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**CONFIDENTIAL**

Mr. William C. Fraser F.C.A.  
Chair of the Audit Committee  
The Manitoba Hydro-Electric Board  
360 Portage Avenue  
Winnipeg, MN R3C 0G8

November 20, 2009

Dear Mr. Fraser

KPMG LLP ("KPMG") is pleased to submit this proposal to The Manitoba Hydro-Electric Board ("Manitoba Hydro") to undertake an External Quality Review ("Review"). This Review will be used to help Manitoba Hydro's management, Audit Committee, and Board evaluate the merits of recent allegations made by an external consultant with respect to decisions made at Manitoba Hydro. This letter describes the objective of our engagement, the nature of the services that we will provide, and our professional arrangements.

This engagement letter has been prepared based on The Manitoba Hydro Energy Risk Management Practices Terms of Reference provided to KPMG on November 20, 2009. It is acknowledged by both parties these terms may change as the engagement progresses. Any substantive changes in the terms of the engagement will be mutually agreed to in writing by both parties.

Manitoba Hydro acknowledges that they have authorized KPMG to engage third party consultants to assist in completing certain aspects of this project if KPMG determines this would be required to complete the engagement.

We confirm we are not aware of any conflicts associated with KPMG accepting this engagement. Our US firm has provided certain services to ICF Consulting unrelated to this engagement. As a result and in accordance with our firm policies the KPMG engagement team assisting Manitoba Hydro will exclude any individual that has previously provided professional services to ICF.

**Background**

Manitoba Hydro has received complaints from an external consultant. These complaints may be the subject of a review by the Auditor General of Manitoba. The complaints relate to mishandling by management in areas such as drought risk management, long-term contracts, hydrologic modeling, specific power trading issues, and governance structures for power trading.

## Scope of Work

For this review, you have asked us to undertake the following activities:

- Review a list of allegations that have been made by the consultant.
- Identify the positions of Manitoba Hydro staff and other external expert consultants on each of the allegations.
- Determine whether the information assembled to date provides a reasonable basis for evaluating the merits of these allegations, and provide our evaluation of the allegations.
- Prepare a report summarizing our findings, on or before December 31, 2009.

Where allegations require further expert study and analysis, we will work with the President & CEO and others as necessary to arrange for the additional work product and associated funding.

## Approach

We propose to undertake this engagement through a two-phased approach. Our proposed phases are as follows:

1. Phase One: Diagnostic Review and Scoping
2. Phase Two: Detailed Analysis and Reporting

These Phases are discussed in more detail below.

### *1. Phase One: Diagnostic Review and Scoping*

We envisage **Phase One** as a diagnostic phase in which we undertake an initial review of the consultant's allegations and surrounding circumstances. Phase One will begin with an initial series of meetings with key members of management and staff and a review of relevant reports and supporting documentation. The objective of this work will be to quickly get up to speed on the relevant issues and to identify the key questions that will need to be addressed by the Review. In the event that there are a large number of allegations, there may need to be some prioritization of those subject to further investigation and analysis.

It will include:

1. Review existing internal and external reports related to matters of Manitoba Hydro's risks, as well as the source data for each of the reports.
2. Provide a conceptual outline to Manitoba Hydro, for the in-depth and independent study as directed in PUB Order 32/09 and meet with PUB Staff and/or Advisors as necessary, including giving testimony at PUB hearings, to review the PUB's orders and concerns with respect to Manitoba Hydro's risks.

As part of Phase One, we will then prepare a Planning Report that:

- Identifies and defines the issues that will need to be addressed by the Review.
- Provides a proposed methodology for addressing these issues. The methodology will include a framework for evaluating the consultant's allegations and for arriving at conclusions regarding their merit.
- Identifies the sources of data that will be used in our analyses, and specifies any external inputs or studies that will be required to supplement existing data available within Manitoba Hydro.
- Provides a detailed work plan, with staffing plans, timelines, and associated professional fees.

Based on our preliminary analysis and discussions with you, we expect that there may be approximately 10 to 20 issues that will need to be addressed by KPMG during Phase Two in order to assess the consultant's allegations.

## ***2. Phase Two: Detailed Analysis and Reporting***

During **Phase Two**, we will carry out the detailed work plan that is developed during Phase One. This work plan will include the preparation of a formal report. This report will document our analyses and conclusions in a format that is suitable for distribution to key stakeholders, including your shareholder, the regulator, and members of the media, as appropriate. In particular, this report will be suitable for submission as evidence in regulatory and/or legal proceedings. This entails a high degree of rigor with respect to our analyses and their presentation. While details of the Phase Two work plan are yet to be defined in detail, we anticipate the work plan including at a minimum the following:

Prepare the independent, in-depth Risk Study as directed in PUB Order 32/09, which is to include an evaluation of the findings and commendations that have been made by this consultant, Manitoba Hydro's Corporate comments and the ICF Report dealing with risk management, long term contracts, hydrologic modeling, specific power trading issues and governance structure for power trading. In its report, KPMG will be specific in either concurring with or rejecting the findings and recommendations of this consultant and may, as applicable, provide its own findings and recommendations related to the issues raised by this consultant. The specific issues to be addressed in Phase Two will be documented in our Phase One Report. With respect to long term contracts, we will consider:

- a. The implications of planned capital spending taking into account export revenue growth, market access risk, interest and inflation risk, and potential currency fluctuation; and
- b. Hydro commitments and risks related to electrical reliability requirements of dealing in the MISO market

The Risk Study should also consider energy supply risks, especially those that export commitments might impose on domestic supply, as well as the impact on the security of supply of not having or significantly curtailing long term export power sales.

## **The Nature of Anticipated Use of Corporate Resources**

The nature of anticipated uses of corporate resources will vary by phase. In general, we anticipate requiring access to senior management such as SVP, Power Supply and the SVP's direct reports, in

particular the PS&O leadership; CFO and finance leadership; President and CEO's office, etc. We anticipate requiring access to background reports referenced in any allegations made by the consultant and any reports/materials produced by Manitoba Hydro or its advisors to rebut / examine allegations made by the consultant.

We also anticipate requiring access to power trading policies/power trading reports / power production reports / minutes / power point / MS word / Excel records of key decision making committees related to power exports, production forecasting or similar bodies.

To the extent necessary to gain an understanding of the model logic, we may require access to the programming logic / code modules of key planning tools such as HERMES / SPLASH and access to the expert operators of such tools. We also anticipate requiring access to the input data and methodologies used in the analysis generated by HERMES and SPLASH. As the engagement progresses, we may identify other resources that we may need access to.

Moreover, in general our requests for access to staff and/or data/reports/methodologies/policies will be driven by a positive requirement to either adequately understand the allegations made by the consultant, any Manitoba Hydro position's on these allegations and/or to understand and analyze Manitoba Hydro's key decisions and decision making process as it relates to its power production planning and sales process. Further, our requests will also be in furtherance of the requirement for the Risk Study envisioned in PUB Order 32/09.

We will also require access to the reports prepared by Manitoba Hydro's External Legal Counsel, Aikens, MacAulay and Thorvaldson LLP, as well as meetings with representatives of Aikens that we may deem appropriate.

### **The Engagement Team**

The consultant's allegations have generated considerable attention within Manitoba Hydro's stakeholder community. As noted earlier, this matter may be reviewed by the Auditor General. It is essential that our final Phase Two Report be objective, credible and fully backed by supporting evidence and documentation. Our analyses and conclusions are likely to be subject to very detailed scrutiny by a variety of external stakeholders. Accordingly, we have assigned to this engagement a very senior team with experience in the following areas:

- Management reviews and the assessment of decision-making processes, particularly in the development and management of long-term contractual arrangements.
- Analysis of complex issues, including the preparation of expert evidence and the provision of expert testimony in legal and regulatory tribunals.
- Energy issues and utility regulation.

In the section below, we summarize the backgrounds of the specific individuals identified for this engagement.

- **Bob Owen.** Bob Owen is well known to management at Manitoba Hydro, having served for many years as your external audit partner. Bob Owen was also a key member of KPMG's team in our review of the Centra Gas acquisition. Bob is based in Winnipeg and accordingly has a good understanding of local sensitivities regarding this engagement. Bob's principal role will be to

serve as the client service partner responsible for the overall quality of our services and timely delivery of our project reports.

- **Stephen Beatty.** Stephen Beatty is a Partner, and is the head of KPMG's Global Infrastructure Practice in the Americas. Stephen provided advice to Manitoba Hydro with respect to its agreement with the Nisichawayasihk Cree Nation for the development of the Wuskwatim Project. Steve has advised public sector clients extensively on issue related to PPP policy development, project financing, project scoping, and process design. Stephen, as are the remaining members of the team, is based out of KPMG's Toronto office. Stephen will be responsible for the management and direction of this project.
- **Will Lipson.** Will Lipson is a Managing Director who specializes in helping public agencies plan and deliver large infrastructure projects. Will has expertise in project management, program evaluation, corporate planning and operations, public-private partnerships, financial and economic analysis, and demand forecasting. He is well known by government agencies across North America, and has been qualified as an expert witness on a number of occasions during the course of his career.
- **Anurag Gupta.** Anurag is a Director. Anurag has over 10 years combined experience in project and corporate finance with extensive experience in structuring projects and complex transactions in the energy and infrastructure sectors. Prior to joining KPMG, Anurag had senior positions with Infrastructure Ontario, Ontario Power Generation, and TXU Energy in Dallas, where his work involved energy trading, structured transactions and finance, quantitative and financial analysis, and credit risk assessments.
- **Michael Ross.** Michael is a Senior Associate at KPMG. Together with Bob Own, Michael led our work for Manitoba Hydro to review the synergy savings from the acquisition of Centra Gas. Michael was for many years the Partner in Charge of KPMG's Economics Group and has extensive experience in the use of economic methods and evaluation techniques. He has directed or carried out studies involving program evaluation, economic impact, and cost-benefit analyses.
- **Jonathan Erling.** Jonathan is a Managing Director. Jonathan was involved in our review of the Centra Gas acquisition and acted as an expert witness on this issue at the Manitoba Public Utility Board. Jonathan's practice focuses almost exclusively on issues related to energy economics and utility regulation. He provides financial modelling, cost allocation and strategic planning services for utility and power generation clients. He has recently undertaken a number of assignments for the Ontario Energy Board (OEB), in addition to acting as an expert witness at OEB hearings.
- **Frank Chen.** Frank is a Senior Manager in our Calgary office. He brings experience in energy trading, risk systems and documentation.

Resumes of the above individuals have been included as an appendix to this letter.

This core team of senior professionals will lead and carry out our work on Phase One. This core team of senior professionals identified above will be supported by other resources as appropriate.

**Business Arrangements**

We will bill for our services at the following hourly rates:

Bob Owen	\$315 per hour
Stephen Beatty	\$490 per hour
Will Lipson	\$490 per hour
Anurag Gupta	\$315 per hour
Michael Ross	\$450 per hour
Jonathan Erling	\$375 per hour
Frank Chen	\$315 per hour

Assuming full start-up the week of November 23<sup>rd</sup>, we propose to provide our Phase I report by Friday, December 4<sup>th</sup>.

GST and out-of-pocket expenses will be billed in addition to the amounts noted above. We expect that the majority of our out-of-pocket expenses will relate to travel and accommodation.

Neither the amount of our fees nor the payment of our fees and expenses will depend upon the results of our work. This engagement will be subject to the standard terms and conditions attached to this letter.

Upon completion of Phase One we will be in a position to confirm, based on the number and complexity of the issues identified that will need to be addressed, the timing of delivery of our Phase Two Report, remaining fully cognizant of the December 31<sup>st</sup> target.

\* \* \* \* \*

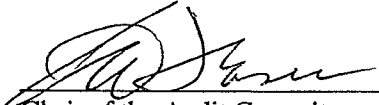
We would be pleased to discuss changes to our proposed scope of work or business arrangements if the foregoing letter does not match your exact requirements. In the event that the letter does address your requirements, please confirm your agreement with the foregoing by signing and dating a copy of this letter and returning it to us.

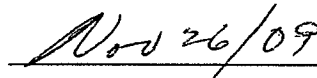
Yours very truly,



R.J. Owen, C.A.  
*Partner*

We acknowledge that we have read the foregoing agreement and agree to be bound by it.

  
\_\_\_\_\_  
Chair of the Audit Committee  
The Manitoba Hydro-Electric Board

  
\_\_\_\_\_  
Date

**Bob Owen, Client Service Partner**

**Role:** Bob Owen will serve Manitoba Hydro as client service partner. He will work with the project team to ensure that all of our commitments are delivered on a timely basis and to your satisfaction. Bob has over 30 years of public accounting experience with KPMG, and has 20 years of experience as a member of the Manitoba Hydro audit engagement team. In addition to serving his clients, Bob is also the Professional Practice Partner-in-Charge for the Winnipeg office. Bob will attend all meetings with Manitoba Hydro's Audit Committee, Board of Directors and senior management and oversee the delivery of all our services.

Some of Bob's most significant clients include or have included: Investors Group, Agriculture and Agri-Food Canada, Cargill Limited, Jovian Capital Corporation, Pollard Banknote Income Fund, Ladco Company Limited, Bird Construction, Ceridian Canada Ltd., Old Dutch foods Ltd., Ducks Unlimited Canada, Lake Louise Limited Partnership and Canad Inns.

**Education and Affiliations:**

- Bachelor of Arts degree, University of Manitoba
- Bachelor of Commerce (Honours) degree, University of Manitoba
- Chartered Accountant, Institute of Chartered Accountants of Manitoba



### **Stephen Beatty, Project Manager**

**Role:** Mr. Stephen Beatty is a Managing Director of the Public/Private Practice of KPMG LLP in Toronto. Steve is also Head of KPMG's Global Infrastructure and Projects Group for the Americas. He co-chairs KPMG Canada's Privatization/Private Finance Network and is the Canadian Representative of KPMG's Global Privatization, Public/Private Network.

He has a B.B.A. from Wilfrid Laurier University, an M.B.A. with honours from York University, and over twenty years' experience with KPMG. He is a member of the Planning Forum, the American Marketing Association, and an associate member of the Transportation Research Board (U.S. National Academy of Sciences). He co-chairs the KPMG National Public Private Network.

### **Consulting Experience**

#### **Transportation**

- **Texas Highways Program**—KPMG has been engaged as a Financial Advisor to TxDOT on procurement strategies and implementation plans for its statewide comprehensive development agreement (design-build, PPPs and franchises/concession) program, which TxDOT anticipates utilizing to help finance many of its new turnpike projects over the next several years. Mr. Beatty's responsibilities have included assistance in developing and implementing transaction strategies, assisting with evaluation of qualifications submittals and responses, coordinating with engineering consultants and internal staff, negotiating with proposers, analyzing financing options, assisting with federal SEP-15 approvals, advising on commercial terms, providing CDA training seminars, and a host of other activities.

In addition, KPMG is assessing financing requirements on a project-by-project basis, analyzing project revenues, investigating other potential revenue sources, and creating strategies for financing each of the individual CDA projects. KPMG is also assisting TxDOT with its applications for TIFIA and PABs for several of the CDA projects. KPMG's involvement spans the entire CDA program.

Mr. Beatty is providing overall client quality assurance and strategic advice on the TxDOT program. This work has included developing programmatic views on dealing with specific issues on the various projects, as well as addressing specific project-level issues. These issues range from business planning, procurement options, providing financial and structuring advice, payment mechanisms and key inputs into the development of financial models. The various projects in which Steve is involved include:

- Assisting TxDOT in working with Cintra-Zachry in the development of a Master Financial Plan for the TTC-35, crossing the State and connecting the Oklahoma border with Mexico.
- Advising in the direct negotiations with Cintra-Zachry for Segments 5 & 6 of SH 130, near Austin.
- Dallas-based projects including the SH 121, IH 635, SH 161, North Tarrant Express, and the soon-to-be released DFW Connector.
- The Loop 1604/SR 281 project in San Antonio.
- The recently released TTC-69 project, connecting Louisiana with Mexico.

- Assessing the PPP potential of several other unfunded projects and creating a framework for "triaging" unsolicited proposals.
- **Ontario Privatization Secretariat—Advisor for the Highway 407 Divestiture.** Mr. Beatty was a principal advisor to the Ontario Privatization Secretariat in the successful \$3.1 billion divestiture of Highway 407, the world's first electronically tolled highway. This transaction is the largest transaction affected by the Province of Ontario to date and was completed in less than nine months. KPMG's extensive involvement included roles as the overall business advisor, transaction process advisor, the transportation advisor, and the accounting advisor.
  - Mr. Beatty, as the transaction process advisor, assisted the Province in the design and execution of the process and provided project management support to ensure that the divestiture process followed was fair, transparent, and defensible. KPMG also served as the interim manager of the facility.
  - In the role of transportation advisor, KPMG provided advice on traffic forecasting, economic regulation, and other matters. One of the key elements of KPMG's work was the design of the toll rate regulation regime to be used by the winning bidder.
  - As an accounting advisor, Mr. Beatty assisted in analyzing various transaction structures, performed due diligence on financial and operating information, and advised on various components of the financial model.
  - Mr. Beatty also worked to assist the Province in the transfer of ownership from the Province to the private sector. These responsibilities included assisting the Province in ensuring all obligations under various agreements with the private sector had been met, assisting the Province in identifying government sensitive documents, and identifying and quantifying outstanding liabilities. Specifically, KPMG assisted with the development of protocols to deal with various contractual, safety, and other issues over concession term, advising the Province on its business relationships with the purchaser through participation in regular management meetings, and devising an approach to perform an audit of compliance with the agreements.
- **Ontario Ministry of Transportation—Highway 407 Regulatory Advice.** Mr. Beatty is a member of the KPMG team that is providing ongoing assistance to the Ontario Ministry of Transportation in its administration of the 99-year concession for Highway 407. The primary focus of the work involves assistance with the regulatory framework which was developed as part of the privatization of the Highway.
- **Indiana Department of Transportation I-69 Corridor.** KPMG was mandated by INDOT to perform a financial feasibility study on the I-69 as a requirement of Indiana's legislation that determined a financial feasibility study must be performed by a firm internationally recognized in the field of such studies. KPMG, along with a team of technical and legal advisors, were mandated to perform the study. Steve has the overall responsibility and is a key strategic advisor to the Indiana Department of Transportation regarding the development of the I-69 corridor in the State under a concession model. I-69 has been identified as a major initiative of the federal highways

administration that is currently being pursued by six States. Steve is advising the only two States (Texas and Indiana) that are at the forefront of delivering their segments of the I-69 and will soon be taking the transactions to market.

- **Irish National Roads Authority—Public-Private Partnership Assistance.** Mr. Beatty was a member of a large KPMG team that provided assistance to the Irish National Roads Authority in the structuring and tendering of ten design-build-finance-operate road projects in Ireland. Mr. Beatty's primary focus was on the tolling of the facilities and different methods of achieving financial self-sufficiency in a number of projects.
- **Riverside County Transportation Commission - Development of PPP Highways.** KPMG was recently appointed as Financial Advisors to Riverside County Transportation Commission regarding the potential development of several billion dollars of highway improvements in the County. The current work is focused on financial analysis of the various projects, with assessment as to their suitability for development under a PPP approach. Mr. Beatty is involved in this project and has been assisting the client in addressing a range of strategic and policy matters to date.
- **Minnesota Department of Transportation—MN Pass.** Mr. Beatty was responsible for KPMG's assistance to the Minnesota Department of Transportation in assessing the potential for the implementation of the MN Pass System involving a public-private partnership to implement HOV/HOT lanes in Minneapolis.
- **Greater Vancouver Transportation Authority/Translink—Golden Ears Bridge.** Mr. Beatty was a member of KPMG's team providing assistance to Translink in its public private partnership for the design, construction, financing and operation of the Golden Ears Bridge.
- **Greater Vancouver Transportation Authority/Translink—RAV Project.** Mr. Beatty was a member of KPMG's team that provided expert peer review services to Translink in its implementation of the Richmond Airport Vancouver Rail Link.
- **Metro Toronto Roads—Operations Centre Privatization.** Mr. Beatty provided assistance in the negotiations surrounding the potential privatization of the Metro Toronto Traffic Operations Centre.
- **Canadian Highways Constructor—Review of Toll Road Opportunity in Guilin, China.** Mr. Beatty undertook a preliminary feasibility review and negotiations regarding a toll road project in Guilin, China. The work examined the potential to develop a highway under a Build-Operate-Transfer approach.

- **Ministry of Transportation of Ontario—Independent Process Review of Five Design/Build Competitions.** Mr. Beatty was involved in assisting the Ministry in the selection process for design/build highway projects in the following five regions:

- North-western
- Northern
- South-western
- Eastern
- Central

The focus of the engagement was on ensuring that the selection process was fair and credible. Upon completion of the selection process, KPMG reported on the integrity of the process.

- **Confederation Bridge—Toll Revenue Forecasts.** Mr. Beatty was responsible for a series of analyses that led to the development of comprehensive traffic and revenue estimates for the owners of Confederation Bridge which links the Canadian Provinces of New Brunswick and Prince Edward Island. The traffic forecasts were used in conjunction with raising of non-recourse debt for the project.
- **Ontario Ministry of Transportation—Logo Signs.** Mr. Beatty led the KPMG team that provided assistance to the Ontario Ministry of Transportation in the establishment of a public-private partnership for the procurement of logo signs on Ontario's major highways. The work involved the establishment of a concession framework as well as the offering of the business opportunity to the private sector.
- **Governments of North Dakota, Manitoba and Saskatchewan—Border Crossing.** Mr. Beatty was a member of a KPMG team that provided assistance to the Governments of North Dakota, Manitoba and Saskatchewan regarding two major rail border crossings between Canada and the United States. The work examined the potential to accelerate customs clearance at the border and recover the costs from users.
- **BC Ministry of Transportation—Sea to Sky Highway.** Working for the British Columbia Ministry of Transportation (MoT), KPMG analyzed the potential to successfully implement, using a public-private partnership, a long-term business arrangement for the operation, maintenance, and upgrading of Sea to Sky Highway. This project included various aspects, such as issues analysis, business case development and options analysis, project planning, analyzing and determining the optimal business model and deal structure, communicating and marketing the deal, creating an interim operating entity, developing a concession agreement, evaluating bids, completing the final transaction, and operational transitioning. Mr. Beatty was the lead advisor on the \$1 billion-plus project, and was key in developing a full understanding of all the relevant issues, in order to determine if there was a business case that could support a P3 structure.

- **BC Ministry of Transportation—Coquihalla Highway.** For the BC Ministry of Transportation, KPMG was retained as the business advisor in the privatization of the Coquihalla Highway. The Coquihalla Highway is the only toll highway in B.C. KPMG's role included assisting in the structuring of the transaction, addressing key transaction parameters, developing the tolling regime, developing the business case, and assisting with the transaction process. Mr. Beatty was the client service partner on this assignment, advising on key transaction parameters and ensuring that the objectives of the transaction were consistent with other road privatization transactions within the Province.
  
- **Municipality of Metro Toronto—Acquisition of a Parking Tag Management System.** Mr. Beatty assisted staff of Metro Toronto in the acquisition of a new parking tag management system, assisted in drafting the Request for Expressions of Interest, the shortlisting of the proponents, the drafting of the Request for Proposals and the evaluation of the final proposals. The process involved consideration of both an in-house procurement of the system as well as a privatization of the parking tag office. In parallel, the process also solicited proposals for upgrades to a police management system. Mr. Beatty assisted Metro in the negotiations with the selected proponents.
  
- **BC Ministry of Transportation—Gateway Program.** KPMG is currently acting as the Business Advisor to the Gateway Program. Mr. Beatty is the Senior Advisor for this engagement, providing strategic and procurement advice, including due diligence, risk assessments, tolling policies and evaluation criteria development. The Province of British Columbia, together with the Greater Vancouver Transportation Authority have undertaken a program of infrastructure improvements, whose objectives are to improve access along and across the Fraser River corridor, improve access to major gateways, promote industrial development, and address current congestion issues. The program is comprised of three primary corridors:
  - Twinning of the Port Mann Bridge and improvements to Highway 1, including widening of the motorway
  - South Fraser Perimeter Road - A proposed transportation corridor running along the south side of the Fraser River (from Highway 91 to Highways 1 and 15). This project would provide the linking of docks, rail facilities, and industrial areas with the Provincial highway system.
  - North Fraser Perimeter Road - improvements and additional connections within the existing road network, combined with improvements to the Pitt River Bridge and Lougheed Highway

Currently, the program is at the pre-Request for Qualifications (RFQ) stage on the Highway 1/Port Mann Bridge project.

- **British Columbia Transportation Financing Authority—Sierra-Yo-Yo-Desan Road Project.** Mr. Beatty assisted the B.C. Transportation Financing Authority in securing a developer/financier of this major natural resource access roadway in Central British Columbia.

- **Province of British Columbia—Lion's Gate Bridge.** Mr. Beatty served as one of the principal advisors to the Province of British Columbia in implementing the repair/rehabilitation/replacement of the Lion's Gate Crossing. Mr. Beatty's work involves assistance in obtaining government acceptance and approval of the project, as well as structuring the transaction to maximize the net benefits.
- **Province of New Brunswick—Procurement Process Review Advisor.** Mr. Beatty served as one of the principal advisors to the Province of New Brunswick regarding the construction of a highway between Fredericton and Moncton. The project, with a value in excess of \$650 million, was undertaken as a public-private partnership between the Government of the Province and a private partner. Mr. Beatty's role involved the provision of expert advice to senior officials in the Ministry of Transportation, the Ministry of Finance and the Ministry of the Attorney General.
- **B.C. Ministry of Transportation and Highways.** Mr. Beatty advised the B.C. Ministry of Transportation and Highways in the development of two design/build highway projects in Vancouver. The projects involved complex design/build challenges on both traffic management and environmental fronts. The KPMG assistance involved the development of a comprehensive approach to project definition, to contractor selection, and negotiations.
- **The City of Mississauga Bus Shelter—Public-Private Partnership.** Mr. Beatty was a member of a KPMG team that provided a range of assistance regarding a public-private partnership for the provision of transit shelters for the City of Mississauga.

#### **Airports and Aviation**

- **Joint U.S.-Dutch Developer—Redevelopment of Terminal Building at JFK International Airport.** Mr. Beatty assisted in a joint venture between a U.S. developer and a Dutch airport operations company in the redevelopment of the International Arrivals Building at JFK International Airport. The focus of his work was on conducting due diligence on the financial information that was provided to the proponents in this competition by the Port Authority of New York & New Jersey.
- **Air Terminals Development Group—Terminal One/Two Redevelopment Proposal.** Mr. Beatty provided extensive assistance to the Air Terminals Development Group in the submission of their proposal to redevelop Terminals One and Two at Lester B. Pearson International Airport. The Air Terminals Development Group is owned principally by the Charles R. Bronfman Family Trusts and the Lockheed Corporation. Mr. Beatty was responsible for the development of a comprehensive plan to transfer the assets, employees, and business obligations of Transport Canada to the Air Terminals Development Group. He had a significant involvement in the development of the business plan for the project, and directed the production of the management and operations elements of the proposals.

- **Ogden Aviation—Proposal to Modernize and Expand International Terminal Facilities at the Luis Munoz Marin International Airport in San Juan, Puerto Rico.** KPMG assisted this client in the preparation of a submission in response to the Puerto Rico Ports Authority's Request for Proposal for the development of the above-noted facilities. Mr. Beatty assessed the operational characteristics and financial performance of the airport. Mr. Beatty was also responsible for the development of financial projections and business plan for the project. A key element of KPMG's work was the formulation of the most appropriate form of public-private partnership. Issues considered included rate setting mechanism, cost minimization, and management and control.
- **Private Sector Consortium—New Runway at El Dorado Airport in Bogota.** For a joint US-Spanish consortium, Mr. Beatty assisted in the development of a proposal to build a new runway at the airport in Bogota, Colombia and operate the airport's airside for 20 years. KPMG was responsible for the business plan and the management operations plan and, as part of this work, developed a detailed operating budgets for the project using experiences gained elsewhere and a limited amount of information made available to the bidders. Recently, the Colombian authorities announced that our client's submission was successful.
- **Airport Development Corporation—Operations Assistance.** Mr. Beatty provided assistance to the senior management and ownership of Terminal Three in Toronto in monitoring and analyzing cost and revenue data. Another aspect of the work involved assessing the accuracy of and curing deficiencies in data supplied by tenant airlines. These data are fundamental inputs used in a complex cost-sharing lease agreement between ADC and its airline tenants.
- **Canadian Developer—Privatization of Trinidad Airport.** Mr. Beatty participated in the development of a comprehensive proposal to privately develop new passenger terminal facilities at the Airport. The analysis focused on both the financial offer and the physical requirements of the facility.
- **Canadian Developer—Vietnam Airports.** Mr. Beatty participated in the analysis of the privatization potential of two Vietnamese airports on behalf of a Canadian developer. The work involved an analysis of local and international travel and the physical requirements of the proposed development.
- **Canadian Developer—Privatization of Runways.** Mr. Beatty participated in this engagement involving assistance provided to a Canadian developer proposing to privately develop runway facilities at Lester B. Pearson International Airport. The focus of the work was on the development of a comprehensive financial model and regulatory structure to govern the business relationship between the Government and the developer.
- **U.S. Aviation Company—Proposal to Privatize and Redevelop the Terminal Operations at Trinidad and Tobago's Piarco and Crown Point Airports.** KPMG was retained by a U.S.-based aviation company to undertake the financial analysis and modeling required to determine the feasibility and financial structure of this U.S. \$70 Million project. Mr. Beatty was the leader

of the due diligence and negotiating team. The project encompasses the construction of a new terminal and the transfer of operations of existing facilities at the airports of Trinidad and Tobago. Mr. Beatty reviewed traffic patterns at the airports and prepared a comparison of airport fees and charges at neighbouring international airports.

- **Italian-Thai Development Public Co.—Proposal to Build and Operate the Clark International Airport in the Philippines.** Mr. Beatty was a member of the consulting team that assisted this client in the preparation of a major submission to the government for the redevelopment of the former Clark Air Force Base in Manila, Philippines. The work included the development of traffic forecasts, translation of the traffic forecasts into facility requirements, projection of revenues and operating expenses, development of a financing strategy, and the preparation of the business plan. In addition, KPMG participated in the preparation of an economic benefit and cost analysis for the project.
- **Panama Airport Proposal.** Mr. Beatty led a large KPMG team that provided assistance to Fraport in the analysis of the preparation of an offer to acquire the Panama City Airport.
- **Basque Government—Airport Privatization.** On behalf of the Basque Government, Mr. Beatty examined the financial and economic feasibility of the privatization of the three major airports in the Basque Region of Spain. The work involved an examination of the financial and operational performance of each of the airports as well as a broad assessment of their future potential.
- **Government of Poland—Airport Privatization/Financing.** Mr. Beatty led a KPMG team which examined the potential for the Warsaw Airport to undertake the development of a new passenger terminal either on a project finance or privatized basis. The work involved an examination of a financial and operational details of the existing airport, together with an examination of capital market conditions in Poland and for Polish projects in Europe.
- **Baltic Republic—Privatization Analysis.** On behalf of an Austrian company, Mr. Beatty examined the potential for privatization of a number of facilities in this Baltic Republic. The analysis focused on public infrastructure and housing, and resulted in the identification of several opportunities for future development.
- **Russian Republic—Privatization Analysis.** Mr. Beatty examined the potential to privatize a semi-autonomous Republic's primary airport and other related infrastructure. The conclusion of the work was that substantial other infrastructure investment was required before the airport could be redeveloped using private finance.



- **Ontario Ministry of Health and Long Term Care—CT Scan/MRI Public Private Partnership.** Mr. Beatty was responsible for KPMG's assistance to the Ontario Ministry of Health and Long Term Care involving the operation of a large number of medical diagnostic imaging facilities, financed and operated on a public-private partnership basis.
- **Sunnybrook and Women's College Hospital.** Mr. Beatty led KPMG's team assessing the potential to develop a major research facility at Sunnybrook Hospital in Toronto utilizing a public-private partnership approach.
- **University Health Network—Sports Medicine.** Mr. Beatty directed KPMG's work in examining the potential to implement a major sports medicine facility at Toronto's University Health Network involving a public-private partnership approach.
- **Urban Shared Services Corporation—Hospital Food Preparation Facilities.** Mr. Beatty was a member of the KPMG team that assisted Winnipeg's Urban Shared Services Corporation in the selection of a preferred private sector partner to implement a comprehensive food services management system for a number of Winnipeg health care facilities.
- **Ontario SuperBuild Corporation—Ontario Hospital Association Health Care Public-Private Partnership Workshop.** Mr. Beatty conducted a workshop on behalf of the Ontario SuperBuild Corporation for the Ontario Hospital Association in the field of health care public-private partnerships. The workshop canvassed a range of experiences relating to public-private partnerships from both the public sector perspective as well as the private-sector perspective.

#### **Water/Wastewater**

- **Regional Municipality of Halton—Development of Corporate Policy/Proposal Call for New Water and Wastewater Facilities.** KPMG, in conjunction with Borden and Elliot, conducted an assignment for the Regional Municipality of Halton which had two components:
  - the development of a corporate policy on public/private partnerships,
  - the conduct of a proposal call process to develop new required water and wastewater treatment facilities.

Mr. Beatty was the co-partner in charge of this major assignment and thereby became familiar with the latest issues that needed to be addressed in operating and maintaining a water system.

- **Private Sector Developer—York Region Water Public/Private Partnership.** Mr. Beatty served as the principal financial advisor to a consortium who submitted a proposal to York Region to become its partner in the provision of water to the Region. This consortium is lead by Union Gas, The Ogden Corporation, and Yorkshire Water PLC. Focus of the work was the preparation of a proposal and the structuring of the partnership relationship in a manner that provides high-quality services at reasonable prices while earning fair returns for the participants.

- **The Regional Municipality of Hamilton-Wentworth—Public/Private Partnership Negotiations.** Philip Environmental, an environmental services company based in Hamilton, made an unsolicited proposal to the Regional Municipality of Hamilton-Wentworth to manage and operate the Region's water and wastewater treatment facilities. In return, Philip proposed to guarantee a minimum annual savings in operating costs for the Region. Philip also made certain assertions regarding the economic development benefits that the Region could gain from providing the private operator with a base of operations from which to pursue work outside of the Region. KPMG was retained by the Region, where Mr. Beatty assisted staff in negotiating a contract with Philip. The scope of the contract covered the operating standards to be followed by Philip, maintenance procedures and standards, transfer of employees from the Region to Philip, economic development guarantees and the financial arrangements between the two parties.
- **Greater Vancouver Regional District—Water and Wastewater Privatization.** KPMG, together with RPA Consultants, conducted a detailed examination of the potential for public/private partnerships in the water and waste water treatment field for the Greater Vancouver Regional District. Mr. Beatty's work examined likely candidates for public/private partnerships and assessed their potential for success. Three projects were reviewed in detailed and it has been recommended two projects proceed for implementation on a public/private basis
- **Major Water/Wastewater Treatment Provider.** Mr. Beatty provided assistance to a major water/wastewater treatment company in the preparation and submission of a bid for a major public-private partnership contract. The work involved a detailed assessment of the risks of the contract from both the public and private sector perspectives. KPMG's work formed an input into the ultimate pricing decision.

#### **PPP Advisory and Policy**

- **Government of the Northwest Territories—Public-Private Partnership Evaluation.** Mr. Beatty was a member of the KPMG team that conducted a comprehensive evaluation of the Government of the Northwest Territories Public-Private Partnership Pilot Program. The work examined both the financial and public policy effectiveness of the program, as well as a range of implementation details.
- **Ontario SuperBuild Corporation—Infrastructure Workshop.** Mr. Beatty conducted a workshop on behalf of the Ontario SuperBuild Corporation in the field of public-private partnerships. The workshop canvassed a range of experiences relating to public-private partnerships from both the public sector perspective as well as the private-sector perspective.
- **Transport Canada/Provincial Transport Ministries—Public-Private Partnership “How-To Guide”.** Mr. Beatty was a key member of a KPMG/Goodman's team that prepared a comprehensive “How-To Guide” for public-private partnerships in transportation projects. The work was undertaken on behalf of Transport Canada and the ten Ministries of Transport across Canada.

- **Government of Saskatchewan—Public-Private Partnership Assistance.** Mr. Beatty was a member of a KPMG team that provided assistance to the Crown Investments Corporation of Saskatchewan regarding potential public-private partnerships in the Province.
- **Arab Republic—Public-Private Joint Venture Planning.** Mr. Beatty assisted professionals from Marshall Macklin Monaghan Limited in the development of a methodology to find a joint venture partner for the government in the development of a major new urban industrial complex in this Arab Republic. This brief assignment focused on alternative methods for attracting "partners" and alternative development strategies.

#### **Other Infrastructure Privatization**

- **Metro Toronto Laundry Facilities.** Mr. Beatty was a member of a KPMG team that examined the ongoing advisability of a public-private partnership between a private contractor and the Municipality of Metropolitan Toronto in respect of the provision of laundry facilities for the Metro Homes for the Aged.
- **City of Mississauga—Spectator Arena Development.** Mr. Beatty provided assistance to the City of Mississauga in its search for a private developer to build, operate and finance a major spectator arena complex in the City of Mississauga. The work involved the conduct of a proposal call process as well as significant detailed negotiations. The project, using private financing, was ultimately discontinued because an appropriate risk-sharing mechanism could not be achieved.
- **District of Muskoka—Seniors' Housing.** Mr. Beatty had overall partnership responsibility for KPMG's assistance in the privatization of the operation of The Pines Long-Term Care Facility in Bracebridge. The work involved an analysis of existing operations, the conduct of a proposal call process and ultimately, negotiations with a preferred proponent.
- **The City of Surrey—Fleetwood Recreation Complex.** Mr. Beatty provided assistance to the City of Surrey in its search for a private developer to design, build, finance and operate the Fleetwood Sports and Recreation Complex. The work involved conduct of a proposal call process and negotiations with a preferred proponent.
- **Metro Separate School Board—St. Basil's School.** Mr. Beatty led KPMG's assistance to the School Board in finding new ways that the Board's investment dollars could be better leveraged into providing more and better facilities; lower overall cost to the Board; and better service and amenities for the local community.
- **Ontario Ministry of Correctional Services—Correctional Facilities Public-Private Partnership.** Mr. Beatty was responsible for KPMG's assistance to the Ministry of Correctional Services in attempting to implement a new correctional facility utilizing a public-private partnership approach.

- **Canadian Department of Foreign Affairs and International Trade—Berlin Embassy.** Mr. Beatty was responsible for KPMG's assistance to DFAIT in undertaking a public-private partnership for the construction of a new Canadian Embassy in Berlin. The project involved a combination of government facilities as well as commercial development. Complex inter-creditor and inter-tenant arrangements were put in place in order to effectively secure the new Embassy tenancy.
  
- **World Bank—Natural Gas System Privatization.** Mr. Beatty had overall partnership responsibility for KPMG's assistance provided in joint venture with Consumers Gas Company developing a strategy for the privatization of the natural gas distribution utility in Bursa, Turkey. The work involved an examination of the regulatory issues, physical planning, as well as the development of proposal call documents.

**Will Lipson, Expert Witness**

Managing Director, Global Infrastructure and Projects Group (GIPG), KPMG LLP

*Qualifications*

- B.Sc. Computer Science, University of Toronto
- M.B.A., University of Western Ontario
- Member of the Institute of Certified Management Consultants of Canada
- Corporate Finance designation from the Canadian Institute of Chartered Accounts

*Background*

Will Lipson is a Managing Director in KPMG's Global Infrastructure and Projects Group, specializing in assisting public agencies with planning and delivering large infrastructure projects. He has spent his 30 years career with KPMG largely dedicated to assisting public sector clients in a variety of matters. Will has expertise in project management, program evaluation, corporate planning and operations, public-private partnerships, financial and economic analysis, and demand forecasting. He is well known by government agencies across North America, and has been qualified as an expert witness on a number of occasions during the course of his career.

*Experience and Expertise*

- **Enbridge — Expert Witness: Financial Feasibility Tests.** This engagement consisted of a review of the financial tests used by a local natural gas distributor. The tests are used to determine the financial feasibility of expansion of the gas distribution system to new residential, commercial and industrial customers. Mr. Lipson primarily carried out this review, and focused his attention to the treatment of inflation, phasing assumptions, and time horizons. Following this engagement, Mr. Lipson acted as an expert witness testifying on the utility's financial feasibility tests in a regulatory hearing.
- **Industry Canada—Financial Analysis.** In this engagement, Mr. Lipson assisted Industry Canada in its evaluation of a large number of grant applicants on a variety of projects. Mr. Lipson initially assisted the Department in the financial and cost/benefit evaluation of a major project in Quebec; he subsequently played a major role in the development of a general process to be used in major future grant applications. Mr. Lipson subsequently assisted in its use of the model to assess several other projects, covering several hundreds of millions of dollars.
- **Saskatchewan Crown Management Board—Review of Financial Model.** Mr. Lipson assisted the Crown Management Board in its assessment of a major investment project. His assistance including reviewing the financial model developed for the project, verifying its accuracy, assessing and interpreting the results of the model, recommending a course of action for modeling future projects, and suggesting improved procedures and standards to be used in connection with the model
- **Toronto Economic Development Corporation (TEDCO)—Arbitration Assistance.** Mr. Lipson acted as an expert witness on behalf of TEDCO in an arbitration process pertaining to the payments for the transfer of lands from the Toronto Harbour Commissioners to TEDCO. The agreement between the THC and TEDCO involved the establishment of the annual payment to be made by TEDCO to the THC through the conduct of a study by an independent consultant.

Mr. Lipson was hired by TEDCO to review the study carried out by the independent consultant and examine whether the methodologies and approaches used were appropriate.

- Department of Energy, Mines and Resources—Evaluation of CHIP Program. Mr. Lipson assisted in the evaluation of the effectiveness of the Canadian Home Insulation Program. His analysis involved the use of advanced statistical techniques, such as logic analysis, factor analysis, and regression in an effort to build a path model of the consumer's decision to insulate and of how much to spend on insulation.
- Department of Public Works—Solar Energy Feasibility Model. Mr. Lipson developed a financial model to examine the feasibility of converting conventional energy applications into solar energy applications. The model had to be able to handle systems classified by technology, application, geographic region (e.g., province), starting date, type of application (residential, commercial, industrial), and conventional energy alternatives.
- Department of Energy, Mines and Resources—Program Evaluation of CCA Class 34. Mr. Lipson worked on a study to evaluate CCA Class 34, which allowed accelerated depreciation for a range of energy-conserving and renewable energy-generating equipment. Mr. Lipson was responsible for exploring the decision-making processes of companies who have utilized Class 34, and developing financial models of each of the case study projects. He was also had for developing an extrapolation algorithm to estimate the incrementality of the non-case study projects and a cost-benefit analysis of the program from both a government and social perspective.
- Department of Energy, Mines and Resources—Economic Impacts of Energy Management Investments. This study assessed the economic impacts generated in Canada by investments designed to reduce the demand for energy (e.g., insulation). The work involved an extensive series of interviews with manufacturers and installers of energy management products to estimate the size of the market and the impacts required to produce the products. The Statistics Canada input-output model was used to estimate indirect impacts and the results were included in a user-friendly computerized model which will be used for future policy analysis.
- Department of Energy, Mines and Resources—Evaluation of COSP. In this evaluation, Mr. Lipson was responsible for the financial analyses which were used to assess incrementality of this major government program to fund conversions from oil furnaces to other types of furnaces. His specific responsibilities included designing a major portion of a detailed telephone questionnaire used for the survey of 1,200 homeowners, conducting a number of policy interviews within the government, developing financial models to explain homeowner decision-making, conducting a cost-benefit analysis of the program, and interviewing a number of furnace manufacturers and installers to develop the input data to estimate the economic impacts of the program.
- Toronto Waterfront Revitalization Corporation—Business Plan for Waterfront Redevelopment. Mr. Lipson led the efforts of a group of planners, engineers, financial and legal advisors to write a business plan for the \$12 billion redevelopment of Toronto's waterfront. Mr. Lipson's role included managing the process so that all parties worked with a consistent set of parameters and assumptions. He was also responsible for providing solutions to address the revenue shortfall with innovative financing or private-sector involvement. A unique challenge in this project is the coordination with municipal, provincial and federal government, who were all involved in this significant redevelopment project.
- Ontario Northland Transportation Commission. Mr. Lipson was a lead advisor assisting this crown agency of the Province of Ontario to develop and implement a divestiture strategy for its major operating divisions. Separate selection processes were undertaken for the telecommunications division (which provides services throughout a 200,000 square mile area in northeastern Ontario) and the rail divisions (which provide freight, passenger and excursion services throughout a 700-mile railway network). He also assisted management with the

preparation of current business plans, drafted divestiture documents for the telecommunications division and rail divisions, and marketed the transaction to potential bidders across North America.

- **NAV CANADA—Strategic Planning Assistance.** Mr. Lipson assisted NAV CANADA, operator of Canada's air navigation system, in the planning and implementation of various strategic initiatives including cost reduction, management streamlining and development of technology. Mr. Lipson was responsible for development of an analytical framework for the initiatives, management of the data collection and review process, construction of the model to assess the financial impacts, presentation of the strategic initiatives for approval, and the incorporation of the strategic initiatives into the corporate plan. The scope of the work addressed the full set of functions, services, and activities performed by the organization.
- **Province of British Columbia—Assessment of Financial Status of Provincial Government.** KPMG conducted a major review of the operations of the Province of British Columbia after a change of governments. As part of this review, Mr. Lipson conducted a detailed assessment of the British Columbia Buildings Corporation (BCBC). BCBC is the sole provider of accommodation and property management services to the Ministries of the Provincial Government. Mr. Lipson's review covered every organizational, financial and marketing dimension of BCBC.

**Anurag Gupta, Senior Manager**

Director, Global Infrastructure and Projects Group

KPMG LLP, Toronto, Canada

- Master of Business Administration, Tulane University, New Orleans
- Bachelors in Mechanical Engineering, Engineering Council, UK
- Bachelor of Science, Calcutta University, India

Anurag has over 10 years combined experience in project and corporate finance with extensive experience in structuring projects and complex transactions in the energy and infrastructure development sectors including experience with public-private partnership (P3 or PPP) models. Prior to KPMG, Anurag was a founding member of the Project Finance group at Infrastructure Ontario (IO), a Crown agency dedicated to delivering major (>\$100MM) public infrastructure projects. Anurag has significant experience in the energy sector having worked at Ontario Power Generation in Toronto and TXU Energy in Dallas in a variety of roles such as trading, structured transactions, quantitative analysis and credit risk.

Anurag has played leading roles in procuring, developing and financing projects in the social infrastructure and energy sectors. Specific energy sector experience includes:

- **Confidential Wind project—Negotiations Assistance** – Recently advised a large municipality in Western Canada negotiate for the purchase of green power from a wind-project developer under a 20-year contract. As part of the KPMG team, provided advice on the business terms and conditions and completed financial and business due diligence into the proposed pricing parameters.
- **Confidential Wind project - Financial Review** – Advised a leading western Canadian power producer conduct an in-depth financial review of a major wind power project for a possible divestiture. Advisory mandate included an independent valuation of the project and providing structuring advice on the proposed off-take agreement.
- **SaskPower, Regina** – Currently assisting SaskPower in their competitive procurements for peaking generation projects sized up to 100 megawatts (MW) to be in-service by December 2011 and for base load generation projects sized between 200 MW and 400 MW to be in-service by December 2012. Anurag is a member of the evaluation committee, provides advice and input on the development of the Request for Proposals (RFP) document and Power Purchase Agreement (PPA), especially on the RFP financial evaluation criteria, PPA financing issues and financial close issues.
- **Hydroelectric Power Generation Capacity Augmentation, Niagara Tunnel Project, Ontario Power Generation, Toronto** – Evaluated this approx. \$1 billion project for commercial completeness and effective risk mitigation. Helped structure the forward starting interest rate swaps used in the financing package. Analyzed creditworthiness of and granted credit to OPG's counterparties on the project
- **Ontario Power Authority's call for Renewable Energy** – Assessed OPG's response to the Ontario Power Authority's Request for Proposals for Renewable Energy by conducting an independent project evaluation and risk assessment.
- **Portlands Energy Centre, Ontario Power Generation and TransCanada Corp., Toronto** - Performed analysis of the economics of the proposed peaker power plant to be built as a joint-venture between TransCanada and Ontario Power Generation in Toronto Portland's. Analysis needed to account specifically for the absence of adequate gas storage and the need to schedule gas on a day-ahead basis.



**Hourly Ontario Energy Pricing Model, Ontario Power Generation** – Developed and implemented tests to assess the logic and accuracy of Ontario Power Generation’s system-wide power forward curve model. Stress tests were designed to take into account the generation stack, dispatch economics, import / export of power from adjacent power control areas and new build economics, including alternative / renewable energy economics.

- **TXU Corporation, Dallas, USA** – Worked in structured finance and trading at this leading merchant energy company with \$14 Billion in assets serving 2.6MM customers in the United States. Performed analysis and financial valuation of commercial deals, capital investment decisions, and asset sales & purchases. Structured complex financial and commodity transactions. Deals ranged in value from \$10MM to \$500MM (NPV)

#### **Selected Transactions**

- **Texas Utilities Fuel Company** – Participated in the \$500 million sale of the TXU Fuel Company gas pipeline system for a pre-tax gain of \$390 million. Anurag led the valuation exercise using complex options analysis techniques to model the full revenue potential of the asset. Anurag advised on various divestiture structures such as Master Limited Partnerships (MLP), participated in the road shows and was on the deal team that negotiated and closed the transaction. Sale of the TXU Fuel Company gas pipeline system for a pre-tax gain of \$390 million.
- **Green Mountain Energy’s Wind Power Project** - Valued a proposed equity investment in Green Mountain Energy’s Wind Power Project. Analyzed and modeled key project risks, such as a shortfall in output and Renewable Energy Credits using a Weibull distribution to model wind power generation, transmission constraints, liquidated damages, etc.
- **Wind Power Contract Restructuring (Confidential Assignment)** – Analyzed the contract structure, economics and operational data from an existing wind power purchase agreement that the company was seeking to restructure. Analyzed alternatives such as a buy-out of the wind project, equity stake, etc.
- **Comanche Peak Nuclear Plant** - Structuring of a \$104MM Nuclear Fuel Supply Agreement, reducing TXU’s credit exposure and working capital requirements.
- **Tenaska Power Purchase Agreement** – Restructured a Power Purchase Contract with Tenaska to unlock \$13MM in value. Valued and monetized the in-the-money spread option embedded in the PPA and negotiated the split of the value with Tenaska.
- **Corporate Finance Support** – Modeled working capital requirements for the proposed Credit Suisse (CSFB) and TXU Energy Trading Joint Venture.
- **Transfer Pricing Strategy** – Analyzed and recommended a transfer pricing strategy for TXU’s Generation, Wholesale Marketing and Retail Sales divisions. Competing incentives across the three divisions, portfolio optimization issues and trading proprietary versus hedging positions complicated the development of an optimized transfer pricing strategy.
- **Retail Marketing Strategy** - Contributed to developing TXU’s retail marketing strategy for the small and medium business segment. Specifically analyzed the use of Third Party Marketing Channels, such as brokers, in expanding retail sales.

**Enterprise Wide Risk Management** - Reported directly to the Chief Risk Officer to develop a monthly enterprise-wide risk report for review by the Board of Directors. Analyzed financial statements and quantified the impact of adverse market/operating conditions on key financial ratios as part of the report.

**Mike Ross, C.M.C., Economist**

Mr. Ross graduated from the University of Toronto with a B.Sc. in Mathematics (1968), and an M.A. in Economics (1971). He is a member of the Institute of Management Consultants of Ontario, Canadian Economics Association, American Economics Association, and the Toronto Association of Business Economists. He has over 27 years' experience with KPMG, and became a partner in 1982.

Mike has extensive experience in a wide variety of industries; working for both the public and private side of the transaction. Some of his most relevant experience is highlighted below:

- **Canada Mortgage and Housing Corporation — Residential Property Management Study.** Mr. Ross had overall responsibility for this two-phased study. The first phase developed a profile of the residential property management industry. The second phase identified information needs and research issues in the industry. The work was based on a combination of the analysis of detailed Statistics Canada survey data, and a wide ranging survey conducted by the consultants.
- **Thunder Bay Regional Hospital — Economic Impact of a New Acute Care Hospital.** Mr. Ross was responsible for this study to determine the economic impact of a proposed new acute care hospital in Thunder Bay, and to compare these impacts to the alternative of providing restructured hospital services through an old, existing facility. The analysis reviewed economic impacts in terms of a number of economic impact criteria, including community economic development, employment generation, economic diversification, and municipal finance.
- **Westnor Limited — Economic Impact Analysis.** For this client, Mr. Ross assessed the economic impacts associated with proceeding with the development of the Westnor site into a mixed-use development of office and condominium buildings. Elements of the work include analyzing the capital expenditure data and using the Statistics Canada Input-Output Model of the Canadian Economy to obtain estimates of value-added and employment generated.
- **Private Sector Developer — Resort Feasibility Study.** Mr. Ross undertook the financial analysis and financeability assessment components of a major study, to assess the feasibility of a proposed tourist attraction and hotel complex, to be developed in conjunction with a ski hill near Ingonish, Nova Scotia. KPMG worked in association with a large firm of recreational planners, and a specialized U.S.-based attractions consultant.
- **Region of Durham — Location of Headquarters.** Mr. Ross was the partner responsible for this study in which we analyzed the financial and planning merits of four alternatives for the provision of a Regional Headquarters building for the Region of Durham. The study involved reviewing the regional staff's analysis of the four alternatives and updating the information contained in the staff report. In addition, Mr. Ross examined the future impacts on municipal taxes of the various alternatives. The final report was presented to the regional council.
- **Canada Mortgage and Housing Corporation — Energy Efficiency in New Residential Housing.** On behalf of CMHC, Mr. Ross undertook a major study to identify impediments to the incorporation of energy-efficiency procedures in new housing in Canada. At the core of the study were tasks designed to develop an understanding of the economics of various energy-using appliances in the home, as well as an understanding of the decision-making processes employed by both consumers and developers/builders with respect to the incorporation of energy-saving features in new housing.

- **National Capital Commission — Real Estate Development.** Mr. Ross was responsible for this engagement to provide assistance to the National Capital Commission, who are offering sites in the Ottawa area to private sector developers. We assisted them to develop appropriate tender documents, and also provided assistance assessing and evaluating the financial aspects of the various development proposals received.
- **City of Ottawa — Bid Evaluation Assistance.** Mr. Ross was responsible for this project, in which KPMG was retained by the City of Ottawa to assist in the evaluation of proposals from real estate developers to provide parking facilities in exchange for the right to develop on city owned land.
- **City of North York — City Centre Development.** Mr. Ross undertook a study for the City of North York, to determine the fiscal impact of various development schemes associated with a new City Centre Development beside the existing City Hall. The study was developed to be used as evidence before the Ontario Municipal Board. In addition, Mr. Ross was responsible for a number of other small engagements to review and assess various development proposals and tenders associated with the project.
- **Schedule A Bank — Regional Office Location.** Mr. Ross undertook a study to assess the most appropriate location for a regional office of the retail banking operations of a major Canadian bank. Our approach combined internal interviewing, and the collection and analysis of external data.
- **Ontario Land Corporation — Housing Market Research.** Mr. Ross was responsible for the study of the market for residential housing in a medium-sized Eastern Ontario City. Work was conducted primarily by a review of existing market trends, and detailed interviews with planners, real estate professionals, and other developers in the area.
- **Private Sector Developer — Hotel Feasibility Study.** Mr. Ross was responsible for a hotel feasibility study, for a proposed site in the northeast section of Metro Toronto.
- **Prince Edward Island — Industrial Development Strategy.** Mr. Ross managed a study designed to evaluate the industrial development strategies currently in place in PEI, and to develop objectives and strategies for the next five years. The study included an assessment of government programs currently in place, with recommendations as to changes in their structure and implementation.
- **Urban Development Institute — Impact of Industrial Lot Levies.** On behalf of this real estate industry association, Mr. Ross prepared a report assessing the impact on municipal revenues, economic development, and other matters, of proposed changes in the structure of developer levies for industrial land in Ontario municipalities. The report was used by the industry association to support their submissions to municipal government. The report was subsequently updated and used again in a similar fashion.
- **Sydney, Nova Scotia — Industrial Park Feasibility.** Mr. Ross managed a study to assess the feasibility of developing an industrial park in Sydney. The study included an assessment of the supply and demand of industrial land, as well as a number of interviews with local citizens. With the assistance of an engineering sub-consultant, costs of alternative sites were assessed, and recommendations as to preferred sites were developed.
- **Private Developer — Management Review of Renovated Facility.** On behalf of a private sector client, Mr. Ross conducted a brief management review of a major renovation project in Eastern Canada. The review encompassed construction costs, financing, and plans for leasing the facility.

- **Private Developer — Municipal Financial Impact Assessment.** On behalf of a private developer, Mr. Ross managed a project to assess the financial impact of a proposed residential development on a town east of Toronto.
- **Wimpey — Municipal Financial Impact Assessment.** On behalf of this real estate developer, Mr. Ross managed a project to determine the financial impact of a proposed residential development on the existing taxpayers of a southern Ontario city. Mr. Ross presented the results of the work as evidence before the Ontario Municipal Board. He was subsequently retained to update the client's development strategy.
- **Private Developer — Opportunities for Residential Growth.** Mr. Ross assisted a private sector client in the analysis of opportunities for residential growth in Oakville, a southern Ontario town. The analysis focused on the Toronto and Hamilton metropolitan areas, and was developed to be used as evidence before the Ontario Municipal Board.
- **Analysis of Serviced Land Prices.** KPMG assisted the large Canadian real estate development companies to prepare a submission to the Greenspan Task Force on serviced land prices. Mr. Ross conducted a number of interviews, supervised the statistical analysis of data for a large number of real estate projects, and played a major role in the presentation and explanation of the project results. Our work was incorporated directly into the technical appendices of the Task Force report.
- **Bruce County — Housing Policy Study.** Mr. Ross managed the activities of KPMG and another consulting firm on this project to develop a set of housing policies for Bruce County. The central tasks of the study were to assess the economic impact on the area of the Bruce Nuclear Power Development, and to translate this impact into housing requirements in both the short and medium term.
- **Markham — Retail Market Analysis.** Mr. Ross was the lead consultant for the assessment of the impact of a proposed major shopping centre on the shopping habits of area residents and associated impacts on local merchants. He evaluated the results of a telephone interview program, and analyzed current and expected shopping habits to produce estimates of shifts in patronage. The focus of the analysis was on the impact on existing local merchants.

**Jonathan Erling, Engineer**

Managing Director, Global Infrastructure and Projects Group,  
KPMG LLP, Toronto, Canada

- Bachelor of Engineering Science (Mechanical Option). University of Western Ontario
- Master of Business Administration (Finance), University of Toronto
- Member of Professional Engineers Ontario

Jonathan Erling is a Managing Director in the Global Infrastructure and Projects Group practice of KPMG's Toronto office. He specializes in energy and utility economics, regulatory issues, statistics, and forecasting. He also provides financial modelling, cost allocation and strategic planning services for utility and public-sector clients.

His project experience covers the electricity, water and wastewater, and natural gas distribution sectors. Specific areas of focus include:

- Evaluation of future financial returns and complex financial modeling.
- Business case assessments for new infrastructure development.
- Cost allocation and rate design.
- Various forms of transaction support, including analysis of regulatory issues and energy pricing risks.

Assistance in negotiating long-term agreements for infrastructure development or for power purchase.

**Hydro Electric Power Generation**

- **Lenders to Abitibi-Bowater—Financial Assessment.** KPMG is providing a variety of financial advisory services to a group of lenders to Abitibi-Bowater during its current restructuring process. Jonathan is taking the lead in providing advice on the potential value of hydro-electric facilities owned by Abitibi in Ontario and Quebec. Issues addressed in our review include the status of water lease rights, the potential for the export of power, ongoing operating costs and requirements for refurbishment, uncertainty in future electricity market prices, and water flow variability.
- **Crown utility—Financial Feasibility.** KPMG helped a Crown utility assess the feasibility of building a new \$300 million hydro-electric dam using project financing. This merchant project would be built to support the operation of a number of mines in a remote northern location and electricity would be sold under long-term Power Purchase Agreements (PPAs).
- **Native Band—Negotiations Assistance.** KPMG was retained by this client to help it negotiate the terms and conditions of an ownership interest in a hydro-electric dam to be built by the provincial Crown utility in the province. In addition to preparing a detailed financial model and evaluating the appropriateness of expected financial returns, KPMG provided advice on a number of strategic issues associated with the project. We examined past and potential future trends in the pricing of energy commodities and drafted price-indexing provisions that would protect our client's interests. We also proposed an allocation of business risks for the project and assessed risks associated with the dispatch of the facility within an integrated river system.
- **Ontario Power Generation—Financial Review.** KPMG was retained by the Board of Directors of OPG to undertake a review of the variance between the company's actual and planned financial performance over the 5-year period from 1999 to 2003. Mr. Erling played a major role in this assignment, and was responsible for validating OPG's methodology and

findings with respect to price and volume variances. Mr. Erling also led the investigation of the impact that fuel price increases and changes in provincial water flows had on achieved net income.

- **Manitoba Hydro—Acquisition Review.** In pursuit of operating cost reductions, Manitoba Hydro purchased the gas distribution assets of privately-owned utility in the province. Combining electricity and natural gas activities was expected to lead to efficiency improvements. Manitoba Hydro retained KPMG to review the results of this acquisition, and to help assess whether forecast cost reductions had actually been achieved. Mr. Erling played a key role in this assignment and acted as an expert witness at the Manitoba Public Utilities Board (PUB).
- **Lakeland Power Group—Valuation of Hydroelectric Generating Assets.** On behalf of a group of utilities in Northern Ontario, KPMG projected financial returns for a hydro-electric plant owned by one of the group members. Our financial analysis was used to determine equity allocations for participants in an amalgamation transaction. Mr. Erling's analysis took into account uncertainty in future market prices for electricity, and annual variations in water flow and, hence, plant output. This project was done prior to opening of the Ontario electricity market, and we thus needed to develop forecasts of seasonal and hourly variation in Ontario electricity prices in the absence of actual market price data.
- **Private Utility—Quantification of Damages.** KPMG helped a private, vertically-integrated utility to quantify the economic loss associated with the implementation of a new electricity market structure in Ontario. As a result of market restructuring, the company's hydro-electric generating activities are now subject to competition and to spot price volatility. For the distribution component of the company's business, the move from a pure Rate of Return to a Performance-Based Regulatory regime (PBR) is causing a reduction in expected profits. KPMG quantified economic losses to support a legal claim. Our model took into account seasonal and annual variation in electricity flows, and the impact of this volatility on production from the company's fossil-fired generating facilities. Mr. Erling was the manager of this project.
- **Newfoundland and Labrador Hydro—Depreciation Study.** KPMG was retained by this utility to review its depreciation policies and to prepare a report for the province's Public Utilities Board. The utility is moving to a Rate of Return basis for tariff regulation. Mr. Erling was the principal researcher on this project. This study involved a survey of depreciation practices among utilities in North America, a review of the utility's future capital expansion plans, and analysis of the implications of different depreciation policies on the province's consumers.

#### **Sector and Policy Analyses**

- **Ontario Energy Board—Review of Asset Management Practices.** On behalf of the OEB, KPMG recently completed a major review of asset management practices in the Ontario electricity distribution sector. This study encompassed activities for inspection, maintenance and capital planning. The study included the development of a framework for evaluating decision-making approaches. It was based on field visits to a number of participating LDCs, a survey questionnaire, a review of practices in other jurisdictions, and a review of utility filings on the issue of asset management. Jonathan Erling was the principal author of this study.
- **Ministry of Environment—Financial Guidelines.** MOE retained KPMG to help prepare guidelines for the preparation of Financial Plans by municipal water and wastewater utilities. These plans will include Capital Investment Plans, which identify appropriate levels of capital expenditure, and Funding Plans, which identify the approach used to raising the financial resources necessary. KPMG has played a key role in the development of these guidelines; this

has included the preparation of detailed examples to illustrate a forward-looking approach to financial planning.

- **Ministry of Environment—Regulations for Full Cost Pricing.** KPMG has been retained by the Ministry of Environment in Ontario to develop the content of regulations for full-cost pricing in the water and wastewater sectors. Regulations will also define the content of cost recovery reports, which will ensure that full costs are collected from utility users. Charts of accounts and accounting procedures are also being developed during this engagement. Mr. Erling is the manager of this project.
- **SuperBuild Corporation—Privatization Strategy.** On behalf of SuperBuild, an agency of the Ontario government, KPMG analyzed the Business Models used in a variety of utility sectors. We then assessed the extent to which these models could be used in the delivery of water and wastewater services in Ontario. A major focus of the study was on regulatory mechanisms for price setting. The results of this study are being used by SuperBuild to develop a long-term water and sewer infrastructure investment and financing strategy. Jurisdictions analyzed include Ontario, U.K., Australia and the U.S. Mr. Erling was the Project Manager for this engagement.

#### **Power Generation - Other**

- **SaskPower—Procurement Assistance.** KPMG is currently assisting this client with the procurement of 100 MW of gas-fired peaking and 200 to 400 MW of gas-fired base-load generation capacity. KPMG helped in the evaluation of responses to a recent RFQ process and has provided advice on the drafting of a Request for Proposals document to be provided to short-listed proponents. KPMG has also been providing advice on the terms and conditions of the proposed Power Purchase Agreement (PPA). Mr. Erling is the Engagement Director for this project.
- **Wind project—Negotiations Assistance.** KPMG recently helped a large municipality in Western Canada negotiate for the purchase of green power from a wind-project developer under a 20-year contract. Mr. Erling played a key role in this assignment, and is providing advice on the business terms and conditions. He also helped to complete financial and business due diligence into the proposed pricing parameters.
- **Landfill gas project—Financial Evaluation.** On behalf of a large municipality, Mr. Erling prepared a financial and business case assessment of a proposed landfill gas project. This project was subsequently bid into the Ontario Power Authority's Renewables II procurement stream, and received a contract.
- **Bio-gas project—Financial Evaluation.** On behalf of a large municipality, Mr. Erling prepared a financial and business case assessment of a proposed project to use digester gas from a wastewater treatment plant in a cogeneration facility. This facility would generate both electricity and hot water for process purposes. This project subsequently received a contract with the Ontario Power Authority.
- **Landfill gas project—Negotiations Assistance.** Mr. Erling helped an Ontario municipality negotiate with a local utility for the development of a landfill gas generating plant on the municipality's landfill site. He helped to structure royalty payments for the methane gas produced at the landfill. These arrangements took into account municipal preferences with respect to the sharing of electricity pricing risk, the allocation of potential emissions credits, and the financing required for associated municipal infrastructure. This project subsequently received a contract with the Ontario Power Authority.
- **Wind farm—Business start-up advice.** KPMG provided business start-up advice to a private company looking to develop a series of wind farms in Ontario. Mr. Erling has helped this client

prepare a spreadsheet-based financial model of the project. KPMG has also advised this client on alternative sources of financing, including flow-through share structures, and tax issues.

- **Ontario Energy Board—Regulatory Regime for Tax Compliance.** The OEB retained KPMG to review its policies and procedures with respect to electric utilities' recovery of corporate income taxes. Mr. Erling helped prepare worked examples of alternative regulatory treatments of tax expense. He also prepared an analysis that proved that there could be a disconnect between book depreciation expense and the allowances for depreciation expense that were implicit in the OEB's PBR methodology.
- **Ontario Power Generation—Review of Cogeneration Economics.** Over a two-year period, KPMG has completed five separate studies for Ontario Power Generation (OPG) to review the financial feasibility of cogeneration and combined-cycle generating units at industrial plants in the province. OPG required third-party confirmation of the economics of such projects before it could provide rate discounts to electricity customers who would otherwise begin to self-generate.

A key focus of the two most recent studies was the likely impact of the province's plan to deregulate the electricity generation sector and to unbundle electricity rates. Three projects involved cogeneration plants at major oil refineries. Two other projects were at pulp and paper mills in Northern Ontario. Mr. Erling acted as the principal researcher on all of these projects.

- **Integrated Energy Development Corporation—Development of Expert Testimony.** In support of this client's intervention at Ontario Energy Board Hearings, Mr. Erling critiqued Ontario Hydro's plans for incorporating sustainable development concerns in its planning process. Mr. Erling reviewed the consistency of economic development programs with proposals to integrate environmental externalities into costing methods. Mr. Erling also analyzed subsidies for energy efficiency programs and the impact of differences between rural and industrial rates.
- **Merchant Bank—Review of Electricity Cost Outlook.** KPMG provided due diligence assistance to a US merchant bank looking to invest in a major supplier of chemicals. Electricity costs represented over 50% of the variable cost of the company's product line. Mr. Erling assessed the company's procurement strategy for electricity and the outlook for electricity prices in the jurisdictions in which operated. We assessed the likely impact from utility restructuring in a number of the jurisdictions, which spanned both sides of the U.S.-Canada border. Mr. Erling highlighted a number of risks at some of the plants in question, as well as the potential for cogeneration at several of the other plants, which had ready access to a supply of low-cost fuel.
- **U.S. Generation Company—Acquisition Due Diligence.** KPMG provided due diligence assistance to this US utility considering the purchase of OPG generating assets. Mr. Erling assessed the business implications of long-term contracts for the supply and delivery of natural gas to the facilities concerned.
- **Independent Power Producer—Review of Business Planning Tools.** KPMG was retained by a major independent power producer in Ontario to review its business planning tools and approach to optimizing plant operations. Mr. Erling interviewed plant managers and reviewed in detail the company's contracts for the sale of power and for natural gas purchase and delivery. To respond to increased volatility in natural gas prices, Mr. Erling recommended the development of formal software tools to identify optimal operating strategies and to document and codify current business practices.
- **Toronto Waterfront Revitalization Corporation—Project Planning.** Mr. Erling has been providing a wide range of advice with respect to the implementation of a major new district energy system along the Toronto Waterfront. This project, which entails the supply of both



heating and cooling services, will be developed using a Public-Private Partnership model. Mr. Erling's role has included the following:

- Preparing a detailed financial model to assess the project's financial returns under a variety of scenarios, taking into account customer growth, demand levels, pricing strategies and alternative approaches to configuring physical plant.
- Evaluating the business case for alternative energy supply options, including the use of small-scale cogeneration and supply of waste heat from the Portlands Generating Plant.
- Developing a pricing structure and regulatory regime to protect the interests of building owners in the district.
- Conducting a market sounding process with potential private-sector proponents, to assess developer response to alternative deal structures.
- Participating in the development of a detailed development agreement to protect the interests of TWRC and its public stakeholders. This included provisions allowing for cogeneration, the purchase of thermal energy from outside suppliers, and the supply of energy and capacity to external customers.
- Participating in the technical evaluation of responses to a Request for Qualifications process.
- Assisting in the development of a procurement strategy for maximizing competitive tension in the procurement process.

Work on this project is ongoing.

- **District Cooling—Optimization of Operations.** On behalf of this client, Mr. Erling prepared a detailed operating model of the clients' district cooling system. The model takes into account the monthly and hourly load profiles of different customer types, as well as the alternative sources of cooling within the system and their associated operating costs and capacity limits. The model is currently being used to optimize the operating parameters of the cooling system and to refine pricing strategies for different customer groups.

#### **Distribution and Transmission**

- **New Brunswick Power—Overhead Capitalization and Corporate Cost Allocation.** Mr. Erling helped this client update their policies and models for the capitalization of overhead costs and for the allocation of general corporate costs to a number of operating entities. Our work included the development of appropriate cost drivers for the allocation of operating and maintenance costs between capital and operating expenses. This study also included a review of the approach that the company used to charge direct labour burdens to capital projects at the company.
- **Union Gas—Overhead Capitalization Policies.** Mr. Erling helped this client update their policies and models for the capitalization of overhead costs. Our work included the development of appropriate cost drivers for the allocation of operating and maintenance costs between capital and operating expenses. This study also included a detailed assessment of the linkage between various support functions and capital activity at the company.
- **Toronto Hydro—Treatment of Tax Variances.** During the OEB's recent 2006 EDR process, KPMG prepared a report for Toronto Hydro on the treatment of tax variances in the LDC rate-setting process. At issue was the treatment of variances between actual and forecast taxes in a regime where revenue and expense variances are not subject to true-ups. Jonathan then provided expert testimony at OEB hearing on our findings and conclusions. Our report was supported by a number of major players in the LDC sector, including Hydro One, Hamilton Utilities Corporation, and PowerStream. The OEB adopted the treatment that was recommended in our report.

- **Enwin Powerlines—Regulatory Asset Assistance.** On behalf of this client, KPMG developed a detailed estimate of the costs that would have been incurred, under normal project management conditions, to install a Customer Information System (CIS) to meet the requirements for opening of the retail market. This counter-factual estimate was needed because the actual circumstances of the client's implementation process did not meet certain tests required by the OEB for cost recovery. Jonathan served as a key member of the project team, and provided input on regulatory issues associated with this estimate.
- **Enwin Utilities—Development of Cost Allocation Methodology.** Mr. Erling managed this project to develop a cost-allocation methodology for Enwin Utilities (EwU), which is an affiliate of the local electricity distribution company in Windsor. EwU provides a variety of shared services to the electricity LDC, the water commission, a telecommunications provider, and a competitive energy affiliate. Services provided include finance, human resources, customer service, stores management, and fleet management. Our cost allocation methodology takes into account the underlying cost drivers in various departments, and calculates end-user shares based on a detailed assessment of services provided.
- **Town of Aurora—Sale of Electricity Distribution Utility.** Mr. Erling provided financial advice to Council at the Town of Aurora during its deliberations over the future of the Town's local distribution utility. Council evaluated a range of options, including two purchase offers, a merger proposal, and operation on a stand-alone basis. Council ultimately decided on a sale option. Mr. Erling also provided advice on terms of the purchase contract.

**Frank Chen, Senior Manager**  
**Background**

Frank has been with KPMG for nine years and is a Director in the Risk and Compliance practice in Calgary. Frank also serves as the Financial Risk Management / Energy Risk Management service line leader for Western Canada. Frank has over 14 years of experience in developing and implementing risk management solutions for companies engaged in energy transacting activities.

**Professional and Industry Experience**

Frank is an energy specialist who focuses on risk management practices, energy procurement, hedging strategies, valuation methodologies, risk governance, analytics, and trading infrastructure.

**Representative Experience**

- Performed a risk assessment of the power business unit of a federal agency in the Northwest. This risk assessment involved a gap analysis of governance, power procurement and credit roles and responsibilities, policies and practices, and back office procedures against leading industry practices. The review included an understanding of hydrologic generation, load/resource balancing, operational planning, and "SLICE" products.
- Performed a risk review of the wholesale energy business activities for three Washington public utility districts and their power management agent. This risk review applied a modified risk control framework to correspond with each utility inherent obligation to serve load. The review included an assessment of the power management agent's supply and demand forecasting practices as well as governance, roles and responsibilities, valuation and market risk measurement, credit, and operational controls.
- Performed a risk assessment of the trading and marketing unit of a southwest investor-owned utility. The risk assessment focused on middle and back office functions and resulted in recommendations addressing model backtesting, valuation adjustments and reserve methodologies, and independent reconciliation practices

**Technical Skills**

**Software:**

- Allegro, TriplePoint, Excelergy, Openlink

**Publications and Speaking Engagements**

- "Enterprise Risk Management", IECA Conference, Orlando, October 2009
  - "Applying Enterprise Risk Analysis to Corporate Ratings," IIA Roundtable, Los Angeles, October 2008
  - "Sarbanes-Oxley, On the Road to Compliance and Beyond," EPRI Conference (San Diego), February 2004
  - "Weather Derivatives – Know Your Options," Energy Houston, February 2000
- "Energy Risk Management Fundamentals," Florida Progress Executive Education, September 1998



## TERMS AND CONDITIONS FOR ADVISORY AND TAX SERVICES

### 1. TERMS AND CONDITIONS.

a. The Terms and Conditions are an integral part of the accompanying Proposal or Engagement Letter from KPMG that identifies the engagement to which they relate.

b. In the event of conflict between the Proposal or Engagement Letter and the Terms and Conditions, the Terms and Conditions shall prevail unless specific reference to a provision is made in the Proposal or Engagement Letter. Other capitalized words in the Terms and Conditions shall have the meanings given to them in the Proposal or Engagement Letter.

### 2. SERVICES.

KPMG will use reasonable efforts to complete the performance of the services within any agreed-upon time-frame. It is understood and agreed that KPMG's services may include advice and recommendations; but all decisions in connection with the implementation of such advice and recommendations shall be the responsibility of, and made by, Client. KPMG will not perform management functions or make management decisions for Client. Nothing in the Terms and Conditions shall be construed as precluding or limiting in any way the right of KPMG to provide services of any kind or nature whatsoever to any person or entity as KPMG in its sole discretion deems appropriate.

### 3. CLIENT RESPONSIBILITIES.

a. Client agrees to cooperate with KPMG in the performance of the services under the Engagement Letter and shall provide or arrange to provide KPMG with timely access to and use of the personnel, facilities, equipment, data and information to the extent necessary for KPMG to perform the services under the Engagement Letter. Client shall be responsible for the performance of its employees and agents and for the accuracy and completeness of all data and information provided to KPMG for purposes of the performance by KPMG of its services hereunder. The Proposal or Engagement Letter may set forth additional responsibilities of Client in connection with the engagement. Client acknowledges that Client's failure to perform these obligations could adversely impact KPMG's ability to perform its services.

b. Client agrees that Client, and not KPMG, shall perform the following functions: (i) make all management decisions and perform all management functions; (ii) designate an individual who possesses suitable skill, knowledge and experience, preferably within senior management, to oversee the performance of the services under the Engagement Letter, and to evaluate the adequacy and results of such services; (iii) accept responsibility for the results of such services; and (iv) establish and maintain internal controls over the processes with which such services are concerned, including, without limitation, monitoring ongoing activities.

c. Client acknowledges and agrees that KPMG will, in performing the services, base its conclusions on the facts and assumptions that Client furnishes and that KPMG may use data, material, and other information furnished by or at the request or direction of Client without any independent investigation or verification and that KPMG shall be entitled to rely upon the accuracy and completeness of such data, material and other information. Inaccuracy or incompleteness of such data, material and other information furnished to KPMG could have a material effect on KPMG's conclusions.

d. Client acknowledges that information made available by it, or by the others on Client's behalf, or otherwise known to partners or staff of KPMG who are not engaged in the provisions of the services shall not be deemed to have been made available to the individuals within KPMG who are engaged in the provision of the services hereunder. Client undertakes that, if anything occurs after information is provided by Client to KPMG to render such information untrue, unfair or misleading, Client shall promptly notify KPMG.

### 4. REPORTING.

a. During the performance of the services, KPMG may supply oral, draft or interim advice, reports or presentations but in such circumstances KPMG's written advice or final written report shall take precedence. No reliance should be placed by Client on any oral, draft or interim advice, reports or presentations. Where Client wishes to rely on oral advice or oral presentation, Client shall inform KPMG and KPMG will provide documentary confirmation of the advice concerned.

b. Subsequent to the completion of the engagement, KPMG will not update its advice, recommendations or work product for changes or modification to the law and regulations, or to the judicial and administrative interpretations thereof, or for subsequent events or transactions, unless

Client separately engages KPMG to do so in writing after such changes or modifications, interpretations, events or transactions.

### 5. WORKING PAPERS AND USE OF REPORTS.

KPMG retains all rights in all methodologies, know-how, knowledge, applications and software developed by KPMG either prior to or during the engagement. KPMG also retains all rights (including copyright) in all reports, written advice and other working papers and materials developed by KPMG during the engagement. Unless contemplated by the Engagement Letter, all reports and written advice are intended solely for Client's internal use and, where applicable, government taxation authorities, and may not be edited, distributed, published, made available or relied upon by any other person without KPMG's express written permission. If such permission is given, Client shall not publish any extract or excerpt of KPMG's written advice or report or refer to KPMG without providing the entire advice or report at the same time. Subject to the restrictions of Section 6, KPMG is entitled to use or develop the knowledge, experience and skills of general application gained through performing the engagement.

### 6. CONFIDENTIALITY.

a. Except as described in section 5 above, Client will treat in confidence any KPMG methodologies, know-how, knowledge, application or software identified by KPMG as confidential information of KPMG, and will not use or disclose such confidential information of KPMG to others.

b. KPMG will treat as confidential all proprietary information obtained from Client in the course of the engagement and, except as described in this section, KPMG will only use such information in connection with the performance of its services.

c. The above restrictions shall not apply to any confidential information that: (i) is required by law or professional standards applicable to KPMG to be disclosed; (ii) that is in or hereafter enters the public domain; (iii) that is or hereafter becomes known to Client or KPMG, as the case may be, without breach of any confidentiality obligation; or (iv) that is independently developed by Client or KPMG, as the case may be.

d. KPMG shall be entitled to include a description of the services rendered in the course of the engagement in marketing and research materials and disclose such information to third parties, provided that all such information will be rendered anonymous and not subject to association with Client.

e. KPMG shall be entitled to share all Client confidential information with all other member firms of KPMG International performing services hereunder. KPMG may also use confidential information to offer services that may be of interest to Client. KPMG may retain and may disclose to other member firms of KPMG International, subject to terms of this section, copies of Client's confidential information required for compliance with applicable professional standards or internal policies or quality reviews.

f. Professional standards require KPMG personnel performing any audit or assurance services for clients to discuss or have available to them all information and materials that may affect the audit or assurance engagement. Client authorizes, if Client is or becomes an assurance Client, KPMG personnel performing services under the engagement to make available to the KPMG assurance engagement team and other KPMG personnel, the findings, observations and recommendations from the engagement and agrees that KPMG may use all such findings, observations and recommendations in KPMG's assurance engagement.

### 7. PERSONAL INFORMATION.

KPMG may be required to collect, use and disclose personal information about individuals during the course of this engagement. KPMG will only collect, use or disclose such personal information in accordance with the KPMG Privacy Policy, a copy of which will be provided on request.

### 8. INFORMATION PROCESSING OUTSIDE OF CANADA.

In some circumstances, personal and/or confidential information collected by KPMG during the course of this engagement may be processed and stored outside of Canada by KPMG or a third party processor, and such personal and/or confidential information may be subject to disclosure in accordance with the laws applicable in the jurisdiction in which the information is processed or stored. These laws may not provide the same level of protection for such information as will Canadian laws.



## TERMS AND CONDITIONS FOR ADVISORY AND TAX SERVICES

### 9. CONSENTS AND NOTICES.

Client represents and warrants that: (i) it will obtain all consents required by law to permit KPMG to collect, use and disclose all personal information that may reasonably be required in the course of the engagement, and (ii) it has provided notice of KPMG's potential processing of information outside of Canada (as described in paragraph 8 above) to all individuals whose personal information is disclosed to KPMG.

### 10. TAXES/BILLING/EXPENSES/FEEES.

a. All fees and other charges do not include any applicable federal, provincial, or other goods and services or sales taxes, or any other taxes or duties whether presently in force or imposed in the future. Any such taxes or duties shall be assumed and paid by Client without deduction from the fees and charges hereunder.

b. Bills, including, without limitation, a charge on account of all reasonable expenses, including travel, meals, accommodations, long distance, telecommunications, photocopying, delivery, postage, clerical assistance and database research will be rendered on a regular basis as the engagement progresses. Accounts are due when rendered. Interest on overdue accounts is calculated at the rate noted on the invoice commencing 30 days following the date of the invoice.

c. Without limiting its rights or remedies, KPMG shall have the right to halt or terminate entirely its services until payment is received on past due invoices.

d. In the event that the engagement is terminated and Client proceeds to complete the transaction or financing within 18 months from the termination date, then the full amount of any Completion Fee shall be payable on closing of the transaction or the completion of financing, regardless of whether KPMG provided further service.

### 11. LIMITATION ON WARRANTIES.

**THIS IS A SERVICES ENGAGEMENT. KPMG WARRANTS THAT IT WILL PERFORM SERVICES HEREUNDER IN GOOD FAITH WITH QUALIFIED PERSONNEL IN A COMPETENT AND WORKMANLIKE MANNER IN ACCORDANCE WITH APPLICABLE INDUSTRY STANDARDS. KPMG DISCLAIMS ALL OTHER WARRANTIES, REPRESENTATIONS OR CONDITIONS, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES, REPRESENTATIONS OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

### 12. LIMITATION ON LIABILITY.

a. Client agrees that KPMG shall not be liable to Client for any actions, damages, claims, liabilities, costs, expenses, or losses in any way arising out of or relating to the services performed hereunder.

b. In the event of a claim by any third party against KPMG that arises out of or relates to the services performed hereunder, Client will indemnify KPMG from all such claims, liabilities, damages, costs and expenses, including, without limitation, reasonable legal fees.

c. In no event shall KPMG be liable for consequential, special, indirect, incidental, punitive or exemplary damages, costs, expenses, or losses (including, without limitation, lost profits and opportunity costs). In any action, claim, loss or damages arising out of the engagement, Client agrees that KPMG's liability will be several and not joint and several. Client may only claim payment from KPMG of KPMG's proportionate share of the total liability based on degree of fault.

d. For purposes of this section, the term KPMG shall include its associated and affiliated entities and their respective partners, directors, officers and employees. The provisions of this section shall apply regardless of the form of action, damage, claim, liability, cost, expense, or loss, whether in contract, statute, tort (including, without limitation, negligence) or otherwise.

### 13. LEGAL PROCEEDINGS.

a. Client agrees to notify KPMG promptly of any request received by Client from any court or applicable regulatory authority with respect to the services hereunder, KPMG's advice or report or any related document.

b. If KPMG is required by law, pursuant to government regulation, subpoena or other legal process or requested by Client to produce documents or personnel as witnesses arising out of the engagement and KPMG is not a party to such proceedings, Client shall reimburse KPMG at standard billing rates for professional time and expenses, including, without limitation, reasonable legal fees, incurred in responding to such requests.

c. When requested or required by law, subpoena or other legal process or otherwise, that KPMG provide information and documents relating to Client's affairs, KPMG will use all reasonable efforts to refuse to provide information and documents over which Client asserts legal privilege or which has been acquired or produced in the context of the engagement of legal counsel by or on behalf of Client, except where providing such copies, access or information is required by law, by a provincial institute/Ordre pursuant to its statutory authority, or a public oversight board in respect of reporting issuers (both in Canada and abroad) pursuant to its contractual or statutory authority. Where Client provides any document to KPMG in respect of which Client wishes to assert legal privilege, Client shall clearly mark such document "privileged" and shall otherwise clearly advise KPMG that Client wishes to maintain legal privilege in respect thereof.

### 14. LIMITATION PERIOD.

No action, regardless of form, arising under or relating to the engagement, may be brought by either party more than one year after the cause of action has accrued or in any event not more than five years after completion of the engagement in the case of an advisory services engagement and not more than eight years after completion of the engagement in the case of a tax services engagement, except that an action for non-payment may be brought by a party not later than one year following the date of the last payment due to such party hereunder. For purposes of this section, the term KPMG shall include its associated and affiliated entities and their respective partners, directors, officers and employees.

### 15. TERMINATION.

Unless terminated sooner in accordance with its terms, the engagement shall terminate on the completion of KPMG's services hereunder, which completion shall be evidenced by the delivery by KPMG to Client of the final invoice in respect of the services performed hereunder. Should Client not fulfill its obligations set out herein or in the Engagement Letter and in the absence of rectification by Client within 10 days, KPMG may, upon written notice, terminate its performance and will not be responsible for any loss, cost or expense resulting. The engagement may be terminated by either party at any time by giving written notice to the other party not less than 30 calendar days before the effective date of termination. Upon early termination of the engagement, Client shall be responsible for the payment to KPMG for KPMG's time and expenses incurred up to the termination date, as well as reasonable time and expenses to bring the engagement to a close in a prompt and orderly manner.

### 16. E-MAIL COMMUNICATION.

Client recognizes and accepts the risks associated with communicating by Internet e-mail, including (but without limitation) the lack of security, unreliability of delivery and possible loss of confidentiality and privilege. Unless Client requests in writing that KPMG does not communicate by Internet e-mail, Client assumes all responsibility or liability in respect of risk associated with its use.

### 17. POTENTIAL CONFLICTS OF INTEREST.

Except as otherwise set out herein, Client should be aware that it is not uncommon for KPMG to be auditors and/or advisors of more than one of the parties involved in a transaction. In such situations, KPMG takes appropriate measures to ensure that strict confidentiality is maintained in all respects. If these circumstances are identified, KPMG will advise Client of that fact, subject to confidentiality requirements, and will consider with Client what further measures, if any, are appropriate. Client further acknowledges that at some point KPMG may act contrary to Client's interest on unrelated matters.

### 18. FORCE MAJEURE.

Neither Client nor KPMG shall be liable for any delays resulting from circumstances or causes beyond its reasonable control, including, without limitation, fire or other casualty, act of God, strike or labour dispute, war or other violence, or any law, order or requirement of any governmental agency or authority.

### 19. INDEPENDENT CONTRACTOR.

It is understood and agreed that each of the parties hereto is an independent contractor and that neither party is, nor shall be considered to be, an agent, distributor or representative of the other. Neither party shall act or represent itself, directly or by implication, as an agent of the



## TERMS AND CONDITIONS FOR ADVISORY AND TAX SERVICES

other or in any manner assume or create any obligation on behalf of, or in the name of, the other.

### 20. SURVIVAL.

Sections 1 to 17 and 20, 21, 25, 26 and 30 hereof shall survive the expiration or termination of the engagement.

### 21. SUCCESSORS AND ASSIGNS.

The Terms and Conditions and the accompanying Proposal or Engagement Letter shall be binding upon the parties hereto and their respective associated and affiliated entities and their respective partners, directors, officers and employees and successors and permitted assigns. Except as provided below, neither party may assign, transfer or delegate any of the rights or obligations hereunder without the prior written consent of the other party. KPMG may assign its rights and obligations hereunder to any affiliate or successor in interest to all or substantially all of the assets or business of the relevant KPMG practice, without the consent of Client. In addition, KPMG may engage independent contractors and member firms of KPMG International to assist KPMG in performing the services hereunder.

### 22. SEVERABILITY.

The provisions of the Terms and Conditions and the accompanying Proposal or Engagement Letter shall only apply to the extent that they are not prohibited by a mandatory provision of applicable law. If any of these provisions shall be held to be invalid, void or unenforceable, then the remainder of the Terms and Conditions and the attached Proposal or Engagement Letter, as the case may be, shall not be affected, impaired or invalidated, and each such provision shall be valid and enforceable to the fullest extent permitted by law.

### 23. ENTIRE AGREEMENT.

The Terms and Conditions and the accompanying Proposal or Engagement Letter including, without limitation, Exhibits, constitute the entire agreement between KPMG and Client with respect to the engagement and supersede all other oral and written representation, understandings or agreements relating to the engagement.

### 24. GOVERNING LAW.

The Terms and Conditions and the accompanying Proposal or Engagement Letter shall be subject to and governed by the laws of the province in which KPMG's principal office performing the engagement is located (without regard to such province's rules on conflicts of law) and all disputes arising hereunder or related thereto shall be subject to the exclusive jurisdiction of the courts of such province.

### 25. PUBLICITY.

Upon the closing of a transaction, KPMG will have the right (but shall not be obliged), at its expense, to publicize its association with the transaction by way of public announcement in "tombstone" or similar format, subject to prior review of the wording for any such announcement with Client.

### 26. KPMG INTERNATIONAL MEMBER FIRMS.

In the case of multi-firm engagements, all member firms of KPMG International performing services hereunder shall be entitled to the benefits of the Terms and Conditions. Client agrees that any claims that may arise out of the engagement will be brought solely against KPMG, the contracting party and not against any other KPMG International member firms.

### 27. SARBANES-OXLEY ACT.

Except as set forth in the Engagement Letter, Client acknowledges that completion of the engagement or acceptance of KPMG's reports, advice, recommendations and other deliverables resulting from the engagement will not constitute a basis for Client's assessment of internal control over financial reporting or Client's evaluation of disclosure controls and procedures, or its compliance with its principal officer certification requirements under Section 302 of the *Sarbanes-Oxley Act of 2002* (the "Act"). The engagement shall not be construed to support Client's responsibilities under Section 404 of the Act requiring each annual report filed under Section 13(a) or 15(d) of the *Securities Exchange Act of 1934* to contain an internal control report from management.

### 28. NATIONAL INSTRUMENT 52-109.

Except as set forth in the Engagement Letter, Client acknowledges that completion of the engagement or acceptance of KPMG's reports, advice,

recommendations and other deliverables resulting from the engagement will not constitute a basis for Client's evaluation of disclosure controls and procedures, or its compliance with its CEO/CFO certification requirements under *National Instrument 52-109, Certification of Disclosure in Issuers' Annual and Interim Filings*, including those related to the design of internal control over financial reporting.

### 29. SPECIFIC ACCOUNTING ADVICE.

Except as set forth in the Engagement Letter, the engagement does not contemplate the provision of specific accounting advice or opinions or the issuance of a written report on the application of accounting standards to specific transactions and facts and circumstances of Client. Such services, if requested, would be provided pursuant to a separate engagement.

### 30. TAX SERVICES.

a. If tax work is specifically requested by Client, KPMG will perform the procedures in accordance with this section. KPMG will base its findings exclusively on the facts and assumptions provided to KPMG by Client and Client's personnel and advisors. KPMG will consider the applicable provisions of the relevant taxing statutes, the regulations thereunder, applicable tax treaties and judicial and administrative interpretations thereof. KPMG will also take into account all specific proposals to amend such statutes, regulations and treaties publicly announced prior to the date of KPMG's reports, based on the assumption that these amendments will be enacted substantially as proposed. These authorities are subject to change, retroactively and/or prospectively, and any such changes could affect the validity of KPMG's findings and may result in incremental taxes, interest or penalties. KPMG's findings will not otherwise take into account or anticipate any changes in law or practice, by way of judicial, governmental or legislative action or interpretation. Unless Client specifically requests otherwise, KPMG will not update tax work to take any such changes into account.

b. KPMG will use professional judgment in providing advice, and will, unless Client instructs otherwise, take the position most favourable to Client whenever reasonable. All returns are subject to examination by tax authorities, and KPMG's advice may be audited and challenged by a tax authority. Client understands that KPMG's conclusions are not binding on tax authorities or the courts and should not be construed as a representation, warranty or guarantee that the tax authorities or courts will agree with KPMG's conclusion.

c. Client should consult with and/or engage legal counsel for the purpose of advising on legal aspects of matters on which KPMG provides its tax advice and drafting any legal documents and/or agreements that may be required. To the extent legal counsel or other professional service providers are required, Client is exclusively responsible for engaging and paying such service providers.

d. Client is also responsible for ensuring that KPMG's advice is implemented strictly in accordance with KPMG's recommendations. KPMG is not responsible for any penalties or interest assessed against Client as a result of a failure by Client to provide KPMG with accurate and complete information.

e. Unless expressly provided for, KPMG's services do not include representing Client in the event of a challenge by the CRA or other tax or revenue authorities.

### 31. LLP.

KPMG LLP is a registered limited liability partnership ("LLP") established under the laws of the Province of Ontario and, where applicable, has been registered extra-provincially under provincial LLP legislation. KPMG is a partnership, but its partners have a degree of limited liability. A partner is not personally liable for any debts, obligations or liabilities of the LLP that arise from a negligent act or omission by another partner or any person under that other partner's direct supervision or control. The legislation relating to limited liability partnerships does not, however, reduce or limit the liability of the firm. The firm's insurance exceeds the mandatory professional indemnity insurance requirements established by the various Institutes/Ordre of Chartered Accountants. Subject to the other provisions hereof, all partners of the LLP remain personally liable for their own actions and/or actions of those they directly supervise or control.