

## Appendix A

### **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 HighwayCurrently, 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