

500 Consumers Road North York, Ontario M2J 1P8 PO Box 650 Scarborough ON M1K 5E3

David Stevens

Acting Senior Legal Counsel, Regulatory

phone: (416) 495-6038 fax: (416) 495-5994

Email: david.stevens@enbridge.com

2006-06-02

VIA EMAIL and COURIER

Mr. Peter O'Dell Assistant Board Secretary Ontario Energy Board 2300 Yonge Street, Suite 2700 Toronto, ON M4P 1E4

Dear Mr. O'Dell:

Re: Ontario Energy Board ("Board") File No.: EB-2005-0551

Natural Gas Electricity Interface Review Issues and Storage Regulation

Remaining Undertakings of Enbridge Gas Distribution Inc.

Please find enclosed ten hard copies of Enbridge Gas Distribution's responses to the remaining undertakings given at the Technical Conference on May 18 and 19, 2006, and Curricula Vita for Rick Smead of Navigant Consulting and David McKeown of View Communications.

Exhibits being filed are:

Undertakings #50, 53, and 55
E-4-1 Curriculum Vita of Rick Smead
E-5-1 Curriculum Vita of David McKeown

Included is an updated index of the evidence of Enbridge Gas Distribution filed to date. A PDF searchable version is also being filed with the Board electronically.

Yours truly.

David Stevens

Acting Senior Legal Counsel, Regulatory

Attachment

CC:

Mr. F. D. Cass, Aird & Berlis (via email and courier)

EB-2005-0551 Interested Parties (via email)

Table of Contents

A - OVERVIEW AND BACKGROUND

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Contents</u>	Witness(es)
Α	1	1	Overview and Background	M. Giridhar

B – CONTEXT FOR DEVELOPING NEW RATES

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Contents</u>	Witness(es)
В	1	1	Current Experience	D. Charleson J. Grant
	2	1	Operational Characteristics and Needs of Power Generation Customers	E. Chin E. Overcast
	3	1	Operational Characteristics and Issues: Load Balancing	D. Charleson
		2	Operational Characteristics, Issues, and Proposed Solutions: Storage	J. Grant
		3	Operational Characteristics, Issues and Proposed Solutions: Rate Implementation	J. Sarnovsky
	4	1	Rate Design Principles and Pricing Approaches	M. Giridhar

Table of Contents

<u>C – PROPOSED TARIFFS FOR POWER GENERATION CUSTOMERS</u>

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Contents</u>	Witness(es)
С	1	1	Overview	M. Giridhar
	2	1	Rate 125	E. Overcast M. Giridhar
		2	Proposed Tariff for Rate 125	E. Overcast M. Giridhar
		3	Rate 125 – Draft Rate Schedule	M. Giridhar E. Overcast
		4	Rate 125 – Derivation of Charges	M. Giridhar E. Overcast
	3	1	Rate 316	E. Overcast M. Giridhar
		2	Proposed Tariff for Rate 316	E. Overcast M. Giridhar
		3	Rate 316 – Draft Rate Schedule	M. Giridhar E. Overcast
		4	Rate 316 – Derivation of Charges	M. Giridhar E. Overcast
	4	1	Additional Service Offerings	D. Charleson
		2	Additional Service Offerings – Derivation of Charges	D. Charleson
		3	Additional Service Offerings – Draft Rate Riders	D. Charleson

Table of Contents

<u>D – PROPOSED TARIFFS FOR RATE 300 CUSTOMERS</u>

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	Contents	Witness(es)
D	1	1	Overview	M. Giridhar
	2	1	Rate 300 – Overview, Description and Derivation of Charges	E. Overcast M. Giridhar
		1	Rate 300 – Draft Rate Schedule	E. Overcast M. Giridhar
	3	1	Rate 315 – Overview, Description and Derivation of Charges	E. Overcast M. Giridhar
		2	Rate 315 – Draft Rate Schedule	M. Giridhar E. Overcast

E – STORAGE REGULATION

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	Contents	Witness(es)
E	1	1	Storage Regulation	J. Grant
	2	1	Regulatory Forbearance in Canadian Telecommunication Markets	View Communications
	3	1	Competitiveness of Natural Gas Storage Market	Navigant Consulting
	4	1	Curriculum Vita of Rick Smead	
	5	1	Curriculum Vita of David McKeown	

Table of Contents

F- REPLY EVIDENCE

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	Contents	Witness(es)
F	1	1	Load Balancing	Dave Charleson
		2	Title Transfers	Dave Charleson
	2	1	Response to APPrO Evidence (Rate 125 and 316)	Malini Giridhar
	3	1	Storage Regulation	Rick Smead (Navigant Consulting)

Filed: 2006-06-02 EB-2005-0551 Undertaking # 50 Page 1 of 4

ENBRIDGE GAS DISTRIBUTION # 50

UNDERTAKING

TO ADVISE of where a customer would be able to source 7 bcf of storage space, or its equivalent, and to provide a cost for this, compared to the Company's current costs. (May 19, 2006, Tr. 47)

RESPONSE

Overview of Subject Volumes: The specific volume addressed in this undertaking consists of seasonal storage for IGUA deliveries into Enbridge Gas Distribution's system. These are various in-franchise, bundled distribution and storage deliveries, in the category of service that Enbridge Gas Distribution believes should be exempted from forebearance.

Examination of Alternatives: The reason for the proposed exemption is that actual access to delivery and storage choices is still quite limited for in-franchise, bundled customers. The storage component of service from Enbridge Gas Distribution would continue to be subject to cost-based rates, rather than subject to the market pricing resulting from forbearance. The only market pricing reflected in this rate arises from the price for storage purchased by Enbridge Gas Distribution to meet its bundled customers' needs, subject to the same Ontario Energy Board ("Board") prudency review applicable to any purchase by the Company to support its utility service. Thus the examination of "alternatives" to compete for such load is necessarily highly theoretical. In a market where the general value of storage significantly exceeds the Company's historic averagecost rates, it is unlikely in the short term that alternative service will be available at a cost equal to or lower than the exempt service. Since the request that led to this undertaking explicitly dealt with alternatives available "today," this review will examine alternatives available in the competitive market for storage in Ontario. i.e., at Dawn.

Level of Volume at Issue: Based upon the transcript, the IGUA volume requiring storage is that necessary for 20 Bcf per year to operate at a 65 percent load factor. The 7 Bcf identified for this Undertaking was quantified by IGUA counsel by multiplying 20 Bcf by the difference between 65 percent and 100 percent. In fact, the storage volume needed is considerably smaller than 7 Bcf. At a 100 percent load factor, 20 Bcf amounts to 54.8 MMcf per day. At a 65-percent load factor, this would imply a peak volume of 84.3 MMcf per day (54.8 divided by 65 percent). During the winter, 54.8 MMcf per day would be supplied by flowing

Filed: 2006-06-02 EB-2005-0551 Undertaking # 50 Page 2 of 4

gas, while the remainder, or 29.5 MMcf per day, would be supplied by storage. Over a 151-day winter period, 29.5 MMcf per day amounts to 4.5 Bcf, rather than 7 Bcf, or 36 percent less than the volume identified for this Undertaking. However, since 7 Bcf was identified in this undertaking, the discussion will address that volume, since any options that would work for 7 Bcf would certainly work for 4.5 Bcf.

Available Supply-Side Market--Ontario: The 7 Bcf per year of storage service specified for this undertaking amounts to approximately 10 percent of the competitive volume at Dawn of approximately 70 Bcf. This volume is already market priced, and much of it is characterized by market-responsive short-term contracts. Thus, the most likely source of storage for IGUA, if the Enbridge Gas Distribution service were not available or selected, would be Union market-priced storage. According to IGUA's witness, this storage is presently priced at approximately 92¢ per MMBtu, (Stauft, 18 May Transcript, p. 133). If IGUA were exploring market options as opposed to relying upon its cost-based exempt infranchise service, it is this price that should be used as a point of comparison.

Available Supply-Side Market—U.S.: From the United States, there are very many options for serving the subject volume. Predicting which one would be the most likely to take place for this particular transaction is impractical. However, representative examples may be examined. For purposes of this undertaking, three such examples have been selected.

Option 1—Vector-Michigan-Released Capacity: Backhaul from Dawn using released segmented capacity, priced at basis plus a nickel. Store in MichCon storage at a negotiated market rate. Forward-haul in released or Great Lakes capacity at basis plus a nickel.

The two basis transactions could equally well be accomplished by selling gas at Dawn and purchasing an equivalent volume at MichCon storage in the summer, and selling gas out of MichCon storage to purchase equivalent volumes at Dawn in the winter. This buy-sell approach might be accomplished without the assumed margins.

Basis, Dawn to MichCon: According to the price data gathered by Energy and Environmental Analysis ("EEA") and included in Union's evidence, the summer basis from Dawn to the MichCon city gate has actually been negative—Dawn prices have been higher than MichCon—in four out of the last seven summers. To be conservative, the cost of a backhaul to MichCon is estimated at the maximum observed positive price difference, which was 1¢US for the summer of 2002. Thus, the cost of a backhaul would be estimated at 6¢US, or the basis plus a nickel.

Filed: 2006-06-02 EB-2005-0551 Undertaking # 50 Page 3 of 4

MichCon Storage: According to IGUA's evidence (Stauft at p. 60), the maximum rate for MichCon storage is \$1.49US. However, the actual price captured by MichCon from the marketplace is significantly less. Public evidence of the actual price received by MichCon ranges from a 1993 Michigan Public Service Commission ("MPSC") decision identifying 48¢US as the overall average, to a more recent 2005 decision identifying 18¢US as the average revenue for "lower-quality" storage services. Informal advice from the MPSC staff has indicated, first, that the market situation has changed little since 1993, and, second, that the typical market rate for MichCon storage is on the order of 50¢US, and possibly as low as 40¢US. Thus, this analysis uses 50¢US to be conservative.

Forward Haul, MichCon to Dawn: Again based upon the EEA evidentiary data, the winter basis from MichCon to Dawn has averaged 15¢US over the last six years and over the last three years as well. Thus, at basis plus a nickel, the cost of transportation from MichCon storage to Dawn is assumed to be 20¢US.

Total Cost: Assembling these pieces, the transfer of IGUA's volume from Dawn to MichCon storage, use of MichCon storage, and redelivery to Dawn would cost 76¢US, or approximately 86¢Cdn at current exchange rates. This is competitive with the 92¢Cdn estimated market price for Union's storage. There is upward sensitivity in a tight market (the peak MichCon-to-Dawn basis during the past seven winters was 31¢, 16¢ above the average), and to downward sensitivity as well (during summers when basis to MichCon is negative, a sell-buy transaction for injection could be as much as 8¢ less than the 6¢ assumed, and the MPSC staff's description of MichCon storage prices indicates a potential dime reduction from the assumed price). Accordingly, the 76¢US appears to be a reasonable estimate of market cost.

Option 2—National Fuel-Displacement: Forward haul in released capacity through National Fuel at basis plus a nickel, store in National Fuel released capacity at tariff rates, displace across TransCanada.

This option uses the large volume (2.5 Bcf per day) of export gas that flows across TransCanada to Niagara and Waddington. In essence, while the injection transportation and storage services are fairly traditional, withdrawal is accomplished through a "drop-off" transaction, wherein some gas flowing on TransCanada remains physically in Ontario, and its US markets are met by withdrawing IGUA's gas from US storage.

Basis Dawn to National Fuel: The EEA evidence reports prices for the Niagara hub and for Dominion Southpoint. It is expected that the market

Filed: 2006-06-02 EB-2005-0551 Undertaking # 50 Page 4 of 4

price at National Fuel's storage fields would be somewhere between these two prices. Accordingly, the summer basis for EEA's historic period had been measured as the average of the Dawn-Niagara basis and the Dawn-Dominion basis. This average is a positive differential (prices at National Fuel higher than at Dawn) of 8.6¢US. Accordingly, at basis plus a nickel, the cost of transportation to storage is estimated at 13.6¢US.

National Fuel Storage: IGUA's witness reports National Fuel's tariff storage rates to amount to 93¢Cdn per GJ (Stauft evidence, p. 58), which would be 86¢US per MMBtu. It is expected that some degree of discounting would be available in released capacity, but for the purpose of conservatism, 86¢US is used in this analysis.

Displacement Across TransCanada: Rather than withdrawing gas from National Fuel storage and transporting it to Dawn, the IGUA members would buy gas at market from TransCanada shippers and sell an equal amount of gas from National Fuel storage, into U.S. markets. By doing so, IGUA members could capture the basis differential between Dawn and the New York-Pennsylvania area. Over the historic period examined by EEA, again using the average of the Niagara and Dominion prices, this basis differential is 20.4¢US.

Total Cost: Assembling the pieces, the transfer of IGUA members' gas across National Fuel into National Fuel storage, with displacement across TransCanada upon withdrawal, would cost 79¢US, or 90¢Cdn at current exchange rates. This cost is within two cents of the IGUA witness's estimate of storage market prices on Union (92¢).

Option 3—Sell-Buy: Sell excess summer supply at Dawn at market, buy winter supply at Dawn at market. This option exposes IGUA to summer-winter price differentials, and thus represents the upper limit on the cost of alternatives to Ontario storage.

Based upon the EEA history, the average summer-winter price differential at Dawn over the past six years has been 85¢US, or 97¢Cdn at current exchange rates. However, the historic period examined was characterized by extreme price volatility, including one year (2001-2002) wherein winter prices were actually lower than summer prices by 98¢US and two years wherein the winter-summer differential exceeded \$2.00US. Thus, 85¢US/97¢Cdn is a reasonable first estimate of the cost to IGUA members if they were to rely on current market purchases rather than storage, but the economics of this approach would be less predictable than a storage-based approach.

Filed: 2006-06-02 EB-2005-0551 Undertaking # 53 Page 1 of 2

ENBRIDGE GAS DISTRIBUTION UNDERTAKING # 53

UNDERTAKING

TO ADVISE whether the Board's approval of the transactional services methodology has been linked to the existence or non-existence of a competitive market for storage. (May 19, 2006, Tr. 55-56)

RESPONSE

Since the approval of the first transactional services sharing methodology in the EBRO 492 Rate Case, there has been limited comment from the Ontario Energy Board ("Board") on the competitive market for storage. With the exception of the 2000, 2005, and 2006 Rate Cases (RP-1999-0001, RP-2003-0203, and RP-2005-001, respectively) the Transactional Services issue has been the subject of a complete settlement by all parties. As a result, it has not been necessary for the Board to review and comment on this issue in those proceedings.

In the EBRO 492 proceeding, where the first transactional services sharing methodology was approved, the Board indicated its intention to review "the degree of competition in storage markets in Ontario" (EBRO 492, Decision with Reasons, para 3.3.28) as part of the next Enbridge Gas Distribution Rate Case. In its next Rate Case, EBRO 495, the Company filed a report entitled "Competitiveness of Transactional Services" (EBRO 495, Exhibit C2, Tab 10, Schedule 1) to assist the Board in its review. However, in this proceeding, the Transactional Services issue was the subject of a complete settlement between all parties which was accepted by the Board. As a result, no specific comment was made by the Board on the report. It is important, however, to note that the report was specifically referenced as part of the evidentiary base for the settlement (EBRO 495, Exhibit N1, page 11). This would suggest to the Company that parties were satisfied with the conclusions of this report and that they believed there to be sufficient competition at that time in the market for transaction storage services to warrant a continuation of the sharing methodology.

In the RP-1999-0001 proceeding, the focus of the Board's findings in the Decision with Reasons was on the sharing mechanism. The Board made no comments regarding the existence or non-existence of a competitive market for storage.

Filed: 2006-06-02 EB-2005-0551 Undertaking # 53 Page 2 of 2

In the RP-2003-0203 Decision with Reasons, the Board commented in its findings on Transactional Services that "While the physical delivery of gas is a natural monopoly, storage and transportation services could reasonably be provided by competitors." (RP-2003-0203, Decision with Reasons, para.2.5.2).

In the RP-2005-0001 proceeding, the Board identified four questions that needed be answered in ruling on the Transactional Services issue (RP-2005-001, Decision with Reasons, para 6.2.1). None of these questions were related to the competitiveness of the storage market.

It would appear from these comments that while there has been limited comments from the Board regarding the competitiveness of the storage market, it was an area of concern when the transactional services sharing methodology was first approved. The Board's ongoing acceptance of a transactional services sharing methodology since 1997 would seem to indicate that their concerns have been satisfied. The clearest statement to this fact being seen in the RP-2003-0203 Decision with Reasons as indicated above.

Filed: 2006-06-02 EB-2005-0551 Undertaking # 55 Page 1 of 1

ENBRIDGE GAS DISTRIBUTION UNDERTAKING # 55

<u>UNDERTAKING</u>

TO PRESENT, on a best efforts basis, a model or proposal for transactional services in circumstances where the Board decided to forbear from regulating transactional storage services, using relevant numbers from 2005 or 2006, that would exclude all revenues, relevant costs, net income and risks associated with transactional storage services (May 19, 2006, Tr. 58-63)

RESPONSE

The best model or methodology for removing Transactional Storage Services ("TSS") from regulation would be the same one utilized by the Ontario Energy Board to regulate the TSS activities, as applied to the most recent actual performance. The following calculations reflect this model.

(\$ million)	Fiscal 2005	2005 Stub	Fiscal 2006
	Actual	Actual	April YTD Actual
	(Oct /04 – Sep /05)	(Oct /05 – Dec /05)	(Jan /06 – Apr /06)
Revenue * Expenses **	8.6	5.6	2.2
	0.3	0.1	0.2
Net Income (Pre-tax)	8.3	5.5	2.0

^{*} Transactional Services Storage Revenues have been separated from total transactional services revenue through an examination of the Company's records.

^{**} Expenses have been allocated to the TSS activities on a revenue weighted basis (TSS Revenues/Total TS Revenues).



Richard G. Smead Director

Navigant Consulting 909 Fannin St., Suite 1900

Houston, TX 77010 Cell: 713-203-6885 Tel: 713-646-5029 Fax 713-646-5001

rsmead@navigantconsulting.com

Professional History

- El Paso Pipeline Group (2001-2004)
 Vice President Regulatory Policy
- Colorado Interstate Gas Company (1995-2001) Senior Vice President, Regulatory and Tax
- (1988-1995) Vice President, Regulatory Affairs
- ANR Pipeline Company (1999-2001) Senior Vice President, Regulatory Affairs
- Tenneco Inc. (1980-1988) Director of Rates, Tenneco Gas Group
- Washington Gas Light Company (1970-1980) Senior Rate Engineer, Planning Engineer, Staff Engineer, multiple areas

Education

- George Washington University, Juris Doctor 1979
- University of Maryland, BS Mechanical Engineering, 1970

Professional Associations

- · District of Columbia Bar
- Energy Bar Association

Rick Smead is a Director in the Litigation, Regulatory, and Markets group of Navigant Consulting Inc.'s energy practice. He has been responsible for multiple engagements involving potential acquisitions, policy analysis, litigation support, and strategic advice with respect to gas pipelines, potential supplies, and market initiatives. A significant concentration of his practice has involved the downstream market and infrastructure issues affecting liquefied natural gas (LNG) projects. Mr. Smead brings to our clients the benefit of more than 33 years' experience in the natural gas business, with a proven track record as a senior executive for several major natural gas pipelines and a leader across multiple industry sectors. He is known for a combination of hands-on, industry-recognized expertise in technical issues, effective management of both internal and external processes, and industry leadership on policy issues. He has testified as both an expert and fact witness in multiple proceedings at the Federal Energy Regulatory Commission, the National Energy Board of Canada, and various state agencies and courts. Mr. Smead is also well known for having created strong, constructive relationships with customers, suppliers, and regulators.

Representative Engagements

Since beginning his consultancy in January 2004, Mr. Smead has been engaged to provide a variety of services to clients including potential purchasers of gas pipelines, major gas producers, major interstate pipelines, large intrastate pipelines, and potential sponsors of new pipelines. Key representative engagements have included:

- Performed regulatory due diligence and provided strategic regulatory advice to potential buyers in three separate, major pipeline acquisitions, involving ten interstate pipeline companies.
- For a major developer of a liquefied natural gas import terminal, provided expert analysis and direct negotiation support in the acquisition of pipeline takeaway capacity, including both FERC and NEB regulated pipelines.



- For a very large national oil company planning to export LNG to the United States, provided
 a broad range of regulatory, infrastructure, and market advice regarding the downstream
 dynamics affecting the economics of multiple projects.
- Performed a major policy analysis with strategic recommendations for possible policy changes, regarding the factors affecting the adequacy of gas pipeline infrastructure. The analysis is being used as the catalyst to formulate industry consensus positions to improve the development and authorization of needed pipeline infrastructure.
- Provided expert testimony to support three major interstate pipelines in state property-tax litigation in two states. The testimony addressed the overall commercial dynamics of the gas transportation in the state, as well as the regulatory factors and history that underlay their claims for relief.
- Provided expert analysis regarding volume custody, operator responsibilities, and operational balancing agreements in ongoing litigation between an intrastate pipeline and a local distribution company.
- Managed the strategic market and regulatory support for a client developing alternative transportation options into the Northeastern United States.
- For multiple pipeline companies and major producers, provided ongoing strategic regulatory advice, with respect to project development, upcoming rate cases, and competitive alternatives.
- Working with the Gas Disruption Analysis Steering Council, developed the overall structure
 for initial and second-stage modeling of the regional impacts of and response to major losses
 of pipeline capacity as a response to the attacks of September 11.

Professional Experience prior to Consulting

Regulatory and Commercial Issues for Gas Suppliers

Mr. Smead is particularly known for effectively managing the impact of regulation on the commercial relationship with customers of gas suppliers such as interstate gas pipelines. This management has spanned such issues as devising and gaining approval for new services needed by customers, leading the industry's analysis of reliability issues posed by 9-11 security concerns to help regulators plan without interfering, understanding and negotiating the resolution of industry-wide service quality issues with customers, and developing new tools for managing the interaction between gas service and electric generation needs.



- As an officer of Colorado Interstate Gas Company (CIG), Mr. Smead led the successful
 resolution of CIG's restructuring under FERC Order No.636. This resolution (culminating in
 the sole uncontested settlement achieved by any major interstate pipeline under Order No.
 636) depended in large part on the creation of new services such as no-notice service, firm
 gathering service, and contract product-extraction service, all developed under Mr. Smead's
 leadership.
- As part of the process that led to the Order No. 636 resolution, Mr. Smead was instrumental
 in working with the FERC to define "no-notice" service, the key service that allowed
 restructuring to occur nationwide without impairing pipeline reliability. He was also
 responsible, in CIG's specific proceeding, for devising and implementing three key services
 needed by customers after restructuring: firm gathering, contract product extraction, and
 regional firm transportation.
- In the last CIG rate case prior to Mr. Smead's move to the El Paso Pipeline Group, he had overall responsibility for the development of a workable firm transportation service for electric generators, and for the complete reformulation of CIG's tariff to balance the needs of all types of customers as extensive new electric generation was built. This effort included a redefinition of storage-based rights to correspond more closely to the impact of individual customer needs on the physical characteristics of CIG's storage fields. Mr. Smead led the effort with the FERC, whereby the new service structure was approved through a technical-conference process, long before the underlying rate case was resolved.
- At the El Paso Pipeline Group, on behalf of the Interstate Natural Gas Association of America (INGAA), Mr. Smead represented the gas pipeline industry in supporting alternatives to the mandatory reallocation of gas supplies in a terrorist-induced emergency. He then devised and led a joint effort of INGAA and the American Gas Association (AGA) to model disaster response to a loss of capacity by region. This effort has now been adopted as the process used by the Department of Energy (DOE) to extend such analysis to further regions and to plan Federal policy. Mr. Smead has served from its inception on the multi-agency, multi-industry Steering Council directing this effort.
- In order to deal with issues raised by the interaction between generators and other types of
 pipeline customers such as industrials and distribution companies, Mr. Smead led
 negotiations between INGAA and AGA that resulted in a joint statement of agreement filed
 with the FERC in 2003. He also served on the steering committee for a major study
 sponsored by the INGAA Foundation to analyze the issue.

Industry Leadership and Educational Support

Mr. Smead has long been extremely active through trade associations and other venues, in leading the resolution of issues affecting the entire energy industry and in educating multiple sectors on a variety of industry-related subjects.



- Mr. Smead chaired AGA's Rate Committee for three years (1988-91), INGAA's Rate Committee for the first year that it was recreated (FY 2002), and the joint AGA/Edison Electric Institute Depreciation Committee (1984-85). Additionally, in both INGAA and AGA, he has been routinely called upon to chair ad hoc task forces to resolve specific energy industry issues.
- Mr. Smead has been on the faculty of the AGA basic regulatory school for over 15 years, was on the faculty of the AGA advanced regulatory school until it was discontinued, has been on the faculty of the Institute of Public Utilities "Camp NARUC," the faculty of the Center for Public Utilities, and multiple educational panels of the Energy Bar Association (EBA) and the Rocky Mountain Mineral Law Foundation (RMMLF). He has also been called upon to teach basic pipeline regulatory issues to multiple audiences from over 13 countries.
- Mr. Smead has been the pipeline-issues columnist for *Natural Gas* (now *Natural Gas and Electricity*), a monthly journal published by John Wiley & Sons (Wiley), since 1986. He has also produced chapters for multiple yearly textbooks on the industry published by Wiley and by Financial Communications, Inc., the firm that edits the Wiley publications.
- At INGAA, Mr. Smead led the task force that supported board members speaking at FERC's 1998 conference on industry financial health. As a result of the work of the task force, as communicated by the participating board members, the FERC issued Opinion No. 414A, which significantly revised upward the returns on equity allowed to pipelines.
- Also at INGAA, Mr. Smead led the task force that reached a consensus solution to newfacility pricing issues in 1995, leading to the FERC policy that stayed in effect until 1999.
- In FERC's Standards of Conduct rulemaking, Mr. Smead was responsible for INGAA's
 explanation of the practical problems posed by the Commission's initial proposed rule. This
 explanation ultimately led to significant changes in the rule as it was issued in November
 2003.
- Mr. Smead was one of the four industry participants in AGA's 1996 live broadcast on the unbundling of local distribution company (LDC) service. The tape of that broadcast is still used by policy makers to understand the issues.
- For the Southern Gas Association (SGA), Mr. Smead produced the rate segment of a widely used training tape on how to do business with interstate pipelines.
- On behalf of CIG, Mr. Smead began and completed the process of the first comprehensive settlement of the Kansas Ad Valorem Tax Refund issue, a massive, industrywide set of cases involving several hundred million dollars of producer refunds on Kansas production. The

Filed: 2006-05-31 EB-2005-0551 Exhibit E Tab 4



Richard G. Smead

proceedings had gone on for approximately 17 years, had become extremely important politically, and had led to significant industry divisions, until Mr. Smead became involved in 2000. In six months, he brought CIG's case to resolution, which then led the way for the industry, as a result of which many Kansas parties still credit him personally with the successful resolution throughout the state.

Regulatory and Rate Case Management

Mr. Smead has been in overall charge of rates and regulatory affairs for the following interstate pipelines: Tennessee Gas Pipeline, East Tennessee Natural Gas, Midwestern Gas Transmission, Viking Gas Transmission, Colorado Interstate Gas Company, Wyoming Interstate Company, and Young Gas Storage. He was also the original rate technical and policy witness for Kern River Gas Transmission. In these roles, he has filed and resolved some 27 major pipeline rate cases, all of which were successfully settled. In that process, Mr. Smead has testified on a wide variety of issues, ranging from specific technical issues such as rate of return and depreciation, to overall regulatory policy. He has then led the negotiation process that led to successful settlement of each case.

- In Wyoming Interstate Company's 2001 rate case, Mr. Smead successfully rebutted a variety of technical issues as to return on equity, as well as presenting a successful analysis of the necessary depreciation rates for the pipeline.
- In multiple rate cases for Tennessee Gas Pipeline, Midwestern Gas Transmission, and East Tennessee Natural Gas, Mr. Smead testified as to depreciation for facilities ranging from the deep-water Gulf of Mexico to the Canadian border.
- In Kern River Gas Transmission's original certificate case, Mr. Smead testified as to all rate issues, introducing for the first time at the FERC the concept of using depreciation to levelize rates over time.
- Mr. Smead has been used as a rebuttal witness multiple times in the area of rate of return, analyzing and modifying the cases presented by FERC staff and various intervenors to support the company's position.
- In the area of cost allocation and rate design, Mr. Smead has frequently presented the justification for pipeline proposals, in both technical and commercial terms. At CIG, he was responsible for one of the first proposals developing short-term and seasonal rates, pursuant to FERC Order 637. He has also successfully testified as an intervenor, in situations where his own pipeline was the customer of another pipeline, both at the FERC and at the NEB
- Mr. Smead has testified or prepared expert reports in multiple pipeline property-tax appeals, analyzing the impact of regulation on valuation, the appropriate methodologies for allocating value between taxing jurisdictions, and the factors that can indicate undue discrimination between different classes of property.



- In the FERC Standards of Conduct rulemaking, Mr. Smead was responsible, both in reacting to the original proposal and in reviewing the final rule, for determining the actual concentration of affiliated business on all interstate pipelines. In this regard, he developed data-extraction and management models that have ongoing use for market analysis from data filed at the FERC.
- At CIG, Mr. Smead prepared the overall depreciation study that was used to reset book accrual rates in 1997. His methodology and model, which greatly simplified the process of a physical-life depreciation study, were reviewed and accepted by the Securities and Exchange Commission in reviewing the merger between El Paso and The Coastal Corporation.

Regulatory Management and Policy Supporting New Facilities

Mr. Smead has been extensively involved in every aspect of the regulatory process necessary to build new pipeline facilities. This involvement has ranged from leading industry initiatives to change FERC policy to managing the details of internal programs such as stakeholder outreach. At the FERC, CIG during Mr. Smead's tenure was regarded as the best pipeline in the industry at gaining approval for its expansion projects.

- At INGAA, Mr. Smead led task forces that successfully affected FERC new-facility pricing
 policy, and that successfully proposed detailed changes in certificate rules and processes.
 Both efforts first required finding consensus positions among pipelines, prior to making
 proposals to the FERC.
- At the El Paso Pipeline Group, Mr. Smead took responsibility for formalizing the stakeholder outreach program. This program, viewed by FERC staff as the best in the industry, required significant effort to integrate the corporate program into actual project operations, without frustrating project timing or expense limits. Mr. Smead successfully achieved this integration.
- At CIG, Mr. Smead was responsible for gaining regulatory approval for over a dozen major expansion projects. Every project gained approval on the precise date originally prescribed in the project plan, with no unacceptable conditions being imposed by the FERC.

Publications, public presentations, and expert testimony: Lists of Mr. Smead's articles, columns, and expert testimony will be provided upon request.

RICHARD G. SMEAD Record of Regulatory Testimony (All FERC, unless otherwise noted)

Cases Which Went to Hearing

<u>Company</u>	Docket No.	<u>Issue</u>	
Tennessee Gas Pipeline Company	RP 80-97, 81-54	Depreciation	
Tennessee Gas Pipeline Company	RP 81-54, 82-12	Negative Salvage	
Midwestern Gas Transmission Co.	RP 81-17, et. al.	Depreciation	
Midwestern Gas Transmission Co.	RP 86-33	Cost Allocation and	
		Rate Design,	
		Minimum Bill	
Southern Natural Gas Co	RP 83-58	Cost Allocation.	
Southern Natural Gas Co.	RP 86-63,86-116	Minimum Bill	
Kern River Gas Transmission Co.	CP 85-552	Rate Policy, all issues	
Wyoming Interstate Co., Ltd.	RP 85-39, Ph. I	Rate Design	
Ozark Gas Transmission Co.	IN 86-6	Refund Disposition	
Colorado Interstate Gas Company	RP 90-69	Rate Policy, all issues	
Wyoming Interstate Co., Ltd.	RP 85-39, Ph. II	Rate Policy, all issues	
Wyoming Interstate Company Ltd.	RP 99-381	Rate Policy, depreciation,	
		rate of return	
Wisconsin Gas Co. Guardian Lateral	Wisconsin PSC	Cost of Guardian alternative	
	6650-CG-194	to ANR service	
Filed Testimony, Case Settled			
Tennessee Gas Pipeline Company	RP 84-17	Rate Policy, all issues	
East Tennessee Natural Gas Co. RP 8	35-149	Rate Policy, all issues	
Niagara Interstate Pipeline System	CP 83-170	Rate Policy, all issues	
Midwestern Gas Transmission Co.	RP 86-33	Rate Policy, all issues	
TransCanada Pipe Lines Ltd.	RH 3-86 (NEB of		
	Canada)	Rate Design	
Columbia Gas Transmission Corp, et. al.RP 8	86-168, et. al.	Cost Allocation and	
		Rate Design	
Tennessee Gas Pipeline Company	RP 88-228	Seasonal Rates	
Questar Pipeline Company	RP 91-140	Cost Allocation	
Colorado Interstate Gas Company	RP 93-99	Rate Policy, all issues	
Wyoming Interstate Company Ltd.	RP 94-267	Rate Policy, all issues	
Public Service Company of Colorado	CPUC 34814,		
	34815 (Colo. PUC)	Order 636, GCA recovery	
Colorado Interstate Gas Company	RP 96-190	Rate Policy, all issues	
Wyoming Interstate Company Ltd.	RP 97-375	Rate Policy, all issues	
Colorado Interstate Gas Company	RP 01-350	Overall policy, depreciation, rate of r	eturn

RICHARD G. SMEAD'S COLUMNS PUBLISHED IN NATURAL GAS (NOW NATURAL GAS & ELECTRICITY), 3/92 TO PRESENT

March 1992 Order 555 Outcome will Determine Pipeline Growth

May 1992 The Mega-NOPR Love-Fest: Is It All Going to Work Out?

June 1992 Order No. 636: How We'll Spend Our Summer Vacations

August 1992 Order 636 and the Consumer--The SFV Question

October 1992 Order 636-A: A Procedural Hand Grenade?

January 1993 Just How Risky *Are* Pipelines?

February 1993 Capacity Release versus Interruptible Pipelines

April 1993 The Reversal of Order 636

June 1993 Life after 636

August 1993 Facility Construction--a Forgotten Subject?

October 1993 Emergency Relief--A Major Post-636 Issue

January 1994 Life in the 636 World and Other Challenges

March 1994 A Gathering Primer

June 1994 Restructuring the Commission--636 Phase II?

July 1994 Gathering Rules Show Class

September 1994 New Facilities Pricing Debate Needs Resolving

November 1994 The Second Winter--Managing Reliability

January 1995 Ten Years of Competitive Evolution

March 1995 Reality Check Needed for Rate of Return

May 1995 Incentive Rate Making--Some Observations

July 1995 The Settlement Process and Rate of Return

September 1995 Rate-Case Filing Requirements Raise Serious Issues

November 1995 FERC Does *Not* Take the Wrong Path in Pricing Policy

January 1996 Outlook for 1996--Competition and Contracts

March 1996 Recourse Rate-Making--What Is It, and Will It Work?

May 1996 Negotiated Rate Policy to Lead to New Kinds of Deals

July 1996 Negotiated/Recourse Rate Alternative--A Reasonable Step Forward

September 1996 Negotiated Rates and Terms Work with Few Disadvantages

November 1996 Negotiable Terms and Conditions Allow Tailoring

January 1997 In 1997, Contracts and Competition Still Dominate

March 1997 New Rate-of-Return Formula Inadequate to Attract Capital

April 1997 FERC's Rate-of-Return Approach Flawed

May 1997 Order 636--The Right of First Refusal

July 1997 Some Challenges from the May Conference About the Industry Future

September 1997 Rate of Return--More of a Problem than Ever

November 1997 Pipeline Construction Affected by *Iroquois*, *National Fuel Decisions*

January 1998 Rate of Return to Be a Major 1998 Issue

March 1998 Rate of Return to Continue Important

May 1998 Pipeline Capital Structure Is a Major Issue

July 1998 Order No. 587-G Not the Whole Answer

September 1998 Negotiated Terms and Rate Regulation Ripe for Resolution

November 1998 The Short-Term NOPR and Its Auctions

December 1998 The Short-Term NOPR's Daily Auction Must Be Addressed

January 1999 1999 Will Be a Major Turning Point

March 1999 Short-Term Pricing and Auction Issues Can Be Resolved

May 1999 Orders on Negotiated Rates Are Troubling

July 1999 Short-Term Pricing after the Comments

September 1999 Relation of Pipelines to Unbundled LDCs

November 1999 Producer Rate Proposal: Pipeline Point of View

January 2000 Pipelines Enter the Twenty-First Century

March 2000 Kansas Tax Refunds Divide Industry

May 2000 Order 637 A Major Step Forward

July 2000 Order 637A Could Lead to Stability

September 2000 2000 Regulation Should Be More Toward Commodity Price

January 2001 2001--Wholesale Regulatory Changes Are Not Good for the Market

February 2001 Merger Economics As Test of Commission Return Policy

March 2001 Bankers Opinions and Return--The Debate Goes On

April 2001 Pipeline Capacity Key to Pricing Issues

June 2001 Gas Service for Generation

August 2001 "No Harm, No Foul" Concept is Flawed

September 2001 Perspectives Vary as to Gas-Fired Generation

November 2001 Defined Quality of Pipeline Service Is Key to Growth

January 2002 2002 Promises to Be Another Active, Interesting Year at the Commission

February 2002 RTO Efforts Highlight Similarities, Differences between Gas and Electricity

May 2002 Reliance on Tariffs and Service Agreements Need Not Undermine Reliability

June 2002 Commission Disaster-Recovery Conferences Showed Positive, Cooperative Spirit

July 2002 Generation Fuel May Be Less of a Problem than Expected

October 2002 Negotiated-Rate Policy Called into Question

December 2002 Stakeholder Outreach Critical to Industry Growth

February 2003 Facility Security a Major Priority in 2003

April 2003 Pipelines Taking More Risk Building New Pipeline Capacity

June 2003	Shipper Creditworthi	ness a Major Issue
-----------	----------------------	--------------------

July 2003 Progress Mixed with "To Do" List on Creditworthiness Issues

August 2003 Progress Made on Credit Issues, More Left to Do

September 2003 Pipeline Return on Investment Needs to Be Revisited

November 2003 This Winter to Be Test for Gas Industry

January 2004 In 2004, Consistency Issues Will Present Challenges for New Commission

February 2004 Order 2004 Resolves Many Issues, Still Raises Questions

March 2004 Gas-Quality Debate Involves Complex Balancing of Interests

April 2004 LNG Deliberations Highlight Gas Industry Challenges

June 2004 Pipeline Infrastructure Critical to Supply Growth

September 2004 Energy Infrastructure Security Has Evolved Since September 11

October 2004 Resolution of LNG Interchangeability Issues Critical to Growth

January 2005 FERC's 2005 Role Stimulating Supply and Infrastructure to Be Important

March 2005 NAESB Gas-Electric Coordination Efforts Highlight the Complexity of the Issues

May 2005 LNG Development Making Progress, Still Facing Challenges

August 2005 Overbuilt LNG Import Capacity, Even If Happens, Not Bad Thing

View Communications Inc.

David McKeown View Communications Inc.

Tel: 905-823-9996 Fax: 416-548-3353 dmckeown@viewcom.ca

David McKeown has 25 years experience in regulatory matters, policy development, and intercarrier negotiations in the telecommunications industry. He is President of View Communications Inc., which provides telecommunications consulting services in areas dealing with business planning, competitive entry, inter-carrier relations, regulation and government policy, and business processes. Clients include cable companies CLECs, IXCs, wireless carriers, service bureaus, software companies, and start-ups.

Professional History

Rogers Cable 1995 to 1998, Vice President Regulatory, Telecommunications

Unitel Communications Inc. (now MTS Allstream) 1992 to 1995, Executive Director, Regulatory Matters, Policy and Costing 1989 to 1992, Director, Policy Development 1984 to 1989, Manager, Regulatory Matters

Ontario Telephone Service Commission 1981 to 1984 Regulatory Analyst

Education

Certified General Accountant Honours BA, Economics

Work Related to Regulatory Forbearance and Competition

December 2005 Application by Bell Canada for a Stay of the Winback Rules

Winback rules are regulatory safeguards which prevent the incumbent telephone companies from contacting customers who have transferred certain types of services from to a competitor. Mr. McKeown helped a competitor which provides competitive long distance and local telephone services in the preparation of an intervention in response to a Bell Canada application to the CRTC for a Stay of the winback rules, pending the outcome of a related proceeding.

April 2005 - October 2005 Telecom Public Notice CRTC 2005-2, Forbearance from regulation of local exchange services (decision pending)

Mr. McKeown provided support to Shaw Cablesystems which filed evidence and participated through each phase of the proceeding. In its Public Notice, the CRTC indicated that there is a need for a framework for local forbearance, including clear criteria that it can use to determine when it is appropriate to forbear from regulating local telephone services. The CRTC also considered that there is a need to determine whether there should be a transitional regime that

provides incumbents with more regulatory flexibility prior to forbearance and, if so, the appropriate criteria under which: 1) the competitive safeguards on promotions and the winback restrictions should be lessened or removed; 2) the *ex parte* filing of tariff applications for promotions should be permitted; and 3) the waiving of service charges for residential local winbacks should be permitted. A Decision is expected by April 2006.

April 2004 - October 2004

Telecom Decision CRTC 2005-28, Regulatory framework for voice communication services using Internet Protocol

Mr. McKeown provided advice for a large cable company which participated in the proceeding leading to Telecom Decision CRTC 2005-28. During the proceeding the CRTC considered submissions from parties concerning the regulation of voice communications services using IP technology. Among other things, the CRTC considered whether or not the incumbent telephone companies' IP voice services should be regulated or forborne from regulation.

March 2002 - June 2002

Telecom Decision CRTC 2004-32, Application by Westman alleging failure by MTS Communications Inc. to comply with tariff filing requirements

In June 2000, the CRTC forbore from the regulation of wide area network (WAN) offered by the incumbent telephone companies but retained some powers, related to the service, to ensure that competitors could have access to the required network components needed by them to compete in the provision of WAN services. Mr. McKeown assisted Westman Cable in the preparation of its application to the CRTC, showing that MTS Communications had violated certain of the WAN forbearance requirements.

December 1998 - August 1999 Order CRTC 2000-653, Commission denies forbearance for digital network access services

Digital network access (DNA) is a service which provides a dedicated digital point to point or multipoint circuits used to transmit any form of information. DNA service is available from the incumbent telephone companies in various capacities, or bandwidths. DNA service is leased from the incumbents by competitors to connect customers to their respective telecommunications networks. Mr. McKeown assisted two cable companies in preparing joint submissions to the CRTC in response to the incumbents' applications for forbearance of DNA services.

December 1997 - February 1999 Telecom Decision CRTC 99-16, *Telephone service to high-cost serving areas*

In 1985, the CRTC began a program of rate rebalancing (i.e., raising local rates and lowering long distance rates) and rate restructuring (i.e., raising local residential rates and lowering or maintaining business local rates). The introduction of long distance competition in 1992 and local competition in 1997 brought greater urgency to rebalancing and restructuring. While employed by Unitel, Mr. McKeown prepared submissions critiquing selective rebalancing by the telephone companies. When employed at Rogers, Mr. McKeown prepared submissions in response to the incumbent carriers' proposals for rate restructuring. Mr. McKeown also prepared a detailed submission for one of the largest of the new CLECs on the subject of universality and provision of local telephone service in high cost areas.

March 1995 - September 1996 Telecom Decision CRTC 97-8, *Local Competition*

In 1995, the CRTC initiated a proceeding to determine the underlying principles for local competition and the interconnection arrangements between CLECs and ILECs. At the time, cable

companies were the strongest potential competitors and Mr. McKeown worked with the Canadian Cable Television Association to develop proposals on:

- the regulation of the incumbent telephone companies local telephone services and rates,
- the absence of any need for subsidies from business local services to residential local services,
- the regulatory treatment of new competitors services and rates,
- the services that should be provided by the incumbent telephone companies to provide interconnection to CLECs,
- points of interconnection and local calling areas, and
- reciprocal payments, and bill and keep for the exchange of local traffic.

December 1992 - February 1994 Telecom Decision CRTC 94-19, *Review of regulatory framework*

In the context of emerging competitive telecommunications markets, Mr. McKeown participated in the CRTC's proceeding to review the regulatory framework as it applied to incumbent telephone companies. The review entailed the development of criteria that the CRTC could use when considering applications requesting forbearance from regulation. The CRTC also considered the use of appropriate regulatory safeguards. The safeguards included the costing treatment for new services provided to competitors including mark-ups, imputation tests for bundled tariffed and non-tariffed services, unbundling of network elements for competitors, restrictions on the use of competitively sensitive information, the appropriate role for incumbent carriers' services groups, and the use of market trials and promotions by incumbent carriers.

January 1989 - September 1991

Telecom Decision CRTC 92-12, Competition in the provision of public long distance voice telephone services and related resale and sharing issues

Unitel Communications Inc. (now MTS Allstream) applied to the CRTC in 1990 for permission to provide long distance telephone service in competition with the telephone companies. Mr. McKeown was responsible for preparing and testifying in defense of Unitel's proposals related to:

- regulatory treatment of new competitors, including the forbearance of competitor's services
- tariff filing requirements and rate regulation of the incumbent telephone companies,
- sustaining universality of local telephone service,
- pricing and costing of access services provided by the telephone companies to competitors, and
- safeguards to ensure that the incumbent carriers could not use their market power to forestall or prevent competition.

Articles

"Megalink, Quality of Service and Telephone Numbers", Info Telecom, June 2003

"DNA, High Speed Metro Service and In-Building Wire", Info Telecom, September 2003

"Bundling and Promotions, Tariffed Dark Fibre, and Centrex Volume Discounts", Info Telecom, December 2003

"Ideas needed to spend \$158 million" in Entertainment, Media and Communications Section Newsletter, Ontario Bar Association, May 2004

Presentations and Seminars

Seminar for the Canadian Cable Systems Alliance regarding the market for the supply of competitive telecom services to small and medium sized businesses, September 2002.

Seminar for the Canadian Cable Television Association regarding competitive local telephone services market, January 2004

Seminar for mid-sized cable companies regarding Options, Risks and Benefits of entry into the competitive local telephone services market, March 2004

Seminar for the Canadian Cable Systems Alliance regarding entry into the local telephone services market, June 2004

Seminar for the Ontario Telephone Association regarding competitive local telephone services market, August 2004

Presentation to the Canadian Cable Systems Alliance regarding 9-1-1 Issues for VOIP, March 2005