Position of Intervenors - Rate Seasonalization

3.81 Pollution Probe submitted that in principal rate seasonalization should have an effect on consumers' behaviour that would lead to improved load factors. However, it noted that obtaining the empirical evidence to quantify the impact would be very "complex". Rather than eliminating rate seasonalization Pollution Probe urged the Board to increase the winter/summer differentials for Rate 01 and Rate 10 and to extend rate seasonalization to Rate M2.

3.82 Energy Probe argued that in the absence of progress in unbundling for general service customers, rate seasonalization is necessary to provide some price signal to influence the use of storage in the peak delivery season. Energy Probe proposed that small customers who can take gas during off-peak periods should receive bill reductions that reflect the avoided costs. Energy Probe submitted that rate differentials similar to those in the Northern and Eastern Operations Area should be introduced in the Southern Operations Area and that Union should undertake a substantive investigation of seasonalization options.

Union's Reply - Rate Seasonalization

3.83 Union challenged Energy Probe's and Pollution Probe's arguments as being entirely theoretical in nature. It was Union's position that there was no evidence that seasonalized rates improve load factors, provide a perceived price signal, or have any impact on consumer behaviour. In fact, Union pointed out that in some cases, based on its experience, where rates have not been seasonalized load factors have increased and where rates have been seasonalized, load factors have decreased.

3.84 Union noted that it is the gas supply transportation rate that is seasonalized in the Northern and Eastern Operations Area. Union argued that there was no justification for seasonalizing the gas supply transportation rate in the Southern Operations Area since the upstream pipelines in the Southern Operations Area operate at 100% load factor and hence upstream pipeline costs do not seasonally vary.

Board Findings - Rate Seasonalization

3.85 While there may be merit in the principle of setting higher prices for distribution service in peak periods, the Board accepts Union's position that no substantive evidence is available concerning the benefit of seasonalization. This is perhaps not surprising given that the block structure of current rates may not convey the intended signal. In future proceedings, or in the customer review process, evidence on the benefits of seasonalized rates together with rate redesign proposals to reflect the seasonal cost difference in landed gas commodity costs may be brought forward. In this proceeding, based on the evidence, the Board accepts Union's proposal to remove the seasonal differentials in gas supply transportation rates from Rate 01 and from Rate 10.

3.7 ALLOCATION OF FUTURE PASS-THROUGH ITEMS

3.86 Union proposed to treat gas costs, return on equity, and unaccounted-for gas charges as annual pass-through items.

3.87 Gas cost items were subdivided into gas supply costs and delivery-related gas costs. Union proposed to continue the current treatment of gas supply commodity costs for system gas consumers using the approved QRAM. The gas supply upstream transportation component would remain unchanged unless the trigger applying to the forecast accumulation in the Purchased Gas Variance Account ("PGVA") was exceeded. Union proposed to change this trigger from $15 to $20 per residential customer. For each year, Union would seek consensus at the customer review process by bringing forward the actual gas cost deferral account balances and their proposed disposition.

3.88 For the delivery-related gas costs (unaccounted-for gas, inventory carrying costs, and compressor fuel) Union proposed to pass-through the impact of the most recent QRAM annually through the customer review process. The unit price changes associated with inventory carrying costs and compressor fuel would be calculated using the 1999 approved volumes. The UFG adjustment would use the updated WACOG along with the new ratio methodology.

3.89 With respect to the ROE, Union proposed to apply annually, to the 1999 Board-approved rate base, adjustments arising from the application of the Board's formula for setting ROE. The inputs to the formula would be the forecast in November 1999 for the 2000 year, while for subsequent years the forecasts used would be those for September of the year preceding the rate change.

3.90 The allocation of the cost changes to the rate classes would be consistent with the allocation of costs in the EBRO 499 cost allocation studies and for new services would reflect the costing approved to justify the new service.

Position of Intervenors - Allocation of Future Pass-Through Items

3.91 IGUA reiterated "that future pass-through items should be allocated on the basis of throughput and other information relevant to a determination and allocation of the pass-through costs in the year in which they will be incurred."

Union's Reply - Allocation of Future Pass-Through Items

3.92 Union referred to its previous submissions.

Board Findings - Allocation of Future Pass-Through Items

3.93 The Board accepts the proposal to treat gas commodity costs as annual pass through items, continuing the current methodology under the approved QRAM. The Board approves Union's proposal with respect to adjustments to gas supply transportation charges, including the change in the trigger to $20 per residential customer. The Board also approves using the customer review process to seek consensus on the disposition of actual gas cost deferral balances.

3.94 The Board approves the proposal to pass-through the impact of the most recent QRAM on delivery-related gas costs, subject to the customer review process. The Board also approves the use of EBRO 499 approved volumes to calculate the unit

price changes associated with the changes in inventory carrying costs and compressor fuel.

3.95 The Board notes that earlier in this Decision it accepted Union's proposed ratio methodology for the calculation of unaccounted-for gas volumes. The Board accepts the use of the updated WACOG and 1999 volumes in calculating the delivery-related gas cost adjustments for the term of the trial PBR plan. The Board expects Union to monitor the impact of this methodology.

3.96 The Board approves the proposal to allocate the cost changes related to future pass-through items to the rate classes in a manner consistent with the EBRO 499 cost allocation studies.

3.97 The Board notes that in this Decision, except for the year 2000, it has not approved a pass-through adjustment for ROE.

3.8 REQUIREMENT FOR NEW RATE - EQUIVALENT TO ENBRIDGE CONSUMERS GAS RATE 125

3.98 MECAP requested that the Board direct Union to develop a rate for high volume, high load factor, firm service similar to Enbridge Consumers' Gas Rate 125. To qualify for Rate 125 a customer must have a minimum annual volume of 200 million cubic metres and (at the time of submission) a minimum load factor of 90%. MECAP pointed out that Union's evidence indicated that currently two customers would qualify for this rate and four additional customers would do so with some changes to their consumption patterns.

3.99 Union did not propose to introduce such a rate. Union's evidence was that had it proposed a rate similar to ECG's Rate 125 it would suffer a revenue reduction of approximately $1.9 million, thereby requiring an increase in rates to other customers.

Position of Intervenors - Requirement for New Rate - Equivalent to Enbridge Consumers Gas Rate 125

3.100 MECAP submitted by not providing such a rate Union was disadvantaging customers in the Northern and Eastern Operations Area compared to customers in Southern Operations Area who can avail themselves of the M7 and T1 rates, where the demand charge is determined by the customer's load factor.

3.101 MECAP commented that, while under a cost-of-service rate setting approach a revenue shortfall would be distributed among other customer classes, under the PBR price cap proposal the revenue shortfall due to the introduction of a rate similar to ECG's Rate 125 would not be distributed among other customers but would result in a $1.9 million charge to the shareholder.

Union's Reply - Requirement for New Rate - Equivalent to Enbridge Consumers Gas Rate 125

3.102 Union, citing paragraph 6.5.6 of RP-1999-0001 in which the Board indicated that no harm to stakeholders had been demonstrated by the introduction of ECG Rate 125, stated that in this instance other stakeholders or the shareholder would be negatively affected by about $1.9 million. Further, Union also indicated that it was prepared to negotiate rates to keep customers on its system and, for these reasons, it would not propose to introduce a new rate equivalent to ECG's Rate 125.

Board Findings - Requirement for New Rate - Equivalent to Enbridge Consumers Gas Rate 125

3.103 The Board notes Union's reference that there was no harm demonstrated to any stakeholders when Rate 125 was introduced by ECG. In this case, the evidence indicates that other stakeholders will be negatively affected were the Board to approve a rate similar to ECG's Rate 125.

3.104 The Board does not find it appropriate at this time to require Union to institute a new rate equivalent to ECG's very large volume firm service Rate 125.

3.9 HARMONIZATION OF NON-ENERGY CHARGES

3.105 Union proposed to harmonize miscellaneous charges, for example, charges for connection, disconnects for non-payment, and account history statements, between the Southern Operations Area and the Northern and Eastern Operations Area. These charges do not currently appear on any rate schedules. Union asserted that they are cost-based and, in the past, have been shown under "Other Revenue". A forecast of other revenue has been deducted from total required utility revenues to arrive at the revenue requirement for rate-making purposes. Union did not propose any change in treatment with respect to these charges and indicated it would advise the Board of any future changes.

3.106 Intervenors did not object to Union's proposal to harmonize these charges.

Board Findings - Harmonization of Non-Energy Charges

3.107 The Board accepts Union's proposal to harmonize the non-energy charges in the Southern Operations Area and the Northern and Eastern Operations Area. However, the Board notes that under section 36 of the Act, Union must seek approval for all charges related to the transmission, distribution and storage of natural gas. Therefore the Board directs the Company to file, as part of its rate order, harmonized rates for miscellaneous charges. The Board expects Union to file supporting cost data with any application for a change to miscellaneous charges.

4. DEFERRAL ACCOUNTS

4.1 Union proposed to treat its gas supply costs as pass-through items and plans to continue recording variances in its supply costs in its gas cost deferral accounts for disposition to customers. Union also proposed to combine some of its existing gas cost related deferral accounts and to discontinue recording certain gas costs in deferral accounts. Additionally, Union proposed to close some of its other deferral accounts after disposition of the 1999 balances since it intends to manage the forecast and business risks associated with these existing deferral accounts as part of its PBR proposal.

4.2 Union proposed that the balances at December 31, 1999 would be disposed of when rates are implemented for year 2000, with the amounts allocated to each rate class recovered through a one-time billing adjustment. Supply-related balances would be disposed of in accordance with 1999 calendar year system supply and buy/sell volumes and delivery-related balances would be adjusted based on 1999 calendar year delivery volumes. The estimated impact for a Rate 01 residential customer with an annual volume of 3,400 m^3 would be a customer credit of $43.83 ($24.07 supply-related, $19.76 delivery-related) and the estimated impact for a Rate M2 residential customer with an annual volume of 3,100 m^3 would be customer credit of $62.25 ($48.57 supply related, $13.68 delivery related). Union proposed to use the 1999

deferral balance credits to reduce any revenue deficiency in year 2000. In recognition that revised rates could not be implemented before April 1, 2001, Union proposed to use the non-gas deferral account balances to offset the final rate increases at the total Company level and to factor any remaining increases into prospective rates.

4.0.1 Proposed Disposition of Deferral Account Balances

Gas Supply Related Deferral Accounts - Merged

4.3 Union proposed to allocate the Firm Supply Purchased Gas Variance Deferral Account (179-80) to firm rate classes, over both operations areas, in proportion to 1999 system sales and buy/sell volumes.

Gas Supply Related Deferral Accounts - Southern Operations Area

4.4 Union proposed to allocate the TCPL Tolls and Fuel Deferral Account (179-67) to all classes in the Southern Operations Area in proportion to 1999 system sales and buy/sell volumes.

4.5 The Other Purchased Gas Costs Deferral Account (179-68) balance was forecast to be a credit of $52.086 million, comprised of a short-term supply and load balancing cost debit of $2.204 million, a short-term supply rate recovery of $8.298 million, and inventory revaluation credits of $45.992 million. Union proposed to assign the $2.204 million of short-term supply and load balancing costs directly to the M2 general service rate class and to recover the $8.298 million in rates in a manner consistent with the allocation methodology for short-term supply costs approved by the Board in EBRO 499. Union would allocate the inventory revaluation credit of

$45.992 million to all rate classes in the Southern Operations Area in proportion to 1999 system sales and buy/sell volumes.

Gas Supply Related Deferral Accounts - Northern and Eastern Operations Area

4.6 For the Spot Gas Deferral Account (179-81), Union proposed that the inventory revaluation credit would be allocated to all firm rates classes in the Northern and Eastern Operations Area in proportion to 1999 system sales and buy/sell volumes. With respect to the balance related to the Rate 25 margin, Union proposed to manage the margin within the rate class. Union proposed that the remaining balance would be allocated to all rate classes (except Rate 25) in the Northern and Eastern Operations Area in proportion to 1999 system sales, buy/sell, ABC-T, and bundled-t delivery volumes.

4.7 The Heating Value Deferral Account (179-89) balance would be allocated to the Rate 01 and Rate 10 customer classes in proportion to 1999 system sales, buy/sell, ABC-T, and bundled-t delivery volumes.

4.8 With respect to the Compressor Gas (179-83), TCPL Tolls (179-84), Centra Transmission Holdings Tolls (179-86), Centra Pipelines Minnesota Tolls (179-87), Transportation Capacity Assignment (179-88), and the TCPL Variance Charges (“LBA”) (179-98) Deferral Accounts, Union proposed that the balances would be allocated to rate classes in the Northern and Eastern Operations Area in proportion to firm 1999 system sales, buy/sell, ABC-T, and bundled-t delivery volumes.

Storage and Transportation Net Revenue Deferral Accounts

4.9 In the EBRO 499 Settlement Agreement, the long-term storage premium was attributed 100% to ratepayers. The variances in excess of the transactional service margin forecast was to be shared 75:25 in favour of ratepayers, with negative variances to the account of the shareholder. The proposed disposition of the ratepayers' shares is described below.

4.10 For the Transportation and Exchange services Deferral Account (179-69) Union proposed to allocate the balance among firm C1 and M12 customers and in-franchise customers in proportion to actual 1999 available capacity. Union also proposed that the forecast 1999 margin, which has been allocated to customers during 1999 in proportion to forecast 1999 available capacity, be allocated in proportion to actual 1999 available capacity. Regarding in-franchise customers in the Southern Operations Area, Union proposed that the balance be allocated among rate classes in proportion to EBRO 499 design (peak) day levels; regarding the balance allocated to customers in the Northern and Eastern Operations Area, the proposal was to allocate the balances in proportion to the allocation of 1999 storage demand costs as approved in EBRO 499.

4.11 With respect to the Balancing Services Deferral Account (179-70), Union proposed that the balance related to off-peak storage be allocated between in-franchise and ex-franchise customers (in both operating areas) in proportion to the allocation of peak storage approved in rates. Union also proposed that $15,960 would be charged to ECG with respect to LBA services. Regarding in-franchise customers in the Southern Operations Area, Union proposed that the balance be allocated among rate classes in proportion to EBRO 499 design (peak) day levels; regarding the balance allocated to customers in the Northern and Eastern Operations Area, the proposal is

to allocate the balances in proportion to the allocation of 1999 storage demand costs as approved in EBRO 499.

4.12 In the case of the Short-Term Storage Services Deferral Account (179-71), Union proposed to allocate the 1999 balance related to C1 Firm Short-Term Storage deliverability between in-franchise and ex-franchise customers in proportion to the allocation of 1999 storage deliverability. Regarding in-franchise customers in the Southern Operations Area, Union proposed that the balance be allocated among rate classes in proportion to EBRO 499 design (peak) day levels; regarding the balance allocated to customers in the Northern and Eastern Operations Area, the proposal was to allocate the balances in proportion to the allocation of 1999 storage demand costs as approved in EBRO 499.

4.13 For the Long-Term Peak Storage Services Deferral Account (179-72), Other S&T Services Deferral Account (179-73), and Other Direct Purchase Services Deferral Account (179-74), Union proposed to allocate the balances to in-franchise rate classes in the Southern Operations Area in proportion to EBRO 499 design (peak) day levels, and to in-franchise customers in the Northern and Eastern Operations Area in proportion to the allocation of 1999 storage demand costs as approved in EBRO 499.

Other Deferral Accounts

Deferred Customer Rebates/Charges Deferral Account (179-26)

4.14 Union has tracked the balance in the Deferred Customer Rebates/ Charges Deferral Account (179-26) by rate class and proposed to recover these balances based on 1999 delivery volumes. Union proposed to treat this accounts as a pass-through item under PBR with the disposition details to be addressed through the customer review process.

Energy Balancing Deferral Account (179-38)

4.15 Union proposed to allocate the balance in the Energy Balancing Deferral Account (179-38) to all in-franchise customers in the Southern Operations Area - except for M7 and T1 customers - in proportion to delivery volume.

Ten Year Market Review Deferral Account (179-54)

4.16 Union proposed to allocate the balance of the Ten Year Market Review Deferral Account (179-54) to in-franchise rate classes, except for Rate 16 and rate 25, in proportion to design day (peak) demand. The balance in the Ten Year Market Review Deferral Account (179-54) is proposed to be allocated 25:75 between the Northern and Eastern Operations Area and the Southern Operations Area respectively.

Comprehensive Customer Information Program Deferral Account (179-56)

4.17 Union proposed to allocate the balance in the Comprehensive Customer Information Program Deferral Account (179-56) to general service classes M2, Rate 01 and Rate 10, in proportion to weighted average number of customers and allocated based on 1999 delivery volumes. Union proposed to treat this account as a pass-through item under PBR with the disposition details to be addressed through the customer review process.

CIS Affiliate Payment Variance Deferral Account (179-57)

4.18 Union proposed to allocate the balance in the CIS Affiliate Payment Variance Deferral Account (179-57) to the M2 class.

Municipal Tax Deferral Account (179-59)

4.19 Union proposed to allocate the balance of the Municipal Tax Deferral Account (179-59) to in-franchise rate classes, except for Rate 16 and Rate 25, in proportion to design day (peak) demand. The balance in the Municipal Tax Deferral Account (179-59) has been tracked by operational area and is proposed to be allocated consistent with this tracking.

Direct Purchase Revenue and Payments Deferral Account (179-60)

4.20 Union proposed to allocate the balance in the Direct Purchase Revenue and Payments Deferral Account (179-60) to rate classes in the Southern Operations Area in proportion to Dawn-Trafalgar design day demand.

Deferred Year 2000 Costs Deferral Account (179-61)

4.21 Union proposed to continue recovering the level of Y2K costs approved by the Board in EBRO 499 in rates until December 31, 2000 with the difference between the balance and actual costs incurred in year 2000 to be recorded and addressed in the customer review process.

Tax Impact of A&G Expenses Deferral Account (179-66)

4.22 Union proposed to allocate the balance in the Tax Impact of A&G Expenses Deferral Account (179-66) to all rate classes, except Rate 16 and Rate 25, in proportion to rate base.

Lost Revenue Adjustment Mechanism Deferral Account (179-75)

4.23 Union proposed to allocate the balance in the LRAM deferral account to in-franchise customers in proportion to the margin impacts attributable to DSM activities. Union reported a balance of $1.6 million in the Lost Revenue Adjustment Mechanism Deferral Account (179-75), for recorded margin losses in connection with 1999 DSM activity. Union proposed that the balance be reviewed at the customer review process and the 1999 LRAM balance be disposed of at the same time as the year 2000 balances in Union’s other deferral accounts. Union proposed to allocate this balance

to in-franchise customers in proportion to the margin impacts attributable to DSM activities.

4.0.2 Treatment of Existing Deferral Accounts

Gas Supply Related Deferral Accounts

4.24 Union proposed no changes to the Firm Supply PGVA (179-80, merged), TCPL Tolls and Fuel (179-67, Southern Operations Area) and the Heating Value (179-89) accounts. Under the PBR plan, Union proposed to pass through these items to customers with the disposition of balances to be addressed at the customer review process.

4.25 Union proposed to close the Compressor Fuel Gas (179-83), TCPL Tolls (179-84), TCPL Transportation Capacity Assignment (179-88), and the TCPL LBA (179-98) accounts and record all variances in a new account, TCPL Tolls & Fuel Account - Northern Operations Area (179-X1). Under the PBR plan, Union proposed to pass through these items to customers with the disposition of balances to be addressed at the customer review process..

4.26 With respect to the Other Purchased Gas Account (179-68), Union proposed to record variances for short-term supply and load balancing costs for the merged Company, the inventory revaluation, and the benefits from the temporary assignment of unutilized non-TCPL capacity. Under the PBR plan, Union proposed to pass through these items to customers with the disposition of balances to be addressed at the customer review process..

4.27 For the Spot Gas (Northern Operations Area, 179-81), Union proposed to stop recording Rate 30 Intermittent Supply and Rate 25 margin in this account and to close it after disposition of the balance at December 31, 1999.

4.28 With respect to the Centra Transmission Holdings Tolls (179-86) and the Centra Pipelines Minnesota Tolls (179-87) accounts, Union proposed to close them after disposition of the balances at December 31, 1999.

Non Gas-Supply Related Deferral Accounts

4.29 Union proposed to close the following accounts after disposition of the balances at December 31, 1999:

- Transportation and Exchange Services (179-69)
- Balancing Services (179-70)
- Short Term Storage Services (179-71)
- Long Term Storage Services (179-72)
- Other S&T Services (179-73)
- Energy Balancing (179-38)
- Ten Year Market Review (179-54)
- CIS Affiliate Payment Variances (179-57)
- Municipal Tax (179-59)
- Direct Purchase Revenue and Payment (179-60)
- Tax Impact of A&G Expenses (179-66)
- Other Direct Purchase Services (179-74)

4.30 Union proposed to close the Year 2000 Costs Deferral Account (179-61) after disposition of the balance at December 31, 2000, the details of which would be addressed in the customer review process.

4.31 For the Deferred Customer Rebates/Charges (179-26) and Comprehensive Customer Information Program (179-56) accounts, Union proposed to maintain these accounts and address disposition details and account continuation through the customer review process.

Positions of Intervenors

4.32 With the exceptions discussed below, LPMA and MECAP accepted Union's proposals with respect to the disposition, continuation and closure of the identified deferral accounts.

4.33 Subject to maintaining the transactional services deferral accounts, Schools agreed with Union's proposals for the closure of accounts and the disposition of all 1999 deferral account balances.

4.34 IGUA argued that the manner in which Union proposed to dispose of the 1999 balances in the deferral accounts appeared reasonable; provided that all credit balances were cleared to customers and not applied to any revenue deficiency for 2000 that the Board might determine.

4.35 CAC and LPMA opposed the closure of the CIS deferral account.

4.36 CAC submitted that the CIS deferral account be continued if the PBR plan goes forward to ensure that ratepayers would not pay more than necessary for CIS services. CAC expressed concern that the CIS components of the 1999 approved cost-of-service may be too high.

4.37 LPMA opposed the closure of the CIS deferral account unless Union reduced the revenue base to be collected through rates to reflect the lower actual costs than those imbedded in current rates.

4.38 Schools, MECAP and WGSPG accepted Union's proposal to close the CIS deferral account. No other parties commented with respect to the proposal to close the CIS deferral account.

4.39 Pollution Probe argued that Union's initial proposal to clear the LRAM balance was premature since the amount had not been endorsed by either Union's auditor or by members of the DSM consultative. Pollution Probe urged that the Board defer disposition of this account pending further review through the existing DSM consultative and then the customer review process.

4.40 GEC and Alliance submitted that Union had not provided a sufficient evidentiary basis on which to clear the 1999 LRAM deferral account balance and that the Company should be advised that clearance would require complete disclosure of data sufficient to enable verification of calculations and meaningful external verification.

4.41 AMO submitted that a new deferral account should be established to capture any revenues accruing as a result of Union marketing capacity that was allocated for delivery point flexibility but not taken by customers.

4.42 GEC, Pollution Probe and Alliance argued for the creation of a DSM variance account. This issue along with Union's request for a SSM variance account is discussed in Chapter 2

Union's Reply

4.43 With respect to the CIS deferral account, Union submitted that although $6.9 million had been included in 1999 rates, due to the late implementation of the system in the Southern Operations Area the actual costs were $2.2 million and the remaining $4.7 million was recorded as a ratepayer credit in Deferral Account 179-57. Union noted that the system was implemented in on July 1, 2000 in both operations areas and that the cost associated with a full year's service is estimated at $9.3 million, exceeding the amount currently included in rates. Union further submitted that the 1999 estimate reflected separation of the ancillary programs on January 1, 1999. Union proposed to manage any variances under the price cap.

4.44 Union noted that it had modified its initial proposal to ensure that prior to clearance of the 1999 LRAM deferral account balance there would be the benefit of a third party audit and examination through the customer review process.

4.45 With respect to AMO's request that a new deferral account related to the Settlement Agreement on delivery point flexibility be established, Union replied that it would not be able to market any unused capacity on a firm basis because it must retain this capacity for customers to use at any time. Further, Union stated that it would be difficult to distinguish the margins from marketing unused space from other net revenues arising from Storage and Transmission transactional activities and that all such revenues should be treated in a similar fashion.

Board Findings

4.46 The Board accepted the use of Z-Factors in certain situations, specifically, the Board has found Z-Factors appropriate for changes in legislative and regulatory requirements, changes in generally accepted accounting principles, property taxes, capital taxes, income taxes and delivery/redelivery costs. Board has also accepted the materiality threshold proposed by Union.

4.47 The Board further notes that for non-routine adjustments (Z- Factors), Union proposed to request a deferral account, record amounts and report for consideration in the next customer review process. The Board has earlier in this Decision directed Union to track changes in Ontario Income Tax, and to bring forward the cost changes to be considered through the customer review process.

4.48 The Board finds that Union need not make specific applications to the Board for deferral accounts, and may "track" such amounts as it sees fit. However, Union must be able to justify inclusion of any amounts should it propose a Z-Factor adjustment.

4.49 Except where specifically addressed in this Decision, the Board accepts the proposed allocation of the balances and approves the disposition of the balances in the 1999 deferral accounts. The Board directs Union to bring forward the balances in all of the year 2000 deferral accounts for review in the customer review process as soon as possible.

4.50 Except where specifically addressed in this Decision the Board, accepts Union's proposals with regard to continuing, merging, closing and creating deferral accounts. In making this decision the Board is aware that Union has proposed a change in methodology for determining the inventory revaluations resulting from changes in its approved weighted average cost of gas. The Board is not prepared to authorize a change in methodology at this time, without receiving public input prior to making a decision. The Board has approved the 1999 balances for disposition proposed by Union prior to the proposed methodology change and directs Union to file its 2000 actual balances and 2001 forecast balances under the existing methodology in the customer review process.

4.51 Union shall show separately the amounts recorded in this account relating to the differences in the application of the existing methodology and the proposed methodology. Union may present proposed changes in the methodology in the 2001 customer review process. If Union feels the timetable for the 2001 customer review process does not permit an effective, timely resolution, Union may bring them forward in a subsequent customer review process.

4.52 The Board notes Union's proposal to offset impacts of its proposal on year 2000 rates against the 1999 balances in the non-gas supply related deferral accounts. Recognizing the timing of this decision, the Board directs Union to bring forward to the customer review process a proposal for the disposition of both the actual 1999 and 2000 balances, and a forecast of 2001 deferral account balances, in the non-gas supply related deferral accounts as offsets to the year 2000 and forecast 2001 combined revenue deficiency or excess. Any differences between the 2001 forecast and actual deferral account balances and any variances between the forecast 2001 revenue deficiency/excess and the actual deficiency/excess, after application of the earnings sharing mechanism, shall be recorded in the Deferred Customer Rebates/Charges Deferral Account (179-26) for review during the 2002 customer review process.

4.53 The Board requires that Union's proposal should result in an appropriate matching of the customer credits and debits. In the event of residual rate payer debits, the Board expects Union to bring forward a proposal that would clear these accounts prospectively through a rate rider should those balances be significant. The Board expects the Company to bring forward a proposal for a one time payment for any material residual rate payer credits.

4.54 The Board directs Union to bring forward a final rate order incorporating the Board's directions for review to the customer review process and for approval by the Board.

4.55 The Board understands Union's position that it will manage the CIS costs under the price cap plan. The Board notes that Union has a rate payer credit balance for 1999 which it propose to be cleared to the rate payer. The Board is unable to determine the balance that will accrue in the account for the year 2000 and therefore requires Union to maintain the CIS account for the year 2000 but will permit Union to close it for

subsequent years in conformance with the Board's decision to approve a trial PBR plan commencing in 2001. The Board directs Union to bring forward the accumulated balance in the CIS deferral account to December 31, 2000 for review and disposition in conjunction with Union's other 1999 and 2000 deferral account balances.

4.56 The Board accepts Union's proposal that the 1999 LRAM deferral account balance be reviewed and disposed of at the time of disposing of the year 2000 balance in the other deferral accounts through the customer review process. The Board notes that intervenors will have an opportunity in the customer review process to address their concerns. The Board expects Union to provide an adequate evidentiary basis to justify the LRAM account balances and its disposition in that process.

4.57 The Board accepts Union's argument that it cannot market unused capacity related to the delivery point flexibility arrangement on a firm basis, since it must maintain the availability of the space for customers. Further, since the Board has required elsewhere in this Decision that Union maintain the Storage and Transmission deferral accounts, any additional margins will be captured and disposed of in a similar fashion to other Storage and Transmission transactional activity net revenues. The Board does not require the establishment of a "delivery point flexibility" deferral account as proposed by AMO.

4.1 ELIMINATION OF STORAGE AND TRANSPORTATION TRANSACTIONAL REVENUE ("S&T") AND LONG–TERM STORAGE PREMIUM DEFERRAL ACCOUNTS

4.58 Union proposed to eliminate the Storage and Transportation Transactional Revenue Accounts (179-69, 179-70,179-71, 179-73, 179-74) and Long-Term Storage Market Premium (179-72) Account.

4.59 In EBRO 499, the Board approved replacing the previously existing accounts for storage and transmission services to ex-franchise and direct purchase customers with six accounts corresponding to the service blocks under which storage and transmission services are sold. Five of the accounts are related to Union's transactional services and are used to record the difference between actual and forecast net revenue for each type of transactional service (eg. transportation and exchange services, balancing services). The variance in excess of the forecast amount in each account (credit balance) is shared on an approved 75:25 basis in favour of the ratepayer.

4.60 Union's evidence is that the ratepayer credits (or debits) corresponding to the balances in each account at December 1999 are listed below:

- Transportation and Exchange Services (179-69) $1,509,000
- Balancing Services (179-70 $938,000
- Short-term Services (179-71) $2,090,000
- Other S&T Services (179-73) $(495,000)
- Other Direct Purchase Services $1,187,000

4.61 These five deferral account balances result in an overall ratepayer credit of $5.229 million at December 1999.

4.62 The long-term peak storage deferral account is used to record differences between the actual and forecast premium over cost-based rates related to the sale of long-term storage under market-based rates. This account recorded a ratepayer debit, at December 31, 1999, of $884,000.

Positions of Parties

4.63 CAC submitted that the “S&T” deferral accounts should be maintained because Union had provided no justification for their elimination. CAC argued that since the assets used to provide these services are regulated assets that have been funded through rates, a cost-of-service approach should be applied to these revenues during the PBR term.

4.64 LPMA, MECAP, and WGSPG submitted that Union had provided no credible evidence to support a change in existing practices concerning these accounts. LPMA rejected Union’s arguments that it required these revenues to manage the additional risks Union would face from its PBR plan, contending that Union could otherwise mitigate against these risks

4.65 Schools' view was the transactional services deferral accounts should be maintained, arguing that the existing revenue sharing arrangement should not be affected by a change to PBR. Schools commented that the 75:25 sharing was an historical arrangement that reflected both the use of utility assets and the need to provide an incentive to management to market the services from these assets. Schools noted that Union proposed that sharing would not apply to new storage developments.

4.66 VECC submitted that these accounts should be maintained and that the revenues "should not be surrendered on the simple assertion that assists Union and the management of its risks", and further considered it inconsistent to include capital assets in the rate base but exclude some associated revenues.

4.67 IGUA opposed the closure of these accounts, referring to its submissions under "Treatment of Market Priced Storage" but suggested that the ratepayers share of the long-term market premium deferral account be reduced to 75% in 2001.

4.68 NOVA supported IGUA's position stating that to "have Union benefit entirely from these revenues which are not currently part of its revenue requirements and then to layer the PBR price cap plan on top of those incremental revenues is ... a double benefit for Union."

4.69 Energy Probe argued that there was no connection established between the additional PBR plan risks and the S&T revenue benefits stating that the "PBR proposal should be introduced only to drive out lower costs, and should be judged on a stand-alone basis."

Union's Reply

4.70 Union reiterated its submissions discussed im Chapter 2 under "Treatment of Market Priced Storage", saying that its proposal to eliminate the S&T and long-term storage premium accounts are a necessary and integral component of its PBR plan.

Board Findings

4.71 The Board has previously authorized the continuation of Long Term Storage Services Deferral Account (179-72) to record the long-term market storage premium. The Board has also authorized the continuation of the five transactional services accounts set out above. The actual balances for 1999 and 2000, and a forecast of the balances for 2001, will be disposed of in conjunction with the other non-gas supply related deferral account balances to be reviewed in the 2001 customer review process.

4.2 INCREMENTAL UNBUNDLING COSTS DEFERRAL ACCOUNT (179-X2)

4.72 Union proposed to establish an account to record the costs incurred for system changes, process changes, and new information systems that are required to implement the unbundling of upstream transportation and storage and also of customer billing. Union proposed to allocate these balances, projected to be $1.0 million at December 31, 1999, to in-franchise rate classes in proportion to the weighted average number of customers.

Positions of Intervenors

4.73 CAC submitted that deferral accounts should be used to accumulate costs going forward. CAC opposed the collection of costs incurred prior to the establishment of the deferral account and also opposed prior approval for recovery of balances.

4.74 IGUA observed that there was a distinction between unbundling ancillary businesses from utility businesses and unbundling utility services. IGUA accepted "that ratepayers should be responsible for incremental costs incurred by Union to unbundle utility services."

4.75 Schools agreed with the establishment of this account but submitted that Union should demonstrate that the costs were both incremental and prudently incurred and that the disposition of balances should discussed at the customer review process.

Union's Reply

4.76 Union estimated that it would spend a total of $7.5 million by the end of 2000 to effect the unbundling of services proposed in this proceeding. Union indicated that, as of December 31, 1999, Union had spent $1.4 million, of which $0.4 million was related to providing functionality to the REMs to enable them to access unbundled services on behalf of their customers. Union was seeking recovery of $1.0 million in this proceeding.

4.77 While Union expected a review of expenditures prior to recovery of costs it stated it would like to have some assurance from the Board with respect to recovery and the disposition methodology. Union commented that in the past the Board had approved deferral accounts with effective dates prior to the Board's order and noted that its initial application for the deferral account was made in September 1999. Union added that in order to achieve a timely implementation of unbundled services it would require expenditures to be made prior to the issuance of the Board's Order.

4.78 Union commented that all of the estimated costs were incremental to those included rates approved by the Board in EBRO 499.

Board Findings

4.79 The Board notes that no party opposed the establishment of a deferral account for incremental expenses related to the implementation of utility unbundled services. The Board agrees with the establishment of such an account. The Board recognizes that Union applied for this deferral account on September 21, 1999 and that the Board deferred the consideration of that application to this proceeding. The Board therefore authorizes recording in the deferral account incremental unbundling expenditures that were incurred after Sept 21, 1999. The Board recognizes that the prudency of costs incurred and the disposition of balances in this deferral account will be reviewed as part of the customer review process. The actual balances for 1999 and 2000, and a forecast of the balances for 2001, will be disposed of in conjunction with the other non-gas supply related deferral account balances to be reviewed in the 2001 customer review process.

5. OTHER APPROVALS AND EXEMPTIONS

5.1 HARMONIZATION OF STORAGE CONTRACT BLANKET APPROVAL POLICY

5.1 Union proposed to extend to the Northern and Eastern Operations Area, the blanket approval provisions approved by the Board in EBO 166 and subsequently modified in EBRO 499 for Union's Southern Operations Area, namely for terms of up to seventeen months encompassing not more than one peak period for space of up to 2 Bcf.

5.2 Union also requested that the blanket approval apply to storage arrangements between retail energy marketers ("REMs") and Union under the unbundled services that were agreed to in the Settlement Agreement. Union noted that while each REM would manage its own storage assignment in aggregate, the aggregate of each assignment is essentially a collection of short term contracts for small capacity tied to the end users, and therefore should be covered by the blanket approval.

5.3 Union also proposed to amend the filing requirements applicable to contracts covered by the blanket approval. Union anticipated that with the unbundling of storage services, the number of storage contracts would increase significantly. Instead of the current practice of filing a copy of each agreement with the Board, Union proposed to maintain a record of all storage contracts that fall under the blanket approval and only provide copies to the Board upon request.

Positions of Intervenors - Harmonization of Storage Contract Blanket Approval Policy

5.4 IGUA contended that T1 Contracts are distribution arrangements rather than the type of storage contracts intended to be covered by subsection 39(2) of the Act. IGUA stated that if the Board were to determine that subsection 39(2) of the Act pertains to T1 storage contracts, IGUA would support Union's proposal to broaden the scope of the blanket approval and to amend the filing requirements.

Union's Reply - Harmonization of Storage Contract Blanket Approval

5.5 Union commented that the original blanket approvals of storage contracts were granted by the Board in EBO 166 and applied to T1 contracts.

Board Findings - Harmonization of Storage Contract Blanket Approval

5.6 The Board approves Union's requests: to extend the blanket approval provisions currently in effect in the Southern Operations Area to the Northern and Eastern Operations Area; to extend the blanket approval provisions to cover storage arrangements between Union and REMs under the unbundling agreement accepted

by the Board as part of the Settlement Agreement; and to amend the filing requirements with respect to blanket storage contracts, as proposed by Union.

5.2 EXEMPTION FOR UNION'S EXISTING INVESTMENT IN UNION ENERGY

5.7 Union proposed that its existing preferred share investment of $150 million in UEI Holdings Inc. ("Union Energy") not be considered in assessing compliance with the Affiliate Relationships Code for Gas Utilities (the "Code").

5.8 Section 2.4.1 of the Code states:

> A utility may provide loans, guarantee the indebtedness of, or invest in the securities of an affiliate, but shall not invest or provide guarantees or any other form of financial support if the amount of support or investment, on an aggregated basis over all transactions with all affiliates, would equal an amount greater than 25 percent of the utility's total equity.

5.9 Union sought to exempt its $150 million investment in Union Energy from the 25% of total equity threshold limit as set out in the Code. This investment related to the transfer of Union's ancillary programs to Union Energy. This transfer was approved by the Board in EBO 177-17.

5.10 The Code provides that utilities may apply for an exemption from its provisions, and Union applied for such an exemption on July 8, 1999. The Board referred this exemption application to this proceeding.

Positions of Intervenors - Exemption for Union's Existing Investment in Union Energy

5.11 HVAC argued that the purpose of the investment cap in the Code was to protect rate payers from the use of equity raised by the utility for non-utility ventures. HVAC noted that prior to the introduction of the Code and to the separation of ancillary businesses, Union had been subject to restrictions on investment in affiliates through undertakings provided to the Lieutenant Governor in Council. HVAC submitted that there was no legitimate argument for excluding old investments from the investment cap in the Code. HVAC argued that Union could apply for an exemption if it were expecting to breach the 25% limitation.

5.12 Schools argued that the 25% cap in the Code is generous and commented that the Union Energy investment was not intended to be permanent. Schools stated that the Company should not capitalize new unregulated businesses, arguing that an investment of this magnitude raised concerns for rate payers.

Union's Reply - Exemption for Union's Existing Investment in Union Energy

5.13 Union submitted that the principal objective of the Code is to enhance the competitive market while keeping rate payers harmless from the actions of gas utilities with respect to dealings with their affiliates. Union argued that if the exemption was not provided it would be unduly restricted in its ability to assume investment opportunities that were contemplated by the Code. Union argued that it needed flexibility to enable it to respond to investment opportunities that may arise quickly. If the exemption was denied and Union had to seek prior approval for a new investment, Union commented that the approval process can take significant time.

5.14 Union argued that the transaction should be exempted from the threshold limit because it received prior approval and will not harm ratepayers.

Board Findings - Exemption for Union's Existing Investment in Union Energy

5.15 The Board notes that the $150 million preferred share investment by Union in Union Energy must be redeemed on or before January 1, 2004. Further the Board notes that if this investment is not excluded from the cap in the Code, Union's ability to pursue other such investments would be limited to $110 million. The Board notes that there was no evidence in this proceeding that Union is not in compliance with the Code.

5.16 The Board does not see the need at this time to exempt this investment from the application of the Code, given that the Company is presently below the 25% of equity limit and given that the Board understands that the investment in Union Energy will expire in the near future.

5.3 APPROVAL TO CONTINUE NATURAL GAS VEHICLES, AGENCY BILLING AND COLLECTING, AND GAS MOLECULE SALES ACTIVITIES

5.17 Union has provided a number of undertakings to the Ontario Government that provide that ."Union shall not, except through an affiliate or affiliates, carry on any business activity other than the transmission, distribution or storage of gas, without the prior approval of the Board". Union sought Board approval to continue its natural gas vehicle program ("NGV"), agency, billing and collection service ("ABC"), and gas molecule sales activities for an indefinite period. In its EBRO 499 Decision, the Board informed Union that it expected evidence concerning its long-term plan for these activities to be filed in this proceeding.

NGV Program

5.18 Union proposed to continue to operate the NGV program within the Company until a competitive market develops for those aspects carried out by Union. Union stated that it was on track with the plan it had filed with the Board in the EBRO 499 proceeding.

5.19 Union added that on a marginal cost basis the NGV program has exceeded the utility rate of return. As part of the Board's decision in EBRO 499, the NGV revenue forecast was adjusted to increase the return, on a fully- allocated cost basis, to the utility's overall rate of return to ensure that ratepayers were not subsidizing Union's NGV program.

5.20 Union submitted that competitive markets have not developed sufficiently to date for the conversion program and public station infrastructure development and Union is the only major supplier in this market.

5.21 Union indicated that customers continue to demand this service and that Union will have to remain in the business for the foreseeable future.

ABC Service

5.22 Union's ABC service enables an REM to bill customers who have contracted with the REM for the gas commodity using Union's billing system. Approximately 400,000 end-use customers in the Union's franchise area are served by REMs.

5.23 Union submitted that without the ABC service the number of REMs able to provide service in the Ontario commodity sales market could be reduced.

Gas Molecule Sales Activities

5.24 Union currently supplies system gas to 650,000 end-use customers. Union submitted that customers continue to demand system gas services and that it will have to remain in the business for the foreseeable future. Union also indicated that the Act contemplates gas distributors providing this service.

Positions of Intervenors - Approval to Continue Natural Gas Vehicles, Agency Billing and Collecting, and Gas Molecule Sales Activities

5.25 CENGAS supported the continuation of Union's ABC service on the basis that Union would be filing an application for approval of enhanced ABC service as described in the evidence in this proceeding.

5.26 CAC noted Union's evidence that elimination of the NGV program would have no impact on rates. CAC submitted that if Union were to eliminate NGV or ABC the details of this elimination should be brought before the Board to determine whether rates should be adjusted.

5.27 IGUA supported Union's proposals provided that the base to which the price cap is applied was adjusted to eliminate the any revenue deficiency, calculated on a fully allocated cost basis, generated by these programs.

5.28 Schools submitted that Union should not be allowed to continue its NGV program indefinitely, but would accept an extension of the program until the end of 2000. Schools argued that the continuation of the NGV program should be considered either in the customer review process or in the billing unbundling proceeding.

Union's Reply - Approval to Continue Natural Gas Vehicles, Agency Billing and Collecting, and Gas Molecule Sales Activities

5.29 Union submitted that in the settlement agreement in EBRO 499, the forecast revenues for both the ABC and NGV programs were adjusted to remove any deficiency on a fully allocated cost basis. As such, Union argued that there was no subsidy for these programs imbedded in distribution rates.

5.30 Union stated that, in accordance with its NGV business plan, it no longer invests in the competitive aspects of the NGV business (i.e. private transit, large-fleet and off-highway conversion businesses).

5.31 Union indicated that while the elimination of system gas sales would be a significant industry event requiring a hearing, the elimination of the NGV or the ABC program would not be a significant industry event requiring a hearing.

5.32 Union stated that with respect to the NGV and ABC programs it was the only supplier of these services. Further, Union submitted that the continuation of these programs had no detrimental impact on consumers.

Board Findings - Approval to Continue Natural Gas Vehicles, Agency Billing and Collecting, and Gas Molecule Sales Activities

5.33 The Board approves Union's application to continue the NGV program, ABC service and the gas molecule sales activity for the term of the trial PBR plan. The Board notes Union's position that there was no embedded subsidy included in EBRO 499 distribution rates for these programs. The Board expects that should Union decide to eliminate any of these programs Union would bring forward to the customer review process information to determine whether adjustments to rates were required.

6. UNBUNDLING

6.1 INTRODUCTION

6.1 Union brought forward proposals to further unbundle its currently offered services. In this context, Union defined unbundling as the separate offering and pricing of discrete elements of services which it currently provides to customers on a fully packaged or bundled basis for a single price. A degree of unbundling has already occurred within Union's market area in respect of natural gas supply and some of the pipeline capacity management. In this application Union proposed further unbundling of upstream transportation and storage and that the unbundling of billing would be addressed in a later process.

6.2 Union stated that it was pursuing unbundling in order to respond to customer demand for further unbundled services and to facilitate the continued development of the competitive marketplace.

6.3 In designing its unbundling proposals Union stated it relied on the following principles:

- customers should retain the ability to choose either the bundled or the unbundled option;

- the operational capability of the assets underlying the bundled service would be made available to the unbundled service;

- stranded costs should be minimized and where stranded costs arise they should be borne by customers;

- the unbundled services should not jeopardize or significantly increase the costs of maintaining system integrity and reliability;

- the terms and conditions of the services should be structured so as to place the risks and rewards of managing the service with the user; and

- existing allocations/assignments of upstream transportation related to direct purchase arrangements in Union's Southern Operations Area would be maintained.

6.4 Union contracts for gas supply and the associated upstream transportation for its system customers and the costs related to these commitments are passed through subject to regulation by the Board. Union has facilitated direct purchase of gas supply by providing direct purchasers with assignments of upstream transportation capacity that it has contracted for its system customers.

6.5 There are significant differences in the way Union provides delivery capacity in its Southern Operations Area and in its Northern and Eastern Operations Area. In the Southern Operations Area, Union serves the demand through a portfolio of firm, upstream pipeline capacity which is operated at 100% load factor and storage which is used to provide seasonal balancing and peaking requirements. In the Northern and Eastern Operations Areas Union serves demand through a combination of storage, upstream capacity into six different TCPL delivery areas, Storage Transportation Service ("STS") contracted from TCPL, allowing Union to shift deliveries from one area to another, and capacity on Union's Dawn-Trafalgar transmission system. Union has structured its proposal as it relates to the allocation and management of

upstream transportation to recognize these differences. Similarly, Union's proposals for the allocation and management of storage reflects these differences.

6.6 Union also proposed changes for the Southern Operations Area that relate to the unbundling of upstream transportation, including changes to increase shipper delivery point flexibility, changes in delivery commitments at Parkway for unbundled direct purchase customers, and the elimination of the Delivery Commitment Credit ("DCC").

6.7 Union also structured its transportation and storage unbundling rate proposals to continue to reflect the cost allocation methodologies underlying the rates that were approved in EBRO 499.

6.8 As part of unbundling, Union proposed the following: changes to its title transfer service; a methodology for allocation of gas in storage when a customer changes to unbundled service from bundled service; changes to its return to system policy; imbalance fees to customers for variances between actual usage and the daily nominations made by the customer related to upstream transportation and storage; and a penalty charge to be applied to customers who exceed their authorized storage entitlement on a given day.

6.9 Union noted that implementation of these proposals would require new and enhanced systems to manage daily nominations and other parameters associated with unbundled services.

6.10 Through the ADR process, participants to the proceeding were able to reach agreement on many of the issues related to Union's unbundling proposals.

6.11 The parties were not able to reach agreement on the terms and conditions and the allocation of upstream transportation. Some parties also argued that Union's unbundling proposals should have been more extensive.

6.2 UNBUNDLING OVERVIEW AND RATIONALE

6.12 Union contended that its unbundling proposals are consistent with the continued evolution over time of competitive options that began with commodity-based direct purchase and extended to T-service offerings. Union stated that its new unbundled service offerings were developed to support a competitive market in natural gas commodity and other non-monopoly services.

Positions of the Intervenors - Unbundling Overview and Rationale

6.13 LPMA and MECAP supported the principles that Union stated underlay its unbundling proposals. They submitted that key principles were the elimination, or at least the minimization, of stranded costs and the maintenance of system integrity and system reliability, and, in their view, that Union's proposals in general met these requirements. They argued that while Union's proposals place a number of restrictions on customers, such restrictions will slow, not stop, the development of competitive markets. They viewed Union's proposals as just "the first step" in the transition from monopoly services to a competitive environment. They stated their expectations that Union, customers and brokers would be able to bring forward further proposals for changes in unbundled services through the customer review process.

6.14 LPMA and MECAP expressed concern that the design of unbundled and bundled rates should not result in cross-subsidization between bundled and unbundled customers. They submitted that the Board should direct Union to undertake a full cost allocation study as part of the implementation of a second generation PBR scheme.

6.15 VECC was not convinced that unbundling would result in real benefits for the residential consumer. VECC submitted that transaction costs would increase to enable choice, and the introduction of options might increase customer confusion. VECC expressed concern that the proposals put forward by Union with regard to storage were a transitional step towards the implementation of market pricing of all

storage. VECC argued that since the market value of storage exceeds the cost-based rates, the unbundling process would move the economic benefits of this asset more toward the marketers.

6.16 IGUA submitted that availability of unbundled transportation, storage and other delivery services is necessary in order to enable market participants to choose the most cost effective mix of delivery services. IGUA also submitted that the provisions of the Settlement Agreement should operate indefinitely, subject to the right of any party to apply to the Board for an order requiring implementation of changes considered to be necessary for serving the public interest.

6.17 CAC noted that, while it was a signatory to the Settlement Agreement, it was not convinced of the extent to which the unbundling proposal would ultimately benefit the residential customer. CAC submitted that it will be incumbent on Union to maintain both bundled and unbundled options; minimize or eliminate stranded costs; and maintain system integrity. CAC also supported the principle that cross-subsidization between bundled and unbundled services should be avoided and that those who benefit from unbundled services should bear the costs of providing those services.

6.18 CAC argued that Union's proposals should not be "set in stone" but that through the customer review process parties should be able to bring forward alternatives.

6.19 CAC did not support the Board requiring Union to undertake a formal study regarding the implementation of an independent system operator for gas and considered the proposals put forward by Energy Probe as premature.

6.20 Schools commented that the major impetus for the unbundled rates has come from the gas marketers and, to some extent, industrial users and Union. While Schools agreed with the unbundling package, it believed that the benefits to be achieved by the typical bundled-T customer that has been purchasing its commodity for many years with bundled storage, were modest. Schools commented that upstream transportation was already quasi-unbundled since customers already held a notional

allocation of Union's TCPL capacity and were responsible for any under-utilization of that capacity through the terms of their bundled-transportation or buy/sell agreements. Storage would now be unbundled under Union's initiative. Since bundled customers currently receive storage at cost it was not clear to Schools what the customer would gain by having storage supplied through a marketer at "cost-plus-a-fee" or "at market". Schools noted that there appeared to be little financial advantage for a bundled customer to move to unbundled rates, since there would be new costs, such as daily balancing costs, that the customer would incur. Schools argued that those who benefit from unbundled services should pay for them.

6.21 OAPPA supported the offering of greater customer choice through the implementation of unbundled services, provided they are not implemented at the expense of customers who choose not to select the unbundled options.

6.22 TCPL argued that unbundling should not be just a matter of providing freer access to upstream assets in Union's existing portfolio, but that the objective of unbundling should be to introduce competitive forces into an area of activity where it was formerly absent. Further TCPL submitted that since the objective of unbundling is essentially broader than the objectives that underlay the introduction of past direct purchase options, one should expect the mechanisms to be different and therefore there should be no requirement for the unbundling mechanisms to be consistent with past practice. TCPL was in favour of a fully voluntary scheme of arranging for upstream transportation and storage with appropriate rate-making provision for stranded costs.

6.23 CEED submitted that Union's proposals should be considered within the context of the end-state that unbundling was meant to achieve, which in its view is one in which the only mandatory service to be provided by the distribution utility is the delivery of gas from the relevant supply point to the customer's meter. The customer should have the choice to purchase all other services, including upstream transportation and storage, in a competitive market. The Board's role in this end-state would be to ensure open access to the distribution system, ensure the neutrality of the LDC by restricting its participation in competitive activities, and protect small customers by

establishing and enforcing licences and codes for gas marketers. With this end-state in mind, CEED proposed that both transportation and storage should be unbundled from Union's rates and services and offered to customers on a voluntary basis so that customers could manage them in the most cost effective manner.

6.24 Energy Probe submitted that Union's unbundling proposals are too limited and that the Board should direct Union to come forward with a more comprehensive approach. It recommended that the Board direct Union to provide a number of studies including options for storage deregulation, the concept of an independent system operator for gas, rate design changes that can benefit competition and unbundling, and the role of distributors in ensuring unbundled services are available to small volume general service firm customers. Energy Probe believed that future unbundling would be assisted if the Board were to indicate its general approach to the treatment of stranded costs and that Union should report at its next hearing on its revenues from new unbundled services to in-franchise customers.

Union's Reply - Unbundling Overview and Rationale

6.25 Union submitted that its unbundling proposals were well considered and comprehensive and had been developed with the goal of moving towards the "idealized end state" agreed to in the industry consensus, formed through the Working Group on Natural Gas Markets formed pursuant to the Ten-Year Market Review and the Market Design Task Force. Union agreed with CAC and IGUA that its unbundled services should be subject to change by virtue of an application made to the Board.

6.26 Union questioned the relevance of Energy Probe's evidence, took issue with its proposals and argued, noting CAC's support, that the Board not require Union to undertake a study of the implementation of an independent system operator.

Board Findings - Unbundling Overview and Rationale

6.27 With changes to the Act in 1998, the Board has seen further development with respect to its mandate and regulatory authority. One of the objectives of the Act is to create a competitive market in the sale of natural gas.

6.28 The Ontario natural gas industry, in particular, has been restructuring and evolving since 1985 when customers were given an opportunity to procure their own gas supply, and the Board first addressed issues of non-discriminatory access to transportation, storage and distribution services. In 1995, the Board initiated a review of the structure of the natural gas market in Ontario. In its Report on the Ten-Year Market Review, the Board indicated that it believed that a fully competitive gas commodity market would be more efficient than a regulated market. More recently the industry led Market Design Task Force ("MDTF") submitted its report to the Board in February 1999. While the MDTF was successful in achieving consensus on a number of issues there were some issues which remained unresolved. Another stakeholder-driven process to establish Gas Distribution Access Rule recently filed its "Final Report of the Distribution Access Rule Task Force".

6.29 In considering this Application, the Board attempts to balance the interests of the stakeholders who may take advantage of unbundled services and those who continue to take bundled services. The Board must also consider the operational integrity of the system for the benefit of all users. This Decision does not address a comprehensive re-engineering or restructuring of the industry.

6.30 The Board continues to believe that a workably competitive market for gas as a commodity requires a market in which there are many buyers and sellers of the commodity and open access to services required to deliver the gas under terms and conditions and prices that are not unduly discriminatory. Reasonable compromises must be made in moving toward a competitive market.

6.31 The Board is not able to precisely describe the end-state which the industry may achieve as there is a lack of tested evidence for the Board to consider this matter. Furthermore, it is the Board's preference that flexibility be incorporated into any unbundling regime so as to correct any undesirable practices or outcomes observed in the future.

6.32 This Decision should be regarded as a component of an overall, longer term transition to increased competition. It is hoped that when a more robust fluid market exists, many features in the Settlement Agreement and in this Decision will have evolved and been replaced with improved features.

6.33 The Board agrees with the many parties who indicated that Union's proposal should be viewed as a continued evolution of new services in support of a competitive market in natural gas commodity and other non-monopoly services, should not be considered to be "set in stone", and that there should be some flexibility surrounding it.

6.3 UPSTREAM TRANSPORTATION

6.3.1 Upstream Transportation - Southern Operations Area

6.34 Over the years, Union has entered into a number of contracts, with varying terms for upstream transportation capacity in order to serve its customers. Under these contracts Union takes delivery at Parkway, Dawn and Ojibway. Union stated that it is not able to remove itself from these contracts without incurring significant costs.

6.35 When a customer moved to direct purchase from system supply the customer was obligated to take an assignment of the upstream transportation that was contracted by Union. In the past the customer received an allocation of TCPL firm transportation ("TCPL FT") capacity with an obligation to deliver at Parkway 365 days per year. Any diversions or assignments of this transportation capacity were subject to authorization by Union.

6.36 Union's current system operation and design relies on the firm delivery of TCPL FT volumes at Parkway. Union argued that its reliance on these volumes has resulted in Union's Dawn-Trafalgar system being smaller than it otherwise would have been, therefore costs were lower, and all customers, both in-franchise and ex-franchise, have benefited from this system design through lower rates.

6.37 In the Spring of 1999, Union implemented a TCPL turnback policy in response to requests from customers who wished to take advantage of discounted transportation capacity available in the secondary transportation market. Under this policy a customer is entitled to reduce its assignment of upstream capacity at levels that equal the capacity that Union could turnback to TCPL without Union incurring any direct costs. However, the customer is still required to maintain its obligated firm deliveries at Parkway for 365 days of the year regardless of the amount of capacity the customer turned back.

6.38 In addition, Union currently pays a DCC to all bundled direct purchase customers who manage their transportation and are obligated to deliver in accordance with the terms and conditions of the delivery service. By design, the costs of this payment are recovered in the delivery rates from all in-franchise customers in Union's Southern Operations Area.

6.39 In order to facilitate unbundling, Union proposed to allocate/assign upstream transportation, underlying current bundled service, based on a vertical slice of Union's upstream transportation portfolio ("Vertical Slice"). The Vertical Slice would include all components of Union's transportation portfolio. For direct purchase arrangements that were operating or in place prior to the unbundling start date, Union proposed to grandfather the existing upstream transportation allocations/assignments, essentially allocations of a portfolio of contracts with different terms of firm TCPL capacity, since to date direct purchase has been facilitated through such an allocation. New direct purchase would be allocated capacity equal to the customer's demand (Daily Contract Quantity) in proportion to Union's total transportation portfolio as of the previous November first. Under this

proposal new direct purchase customers would receive delivery rights at Parkway and Dawn on a number of pipelines.

6.40 Union explained that it could not continue to facilitate direct purchase through the allocation/assignment of TCPL firm transportation because the TCPL firm transportation in its remaining system portfolio was almost depleted. Union proposed to put in place a transportation clearing-house through which Union would attempt to arrange adjustments to a customer's assigned transportation portfolio through mutual agreement between customers. The mandatory assignment of capacity to a customer would only change: if there was agreement through the transportation clearinghouse to change the customer's assignment; if the customer took advantage of the TCPL turnback policy; or, if the term of the underlying transportation contract expired.

6.41 Union also stated that it would enter the appropriate transportation queues and contract for long-term capacity on behalf of direct purchase customers at their request but might, in such case, require the customers to make a longer term commitment to this capacity.

6.42 As part of its unbundling proposal Union also proposed: to eliminate payment of the DCC; to replace the Parkway delivery commitment for unbundled customers with an obligation to deliver at Parkway, subject to call by Union, for up to 22 days in the period November 1 to March 31; and to retain the restrictions on diversions and assignments for bundled direct purchase customers who already hold upstream transportation capacity with a Parkway delivery point.

6.43 Union stated that all customers, both bundled and unbundled, had indicated to Union their desire for greater delivery point flexibility in order to access competitively priced gas supplies at Dawn and not be restricted to the Parkway delivery point. Union identified three options for providing additional flexibility: build additional Dawn-Trafalgar facilities; acquire additional Dawn-Trafalgar capacity from existing M12 (ex-franchise) customers; or change contractual arrangements between TCPL and Union. Each of these three options would have rate impacts and Union proposed

that these impacts would be passed through to in-franchise customers, since it is in-franchise customers who want and could benefit from the delivery point flexibility.

6.44 Prior to the settlement negotiations Union and TCPL negotiated a temporary assignment of 150 mmcfd of Dawn to Parkway capacity from TCPL for a three-year term. Union made this unconditional three-year commitment in order to facilitate delivery point flexibility for its in-franchise customers effective November 1, 2000. This assignment is renewable subject to agreement between TCPL and Union. This 150 mmcfd temporary assignment represents approximately 20% of the existing volumes committed for delivery at Parkway.

6.3.2 Settlement Agreement related to Parkway Commitment, 22 Day Callback, Delivery Point Flexibility and DCC Elimination

6.45 Parties accepted some of Union's proposals as detailed in the Settlement Agreement. Union agreed to defer the elimination of the DCC until April 1, 2001, to align with the projected unbundling implementation date.

6.46 The parties agreed that the 150 mmcfd M12 Dawn-Parkway capacity should be used to provide delivery point flexibility for all in-franchise customers. The parties agreed that: the costs associated with this temporary assignment, namely the foregone M12 revenues, should be allocated among all in-franchise customers based on the 1999 Dawn-Trafalgar design day demand approved in EBRO 499; the recovery of these costs met the definition of a non-routine adjustment; and rates should be adjusted to recover these amounts regardless of the Board's decision on Union's PBR proposal.

6.47 Union also agreed to facilitate individual customer's requests for delivery point flexibility in excess of the 20% already provided through negotiations with TCPL. Parties agreed that the costs of additional capacity obtained through temporary release of M12 capacity would represent additional foregone revenues and that a separate agreement between Union and the customer would be required to outline the customer's commitment to pay for the associated costs. Union agreed to establish

a queue process in order to determine the level of interest and form the basis for negotiations with TCPL for temporary assignment of additional M12 capacity.

6.48 Union agreed to consult annually with parties to determine whether there is a consensus to seek additional capacity over and above the 20% level to provide additional system-wide delivery point flexibility. Further, Union would consult with parties on whether to seek an extension to the three-year temporary assignment from TCPL. Parties acknowledged that any system-wide solution must be mutually agreed to by TCPL and Union and must be paid for by customers.

6.49 The Settlement Agreement noted that should the three-year temporary M12 capacity assignment not be renewed, customers would lose the flexibility provided by this assignment and would be obligated to deliver these volumes at Parkway and Union would adjust the rates to remove the recovery of costs related to this assignment.

6.50 The Board notes that it accepted the settlement of these issues during the oral phase of the proceeding. The Board further notes that all parties to the proceeding had the opportunity to participate in the settlement conference and, while some parties did not take a position on some of these issues, no parties stated opposition to the settlement.

6.51 The Board notes there was no agreement on issues relating to upstream transportation allocation and allocation terms and conditions in the Southern Operations Area.

6.3.3 Upstream Transportation - Northern and Eastern Operations Areas

6.52 The assets used to serve the Northern and Eastern Operations Area are managed by Union in an integrated manner to serve all six delivery areas, namely: Manitoba, Western, Northern, Sault Ste. Marie, Central and Eastern. Firm TCPL FT capacity is contracted separately for each of these delivery areas. In addition to TCPL FT capacity, Union uses STS contracted from TCPL and the associated pooling rights, storage (at Dawn and at the LNG facility), Dawn to Parkway transmission capacity

and other third party services such as exchange contracts, to provide an integrated service to customers across all delivery areas.

6.53 Union noted two types of transportation service are required to serve markets in the Northern and Eastern Operations Area, upstream transportation capacity and delivery/redelivery service. The upstream transportation capacity, primarily TCPL FT, and some additional capacity from the secondary market is required to transport gas generally from Alberta to the market area. The delivery/redelivery service, used to manage demand swings, consists of other assets and storage. The delivery/redelivery service enables customers to nominate delivery of gas from a market area to storage (summer storage injection) and from storage to the market area (winter storage withdrawal).

6.54 To date in the Northern and Eastern Operations Area, Union has facilitated direct purchase largely by allowing customers to provide their own supply in Alberta with Union generally managing the transportation of the gas under a bundled service. Upstream transportation has not generally been allocated or assigned to specific customers. Union proposed to continue bundled direct purchase arrangements in much the same manner without specific allocation or assignment of upstream capacity.

6.55 Union stated that it based the allocation of these assets on the current mix and operation of the assets. In so doing, Union attempted to meet the peak day needs of unbundled customers while retaining sufficient assets/capacity for the remaining bundled customers without incurring significant cost increases. Union noted that as a result of unbundling there would be a winter peak day deliverability shortfall for which provision would have to be made.

6.56 Union proposed that the current allocation of TCPL FT capacity to existing T-service customers be grandfathered. New direct purchase customers (T-service and unbundled service) would receive a “vertical slice” of Union’s Northern and Eastern Operations Area system gas transportation asset portfolio. However, since Union’s current portfolio for this area is comprised of 97% TCPL firm transportation, Union proposed that until the TCPL FT capacity component of its system gas portfolio falls

below 60% it would provide a mandatory allocation of 100% TCPL FT capacity. Assignments would be mandatory, would roll over every year, and could only be cancellable by the agreement of the parties.

6.57 Union stated that it was only able to make temporary assignments of TCPL FT upstream transportation capacity because Union's rights under its STS contracts with TCPL are based on Union's underlying portfolio of TCPL FT capacity. Impairment of these rights due to changes in Union's underlying portfolio would result in Union being unable to physically operate the system and provide firm service to all customers in the Northern and Eastern Operations Area.

6.58 Union stated it would continue to operate under its existing TCPL turnback policy but noted that it would be unable to reduce its TCPL contractual obligations until November 1, 2003.

6.59 All current contracted TCPL FT firm capacity is allocated to its specific delivery area. Within the delivery area, Union proposed to allocate the capacity by rate class and by customer by recognizing both the average daily demand by rate class and the peak day requirements of each rate class relative to the total firm capacity available in that delivery area. Customers electing unbundled service and taking an assignment of TCPL FT capacity would have access to diversion rights subject to TCPL's policy and procedures.

6.60 A customer electing unbundled storage service would receive an assignment of storage and, under the proposed delivery/redelivery service, transportation necessary to operate the storage. Union stated it was not in a position to unbundle the assets that underlie the delivery/redelivery service for contractual and operational reasons.

6.61 Union proposed to allocate delivery / redelivery capacity by delivery area, customer class, and customer. After allocating capacity for system integrity, capacity was then allocated to recognize the following factors: the proportional requirements of each rate class; the need to manage peak day requirements in the winter; and the need to manage unabsorbed demand charge risk which exists when summer demands are less

than the firm transportation allocated. Union stated that it would manage the assets underlying this service under its PBR proposal.

6.62 Union stated that both unbundled and bundled customers might experience higher costs for utility services in an unbundled world. The costs arising from unbundling will be dependent on the number of customers electing unbundled service and the rate classes and delivery zones in which the customers unbundle. Union stated it would continue to attempt to mitigate these costs to the extent feasible and would manage these costs under its PBR plan up to a level at which 30 percent of the demand in the North was being served through the unbundled option. When this level of unbundling is achieved Union would annually, through the proposed customer review process, adjust the gas transportation charge applicable to all bundled customers

6.3.4 Settlement Agreement related to Northern and Eastern Operations Area Upstream Transportation

6.63 Parties agreed with Union's proposed delivery/redelivery service. Parties also accepted Union's proposal for a threshold level of a 30 percent increase in new T-service and unbundled service demand (representing approximately 830 10^6 m^3 of annual demand) below which it would manage the risks within its PBR proposal. If this threshold were to be reached, Union would undertake a review of the experience with unbundled service in the Northern and Eastern Operations area to determine the impact on the costs and operations in the delivery area.

6.64 During the oral phase of the proceeding, the Board accepted the settlement of these issues, as more specifically set out in the Settlement Agreement. The Board notes that there was no agreement on upstream transportation allocation and allocation terms and conditions in the Northern and Eastern Operations Areas.

6.3.5 Upstream Transportation Allocation

6.65 The parties were not able to reach agreement on the methodology and the terms and conditions associated with the allocation of upstream transportation capacity. Union, IGUA and Nova, and CEED each made proposals to deal with these matters. The details of these three proposals are more specifically set out in the Settlement Agreement and are summarized below.

6.66 The focus of most of the intervenor participation was on upstream transportation allocation for Union's Southern Operations Area. Union noted that its proposal for the unbundling of upstream transportation in the Northern and Eastern Operations area is consistent with that proposed for the Southern area. However, since Northern and Eastern Operations are served almost entirely with TCPL capacity, Union's proposal for the unbundling of upstream transportation service would not be applicable in that area at this time.

6.67 Union proposed that those customers who elect to take unbundled service would be assigned a proportion of each of the components ("Vertical Slice") of Union's existing transportation capacity portfolio. There would be no flexibility with respect to the components of capacity that are assigned. All existing direct purchase assignments of upstream capacity would be grandfathered, leaving existing direct purchase customers responsible for TCPL capacity even if existing direct purchase customers chose unbundled service. Union subsequently revised its original proposal by removing the Alliance/Vector transportation component from its upstream transportation portfolio until November 2001. The cost consequences of changes in the upstream transportation portfolio would be dealt with in the customer review process.

6.68 Union noted that stranded costs could arise from unbundling if Union is left with contracted transportation capacity surplus to its requirements that it cannot sell at a favourable price in the secondary transportation market and consequently is exposed to unabsorbed demand charges. Union estimated that the potential for stranded costs, calculated as the difference in price between the published tolls and the then current

market price multiplied by the volumes in Union's total transportation portfolio, could be $101 million annually. Union pointed out that under its proposal there would be no stranded costs arising from unbundling because customers would be responsible for the upstream transportation capacity that Union had contracted for on their behalf.

6.69 As part of the Settlement Agreement, Union agreed to certain administrative arrangements related to its proposal including: to use of a 300 GJ/day threshold for the purposes of determining the applicability of its Vertical Slice proposal; and to take back capacity from an unbundled customer if the customer was returned to system.

6.70 The Settlement Agreement states that CAC, CENGAS, ECG, LPMA, Schools, VECC, and WGSPG agreed with Union's proposal.

6.71 IGUA suggested a different unbundling proposal. Under IGUA's proposal existing direct purchase customers would continue to be responsible for the TCPL capacity that had been assigned/allocated to them. New direct purchasers would be required to specify a delivery point for their gas and to take an assignment of Union's contracted capacity at that delivery point, as long as Union continued to hold any capacity in its upstream transportation portfolio having that delivery point. If a customer chose a Parkway delivery point then the customer would be obligated to the Parkway delivery commitment (365 days per year delivery for bundled customers and the 22 day call back for unbundled customers). If a customer chose Dawn delivery then the customer would not have a Parkway delivery commitment.

6.72 IGUA argued that under its unbundling proposal, stranded costs would be limited because Union would continue to require upstream capacity to serve its system customers. However, if and when stranded costs arose, IGUA suggested that they should be brought forward for recovery from customers in a manner to be determined by the Board.

6.73 CEED suggested another unbundling proposal. Under CEED's proposal there would be no mandatory allocation/assignment of upstream transportation capacity. Existing bundled and new unbundled direct purchase customers would be free to either accept an allocation of Union's upstream transportation portfolio or make their own upstream transportation arrangements. System customers would continue to be served under Union's transportation portfolio, which would be adjusted from time to time to reflect the needs of Union's remaining system customer base. Under CEED's proposal Union would be required to recover, from the market, value for any excess transportation capacity that had not been taken up voluntarily by existing bundled or new unbundled customers.

6.74 Under CEED's proposal Union could apply for recovery of the difference between Union's transportation costs and the value recovered from the market. CEED argued that these stranded costs should be identified, mitigated and, if found to be prudently incurred, recovered from all customers.

Positions of the Intervenors

6.75 LPMA and MECAP argued that three principles should guide the Board in determining the allocation of upstream transportation capacity: flexibility, potential for stranded costs, and fairness.

6.76 LPMA and MECAP submitted that the CEED alternative provided the most flexibility and was fair because all direct purchase customers would receive similar treatment with regard to upstream transportation. LPMA and MECAP were concerned, however, that the CEED proposal would lead to too high an exposure to potential stranded costs, noting that during the oral hearing Union's witness had raised the estimate of costs potentially stranded as a result of CEEDs proposal to approximately $115 million annually.

6.77 LPMA and MECAP argued that while Union's proposal provided the least amount of flexibility, it contained the smallest potential for stranded costs. They noted that there was some flexibility built into Union's proposal through the TCPL turnback policy, the 20% system-wide delivery point flexibility agreement, the fact that contracts for about half the capacity that would be allocated through the Vertical Slice expire within two years. LPMA and MECAP also commented that Union, through its clearing house function, would help customers adjust their upstream transportation. MECAP expressed concern that Union's Vertical Slice proposal would add administrative complexity to new direct purchase customers since they would be required to manage upstream capacity from a number of different gas supply basins.

6.78 LPMA and MECAP argued that the IGUA alternative provided more flexibility but could lead to more stranded costs than Union's proposal; on the other hand, it was less flexible but would result in less stranded costs than the CEED alternative. LPMA and MECAP felt that the IGUA alternative was unfair because it required existing direct purchase customers to take a mandatory allocation of the currently assigned capacity.

6.79 LPMA concluded that the Board should approve Union's approach since it would eliminate stranded costs and ensure consistency of treatment with customers who had moved to direct purchase in the past.

6.80 MECAP submitted that the Board should approve a modified version of IGUA's proposal. New direct purchasers would be required to accept a mandatory allocation from Union's remaining transportation portfolio; however, the direct purchaser would choose the composition of the capacity.

6.81 VECC was of the view that allowing marketers to select from Union's transportation portfolio would not result in lower rates for the residential customer, because the costs of transportation stranded on the system would have to be recovered through higher distribution rates. VECC pointed out that if the discounts on transportation available in the secondary market were not passed through by the retail marketer the

residential customer would be worse off. VECC supported Union's proposal, noting that it prevents the cherry-picking of Union's transportation portfolio that would lead to remaining system customers bearing the costs of the higher priced components. VECC pointed out that unbundled customers already had flexibility through the TCPL turnback policy, the 22 day call back obligation, and the 20% system-wide flexibility.

6.82 CAC, while recognizing that Union's proposal is not a perfect solution and is properly characterized as transitional, supported Union's proposal because in CAC's view it has regard for historical circumstances and attempts to ensure the interests of the various stakeholders are balanced to the extent possible.

6.83 Schools supported Union's proposal for a mandatory allocation of upstream capacity. Schools argued that by assigning this capacity to the unbundling customer Union ensures that the customers who benefit most from the unbundling proposal pay for the largest share of any incremental costs. In Schools' view CEED's proposal tilts the balance in favour of unbundled customers because remaining bundled customers would be required to pay a share of the stranded costs without receiving any of the benefits of a reduced price for TCPL transportation. Schools submitted that the TCPL turnback policy had already provided an alternative for bundled customers seeking to shed TCPL capacity without incurring stranded costs.

6.84 CENGAS and ECG also supported Union's Vertical Slice proposal.

6.85 IGUA submitted that the criteria to be used in assessing the alternatives should be: minimizing stranded costs; allowing customers some freedom of choice; market stability; practicality; and fairness. IGUA, in supporting its own proposal, argued that the CEED proposal should be rejected because it does not minimize stranded costs, and that Union's proposal was too rigid because it would impose pieces of contractual capacity on several pipelines and exchanges at Dawn and Parkway on customers who may not need service at both delivery points.

6.86 Alliance generally supported the IGUA alternative but submitted that if and when stranded costs do arise, these costs should flow through to the unbundled direct purchase customers that gave rise to those costs.

6.87 Nova also supported the IGUA alternative as a compromise solution. It stated that some of the elements of Union's Vertical Slice proposal might be quite difficult to implement in practice and rejected the CEED proposal because of the risk of creating significant stranded costs.

6.88 OAPPA supported the IGUA alternative arguing that it recognizes past practices, commitments and decisions while incorporating an additional element of choice for both new direct purchasers and for existing direct purchase customers increasing their loads. OAPPA submitted that there should be no obligation on Union to provide the upstream transportation and that customers should be free to make their own upstream arrangements.

6.89 In arguing in support of its proposal, CEED made frequent references to the work of the Market Design Task Force ("MDTF") and of the Direct Access Rule Task Force. CEED argued that these reports, which in CEED's view favoured a voluntary allocation of upstream transportation, represented the views of industry working groups and should not be disregarded by the Board. CEED argued that its proposal was more consistent with the desired competitive end-state because the supply arrangements would result from customer choice. Under Union's proposal, customers would be obliged to take on transportation capacity that they did not choose. CEED argued that in the end-state market, unbundling was meant to facilitate customers (directly or through REMs) arranging their gas supply from a range of market options. CEED also argued that there was no single mix of these options which was optimal for all customers.

6.90 CEED also expressed concern that under the Union's PBR proposal it was seeking to keep the margins from transactional services and therefore Union had an incentive to compete for services provided by marketers.

6.91 Enron submitted that in reviewing the alternative approaches for the allocation of upstream transportation the Board should focus on the question of which methodology will most quickly result in increased competition. Enron submitted that using a voluntary allocation would enable customers to immediately start managing their upstream transportation by acquiring a transportation mix that more closely matches their optimal gas supply portfolios. Enron proposed that Union should be provided the same opportunity to adjust its transportation portfolio and that Union should be allowed to recover the stranded costs associated with any excess capacity from both bundled and unbundled customers. Union's approach, Enron argued, downloads the costs of Union's existing portfolio to unbundled customers and relieves Union of the obligation to mitigate these costs. Enron argued that Union's Vertical Slice proposal is anti-competitive since it would saddle a marketer with a portfolio that bears no relation to its customer base while Union would maintain its optimal portfolio. Enron supported the CEED proposal for a voluntary allocation mechanism.

6.92 TCPL submitted that the objective of unbundling is to introduce competitive forces into a sphere of activity where it was formerly absent and that there should be no requirement that unbundling mechanisms be consistent with past practices. It argued that the mandatory nature of the allocation under Union's proposal would frustrate the development of a competitive market for gas in Ontario. TCPL expressed the concern that the requirement for customers to take on very long term contract obligations, specifically the Vector and Alliance contracts, would prevent TCPL from competing for those customers and therefore would be unfair. TCPL further argued that Union's proposal, rather than avoiding stranded costs, would obligate system customers to shoulder the costs for the long-term transportation contracts between Union and Alliance and Vector. TCPL stated that this created an asymmetry between the obligations of existing direct purchase customers and those of new direct purchase customers.

6.93 Energy Probe agreed with Union that a new allocation methodology for upstream transportation was required because at any reasonable rate of unbundling Union would run out of TCPL FT capacity. However, Energy Probe urged the Board to reject the three alternatives that were before the Board and instead consider an auctioning of the excess capacity resulting from customers unbundling. Energy Probe argued that stranded costs should be handled on a financial and not a physical basis and that Union should have the right to pass through all costs that are just and reasonable. Energy Probe expressed concern that by eliminating the Alliance and Vector capacity from the initial Vertical Slice, Union was leaving the cost responsibility for that long-term and higher-cost capacity to the remaining system customers. It also submitted that customers wanting incremental system supply should be charged for transmission capacity on an incremental basis.

6.94 AMO was concerned that the operational complexity and risk assumption facing a new direct purchaser had increased considerably because of Union's unbundling and Vertical Slice methodology. AMO was further concerned that a mandatory Vertical Slice allocation approach should include a prudency review of Union's acquisition of Vector capacity.

6.95 Comsatec requested the Board to direct Union to release existing T-service customers from their current assignment of upstream TCPL capacity upon the expiry of the current one year temporary assignment agreements.

Union's Reply

6.96 In Union's view, the key question to be addressed is how best to transition to an end state in which end-use customers and retail energy marketers are accountable for and have full freedom to contract for and manage all upstream transportation requirements on behalf of end-users. However, it argued that this adjustment cannot be done in a manner which ignores the existing direct purchase framework, stability, system integrity and reliability. Union noted that it has and continues to have the obligation: to provide system supply for customers who choose not to go direct

purchase; to take back customers from direct purchase; to manage upstream capacity for system customers for changes in their Daily Contract Quantity; and to contract for sufficient upstream capacity to meet incremental growth requirements. It was Union's position that to adopt the voluntary allocation approach proposed by CEED, would necessitate a complete overhaul and redefinition of Union's system supply role and accountabilities.

6.97 Union challenged statements that Union was abandoning the consensus contained in the MDTF Report. Union argued that parties making this claim: had failed to view the report in its entirety; had failed to recognize the principle of grandfathering existing arrangements that was part of the consensus; and had failed to take into account the change in Union's upstream transportation portfolio resulting from the turnback policy and the impact of this change on the MDTF recommendations.

6.98 Union pointed out that parties acknowledged that long-term contracts were required for construction of incremental new transportation capacity to Ontario but that, based on the evidence in this proceeding, marketers did not come forward to make this commitment. Union submitted that TCPL's "unfair competition" argument, as it related to Union's long-term contracts with Alliance/Vector, was without merit. Union noted that its portfolio also included contracts with TCPL that had long terms, that TCPL would be able to compete for incremental transportation requirements and current requirements as existing contracts expire, and that TCPL itself requires long-term commitments to build incremental capacity. Union notes that in 1997 when Union entered into the Alliance/Vector contracts, capacity to Ontario was tight, TCPL capacity was trading at a premium to posted tolls and Union was not able to acquire that capacity through the TransCanada queue.

6.99 Union stated that AMO's argument that somehow through the Vertical Slice proposal Union was trying to avoid review of its Alliance/Vector contracts was wrong. Union indicated that it would introduce the Vertical Slice two months after receiving the Board's decision. Union pointed out that it had agreed to remove the Alliance/Vector contract from the vertical slice until November 2001, following an opportunity to review the Alliance/Vector capacity through the customer review process.

6.100 Union argued that its mandatory allocation approach maintained consistency between existing and new direct purchase customers and avoided unfavourable cost impacts that would arise from the recovery of stranded costs resulting from a fully optional approach. Further, end-use customers and marketers could restructure their upstream portfolio through the secondary market or through Union's optional transportation clearinghouse. Union submitted that significant flexibility existed through the TCPL turnback policy, the delivery point flexibility solution agreed to in the Settlement Agreement, and the fact that approximately 50% of the capacity in the Vertical Slice expired within two years. Union further pointed out that CEED members admitted they were sophisticated players in the gas and gas transportation markets.

6.101 Union considered IGUA's alternative and the suggested modification of it by MECAP and WGSPG as workable proposals but pointed out some inequities and complexities. Union noted that customers would likely choose the least cost components from the portfolio and could reduce Union's flexibility in purchasing supply for system customers resulting in higher costs for system customers.

6.102 Union rejected CEED's alternative, arguing that it was inconsistent with the MDTF report, did not recognize existing arrangements, did not address system reliability and integrity considerations, did not address the principle of minimizing stranded costs and did not consider the cost impact on end-use customers. Union noted witness statements that existing direct purchase customers would be unlikely to see any immediate benefits from an optional allocation approach but would see, subject to Board approval, an immediate cost from the recovery of stranded costs.

6.103 Union considered Energy Probe's auction proposal as in essence no different from CEED's optional allocation proposal and rejected it for the same reasons.

6.104 Union noted that when TCPL transportation was trading at a premium customers approached Union seeking a long term assignment of their upstream transportation. Now that TCPL capacity was trading at a discount Comsatec was seeking release from its assignments to take advantage of the discounts. Union was of the view that it would be inappropriate for Union and its customers to face the cost consequences of a customer not taking or taking more than its share of Union's upstream transportation capacity. Union noted that customers in the Northern and Eastern Operations area would be able to take advantage of its TCPL turnback policy starting in November 1, 2003.

Board Findings

6.105 The Board recognizes that the choice of an appropriate approach to allocate upstream transportation must accommodate the competing principles of flexibility of choice for the customer and the minimization of stranded costs. The Board considers that each of the proposals offers a unique tradeoff between customer choice and potential stranded assets, with one combining the most choice with the highest potential for stranded costs, a second combining these characteristics to an intermediate degree, and a third providing least choice and lowest potential for stranded costs. On this basis alone, there is no clear preferred choice.

6.106 The Board believes that there is merit in the principle that those who stand to benefit most from an initiative should bear the bulk of the cost.

6.107 The CEED proposal, while providing the most customer choice also has the potential to create the largest stranded costs. Under CEED's proposal, the stranded costs resulting from customers that elect direct purchase would be paid for by all delivery customers.

6.108 The IGUA proposal is a compromise between CEED's approach and Union's vertical slice proposal. It has less potential for stranding costs than CEED's proposal. However, the Board is concerned that the lowest cost transportation components of the portfolio would be selectively chosen, potentially increasing the unit costs of transportation for the remaining system customers. Any stranded costs would be borne by all delivery customers.

6.109 While Union's proposal provides the least customer choice of the three options, it eliminates the potential for stranded transportation assets. The Board is concerned about the ability of parties assigned a vertical slice to manage the components. The Board took some comfort from Union's statement that a significant portion of the transportation portfolio underlying the vertical slice would expire within a short period of time and also from Union's undertaking to put in place a transportation clearinghouse through which customers could rearrange assigned transportation among themselves. The Board also notes that through the agreement on delivery point flexibility, parties will have more choice in managing their transportation arrangements.

6.110 The Board finds that Union should take steps towards achieving greater flexibility with respect to customer choice. Going forward, the Board expects Union to build more flexibility into its upstream transportation portfolio. There should be an ability to absorb small changes without rigidly tying customers to specific upstream assets and without incurring significant stranded costs. The Board expects Union to continue its efforts to facilitate transportation options, to mitigate costs to both system and direct purchase customers, and to present these in the customer review process. In the interim, on balance, the Board is prepared to approve Union's Vertical Slice proposal for the duration of the term of the trial PBR plan.

6.111 The Board is also concerned about long-term commitments, such as Union's seventeen-year contract with Alliance-Vector. The Board in this case has not made a decision as to the prudency of the costs of these commitments for ratemaking purposes. Such long-term transportation commitments do not appear to be congruent with the unbundling of services and the shift in responsibility for upstream

transportation from Union to direct purchasers. The Board further notes the evidence that, at the present time, for the most part, marketers and industrial customers have been reluctant to enter into long-term arrangements that are required by the National Energy Board to support expansions of upstream capacity. While it would be desirable for the utility to reduce its involvement in the brokering of upstream capacity, until market participants are prepared to take on this role it may be inevitable that the utility continue to perform some minimum role as a broker of upstream services.

6.112 The Board is concerned that granting Comsatec's request that Union release existing T-service customers from their current assignment of TCPL capacity upon expiry, may create stranded costs which could be visited on other customers. The Board is therefore not prepared to grant the relief requested by Comsatec. The Board notes Union's statement that it will be able to facilitate the turnback of existing TCPL capacity beginning November 1, 2003.

6.4 STORAGE UNBUNDLING AND RELATED ISSUES

6.113 Parties reached complete agreement on Union's proposals related to unbundling of storage services. The details of the settlement are set out in the Settlement Agreement and summarized as follows:

Standard Storage Service and Standard Peaking Service

6.114 The parties agreed with the definition of and the terms and conditions that apply to Standard Storage Service ("SSS") and Standard Peaking Service ("SPS"). The SSS will be optional. The SPS will continue to be mandatory for M2 customers in the Southern Operations Area and will be available on an interruptible basis in the late winter season to the extent that an unbundled customer's gas in inventory is less than 20% of the full SSS entitlement. SPS will be optional where it can be demonstrated that a physical replacement for SPS peaking deliverability exists. Union agreed to review proposals advanced by parties for a contractual SPS replacement service

through the regulatory process existing at that time. Union made a commitment to separate the SPS service from the U2 delivery rate.

Space Allocation

6.115 The parties agreed to the methodology for the allocation of storage space to customers. Union proposed to allocate space in the Southern Operations Area according to its existing cost allocation methodology. This methodology allocates storage space and the associated costs to bundled rate classes in proportion to each rate class' "aggregate excess" or difference between winter demand and average annual demand for a 151 day winter period.

6.116 Storage space allocation for individual customers in each rate class in the Northern & Eastern Operations Area was set out in the Settlement Agreement. Union agreed to grandfather existing T-service customers currently operating with storage at their existing storage deliverability level.

System Integrity Storage Space

6.117 Union currently has 10.4 Bcf of system integrity storage space to allow it to manage weather variations, backstop supply failures, and maintain operational integrity of the delivery system for its existing bundled customers. Union proposed to maintain 9.1 Bcf of storage space.

Pricing and Annual Storage Space Reallocation/Redistribution

6.118 Union proposed to unbundle its in-franchise storage services at cost, subject to adjustment of the rates under its proposed PBR price cap plan. In response to concerns from certain intervenors about customer mobility, Union agreed to facilitate customer transfers subject to certain conditions that are outlined in the Settlement Agreement.

Future Standardization of Storage Contracts

6.119 The parties agreed that when existing ex-franchise storage contracts are renewed, they will be structured so that the injection and withdrawal parameters are consistent with the proposed SSS and SPS.

Future Storage Development

6.120 The parties accepted Union's proposal to "manage" future in-franchise storage requirements due to growth, at cost. In making this proposal Union noted that developing or acquiring additional storage capacity would result in incremental costs above the level reflected in rates. The Settlement Agreement states that "The status of Union's proposal to eliminate the existing storage and transportation deferral accounts remains outstanding and is contained within Union's PBR proposal".

6.4.1 Other Issues

6.121 In addition to its proposals related to upstream transportation and storage, Union made a number of additional proposals related to the introduction of new unbundled services. These proposals with certain amendments were accepted by parties in the Settlement Agreement and are briefly summarized below.

Title Transfers

6.122 The parties agreed to certain changes with regard to the operation and charges for in-franchise bundled and unbundled title transfers.

Allocation of Gas in Inventory

6.123 The parties accepted Union's proposals for the allocation and transfer of gas in storage for customers that switch to unbundled service. Union proposed to transfer to the customer its proportional share of the gas in storage at the time that a customer chooses to take the unbundled service. The Settlement Agreement outlines the method to be used in truing up the associated costs.

Return to System

6.124 The parties also agreed to the approach that Union would follow in managing the impact on Union's storage and transportation assets when customers return to system. Union requires replacement capacity at Parkway or a winter peaking service in order to manage the customer's return to system. Costs associated with managing the east-end obligation for return to system would be recorded in a new deferral account and all prudently incurred costs would be recovered from system customers.

Nomination of Imbalance Fees

6.125 Under unbundled service, customers need to manage supply nominations related to upstream transportation capacity and storage on a daily basis. Union proposed fees, consistent with those currently charged by TCPL for variances between actual consumption and actual nominated supplies. Amendments to Union's original proposal, agreed to by the parties, are set out in the Settlement Agreement.

Unauthorized Storage Overrun

6.126 Union proposed to charge a $100/GJ storage overrun penalty to all customers that elect unbundled service and that exceed their authorized storage entitlement on any given day. Union responded to intervenor concerns by agreeing to the following amendments to its proposal: limit on the period during which the unauthorized overrun charges would apply; a reduction the unauthorized storage overrun charge

to $50/GJ; and the recording any unauthorized storage overrun charges in a Board-approved deferral account.

System Gas Pricing Methodology

6.127 CEED filed evidence related to pricing components of system gas supply. On the basis that the Board should initiate a process to review the methodology and the terms and conditions of system gas supply offering as soon as possible, CEED agreed to withdraw its evidence and Union agreed to withdraw its motion to strike CEED's evidence from the proceeding.

7. IMPLEMENTATION OF RATES AND COST AWARDS

7.1 IMPLEMENTATION OF RATES

7.1 Union filed its Application on March 5, 1999, for an order or orders approving rates for the sale, distribution, transmission and storage of gas using a PBR mechanism commencing January 1, 2000. Union had also applied for an order approving the unbundling of certain rates charged by Union for the sale, distribution, transmission and storage of gas.

7.2 Union started consulting with stakeholders with regard to its PBR proposal in October 1998. The Board notes that the Application included no evidence and no supporting material. Union held a series of meetings, both in groups and with individual parties, its consultation culminating in a four-day session on unbundling and Union's PBR proposal in July 1999. Union filed its evidence in December 1999. An issues list was established on January 18, 2000, and an interrogatory process was set.

7.3 Although the Board had originally given Union an extended period in which to respond to interrogatories, this period was further lengthened in response to a request by the Company. Originally, interrogatories were to be submitted to Union by January 31, 2000 and responses to these interrogatories were due by February 28, 2000. Union informed the Board on February 29, 2000, that it was unable to complete its responses to the interrogatories, and the Board responded by extending

the date for the Company to respond to interrogatories to March 15, 2000. As of March 20, 2000, numerous interrogatory responses remained outstanding.

7.4 On March 13, 2000, GEC made a motion to compel the Company to respond to the interrogatories. On March 24, 2000, the Board issued Notice of Written Hearing of the GEC Motion. At the time, the Board also amended dates for future stages of the proceeding.

7.5 A settlement conference was held from May 10, 2000, to May 19, 2000, and no consensus was reached. At the request of parties, the settlement conference was reconvened on June 6, 2000. The parties reached a Settlement Agreement, dated June 7, 2002, agreeing on most of the unbundling issues, but failing to reach agreement on any of the PBR issues.

7.6 The Board sat full days from June 12, 2000, to July 13, 2000. Union presented argument-in-chief on July 13, 2002; intervenor arguments were filed by July 24 2000; and Union's reply argument was filed on August 15, 2000.

7.7 The Board notes that Union filed, with its argument-in-chief, a timetable for implementing new rates, premised on a Board decision in this proceeding being issued October 31, 2000. The timing of this decision renders the original timetable for implementing new rates moot. Although it was open to Union to request a partial decision or other relief, Union has chosen to await this full Decision which is being issued months after it had originally hoped.

7.8 The manner in which the Applicant brought forward this Application and presented its evidence to the Board, and the nature, breadth and complexity of the subject matter at issue, have adversely affected the timing of the release of this Decision. Aspects of this Decision address principles and methodology and will require further information from the Company to quantify specific amounts, rate changes and impacts in order to implement this Decision.

7.9 The Board has approved a "trial" PBR plan for ratemaking for a three-year period, and significant changes resulting from unbundling of services. The Board anticipates that some decisions may require refinement or change as experience is gained with the new regulatory framework. The Board notes that the customer review process is an integral part of the operation of this framework and provides a forum for bringing forward to the Board matters arising from this Decision requiring adjudication.

7.10 The Board recognizes that the Company requires some flexibility to implement the Board's Decision. The Board therefore directs the Company to file with the Board and intervenors, as soon as is practicable, a proposal for a process, including a timetable, for setting rates for 2000, 2001 and following. This proposal must provide intervenors with a reasonable opportunity to comment on and suggest revisions to the process.

7.11 The Board recognizes that as a consequence of the time taken in issuing this Decision, there is possibly a need for significant rate adjustments to adjust the revenues to which Union is entitled for the years 2000 and 2001. This possibility had already been recognized by Union in its proposal for implementation of new rates in April 2001 to permit adjustments related to the year 2000. Union proposed to offset where possible these adjustments through the clearance of year-end 1999 balances in non-gas-cost-related deferral accounts and the application of rate-riders for remaining amounts. The Board is of the view that where possible clearance of balances should be made to correspond with the consumption volumes which gave rise to those balances.

7.12 In bringing forward its implementation plan, Union should specify its proposals for offset against existing balances in the deferral accounts, for rate-riders, for one-time charges/payments, and for the clearance of its gas supply related deferral accounts. Union should also bring forward for Board approval any accounting orders that it believes are required. For this purpose, the Board believes that an expedited customer review process should be appropriate. Intervenors would have the opportunity to comment on Union's proposed implementation plan.

7.2 COST AWARDS

7.13 Section 30 of the Act states:

(1) The costs of and incidental to any proceeding before the Board are in its discretion and may be fixed in any case at a sum certain or may be assessed.

(2) The Board may order by whom and to whom any costs are to be paid and by whom they are to be assessed and allowed.

(3) The Board may prescribe a scale under which such costs shall be assessed.

(4) The costs may include the costs of the Board, regard being had to the time and expenses of the Board.

(5) In awarding costs, the Board is not limited to the considerations that govern awards of costs in any court.

7.14 The Board's Rules of Practice and Procedure provides guidance on the approach the Board follows in determining questions related to a participant's eligibility for costs, the awarding of costs and assessment of reasonable costs.

7.15 The Cost Eligibility Guidelines state that, subject to the Board's discretion, intervenors are eligible to receive an award of costs where they primarily represent the direct interest of consumers of regulated services, or a public interest relevant to the Board's mandate, or a significant grouping of interests relevant to the Board's mandate. Further, the guidelines state that an individual local distributor of gas or electricity and an agent, broker or marketer of natural gas or electricity is not eligible for a cost award.

7.16 The Board received submissions and requests for costs from the following parties:

- Alliance
- CAC
- CEED
- Energy Probe
- GEC
- HVAC
- IGUA

- LPMA
- MECAP
- OAPPA
- Pollution Probe
- Schools
- VECC
- WPSPG
- John Fullerton

7.17 The total costs claimed by intervenors was $1.4 million. The Board notes that Union made no submissions in its reply argument with regard to cost awards.

7.18 The Board was assisted by the contributions of the parties and this is reflected in the Board's Decision, where there are numerous references to their submissions. However, the Board has noted a wide variation in the costs claimed. The Board recognizes that, to some extent, the differences can be explained by the retention of expert advice by some parties and the degree of use of legal counsel.

7.19 The Board directs the Board's Costs Assessment Officer take into account the following comments when reviewing the individual cost claims.

7.20 While the Board finds the participation of Energy Probe to be of assistance, the Board finds some of the materials included in Energy Probe's pre-filed evidence not to be totally relevant to the issues of this proceeding. While the Board has previously ruled that this evidence should not be excluded, the Board is not prepared to award in full the costs claimed for preparing this material. Accordingly, the Board awards Energy Probe 90% of the costs related to the preparation of its pre-filed evidence and 100% of its other costs related to its participation in the proceeding, subject to assessment by the Board's Cost Assessment Officer.

7.21 While the Board finds the participation of VECC to have been helpful, the Board finds that the testimony of Dr. Norsworthy could have been of more assistance to the Board had greater care been taken. The Board therefore awards 90% of the costs claimed for Dr. Norsworthy. The Board awards VECC 100% of the other costs related to its participation in the proceeding, subject to assessment by the Board's Cost Assessment Officer.

7.22 The Board notes that the arguments of LPMA, MECAP, and WPSPG were for the most part identical. The Board directs that the costs for preparation of argument from these three parties should be considered together in assessing whether the costs claimed are reasonable. In that regard, the Board requires that the total cost awarded to the three parties for argument preparation should be based on preparation hours not exceeding 110% of the average of the number of hours claimed for argument preparation by CAC, IGUA, Schools, and VECC. The Board awards LPMA, MECAP, and WPSPG 100% of the other costs related to their participation in the proceeding, subject to assessment by the Board's Cost Assessment Officer.

7.23 The Board awards Alliance, CAC, CEED, GEC, HVAC, IGUA, OAPPA, Pollution Probe, Schools and Mr. Fullerton 100% of their reasonably incurred costs of their participation in this proceeding, subject to assessment by the Board's Cost Assessment Officer.

7.24 In recognizing that the extension of the proceeding may have resulted in some financial difficulty for intervenors, the Board directs Union to pay immediately 50% of the costs claimed by intervenors, as adjusted first to conform with the Board's currently published guidelines. The final cost awards will await the Board's final cost order.

7.25 The Board directs the Cost Assessment Officer to review the costs claimed to and to make adjustments as necessary to ensure that they are consistent with the Board's Cost Assessment Guidelines. All claimants should show details of GST paid on costs which are claimed.

7.26 The Board orders that the eligible costs of intervenors as assessed by the Board's cost assessment officer shall be paid by Union. The Board will issue its Cost Orders in due course.

7.27 The Board's costs of, and incidental to the proceeding shall also be paid by Union upon receipt of the Board's invoice.

DATED at Toronto July 21, 2001

George Dominy
Presiding Member and Vice Chair

Malcolm Jackson
Member