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 Our File: 23841/0146

November 5, 2018

**VIA ELECTRONIC MAIL**

British Columbia Utilities Commission  
 Sixth Floor, 900 Howe Street  
 Vancouver, BC  
 V6Z 2N3

**Attention: Patrick Wruck, Commission Secretary**

Dear Sirs/Mesdames:

**Re: British Columbia Hydro and Power Authority Review of the Regulatory Oversight of Capital Expenditures and Projects ~ Project 3698877**

We are counsel for the Commercial Energy Consumers Association of British Columbia (the "CEC") in this matter. In accordance with the Regulatory Agenda in this proceeding set out in Order No. G-193-18, we attach the expert Evidence of Mr. Scott Thomson.

The CEC retained Mr. Scott Thomson to provide an expert opinion on Part I of the CEC Evidence prepared by Mr. David Craig which was filed under separate cover today. Mr. Thomson's Evidence is attached to this letter. Mr. Thomson's Curriculum Vitae is attached to his Evidence as Appendix "A".

Yours truly,

**OWEN BIRD LAW CORPORATION**



Christopher P. Weaver

CPW/jj

cc: CEC

cc: BC Hydro

cc: Intervenors

**COMMERCIAL ENERGY CONSUMERS ASSOCIATION  
OF BRITISH COLUMBIA**

**SCOTT A. THOMSON EVIDENCE**

**British Columbia Hydro and Power Authority Review of the Regulatory Oversight  
of Capital Expenditures and Projects – Project No. 3698877**

**November 5, 2018**

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**QUESTION #1**

Have you reviewed BC Hydro's Capital Expenditures & Projects Guidelines, which are the subject of the British Columbia Utilities Commission ("BCUC" or "Commission") hearing process to which the CEC is submitting evidence, and have you reviewed Part One of the CEC Evidence?

*Yes, I have. In addition, I have familiarized myself with BC Hydro's most recent RRA filing (2017-2019), with emphasis on Chapter 6 relating to Capital Expenditures and Additions, and the related Decision of the BCUC to gain a better understanding of the capital planning and management processes and resources that BC Hydro employs to plan and manage the execution of capital spending. I have also familiarized myself with the most recent 10 Year Capital Plan document.*

**QUESTION #2**

In your opinion, as a utility executive, is it reasonable for the BCUC, in performing its regulatory oversight of BC Hydro, to have an objective to assess whether or not the capital expenditures and investment planned for by BC Hydro are cost-effective?

*Yes, I believe that is a reasonable objective for the BCUC as a steward of the public interest in the Province of BC. The BCUC's regulatory oversight responsibilities are set out in the governing legislation, including the Utilities Commission Act and related Regulations, and as I understand it, as modified by Special Directions from the Provincial government. To the extent that they have jurisdiction oversight over the Capital Expenditures subject to the guidelines being reviewed, I believe that is a reasonable and appropriate objective.*

### **QUESTION #3**

In your view, is it reasonable for the Commission, in its oversight, to ask for and utilize information from BC Hydro developed to provide a quantitative perspective on the cost-effectiveness of BC Hydro capital expenditures and investments?

*Subject to any jurisdictional exclusions in the empowering legislation or Special Directions to the BCUC, I would agree that it is reasonable for the Commission to ask for and utilize information from BC Hydro to provide a quantitative perspective on the cost effectiveness of BC Hydro's capital expenditures and investments. This would, if available, augment the qualitative information it receives to provide regulatory oversight to the utility.*

### **QUESTION #4**

In your view, is it reasonable for the Commission to use and assess a quantitative framework of information on the cost-effectiveness of BC Hydro's proposed capital expenditures and investment, in its oversight and consideration of CPCNs, Section 44.2 of the Utilities Commission Act (the "UCA") applications, and RRA processes (not from a legal perspective but from the business perspective of a utility applicant for regulatory approvals)?

*To the extent that the above regulatory processes/proceedings have as one of their primary objectives to determine if the expenditures are in the public interest, then one dimension of that assessment is to determine if the planned expenditures meet the objective/purpose of the expenditure/investment at the lowest reasonable cost. All else equal, you would pick the lower cost alternative, so having a solid quantitative analysis should be valuable to the Commission in its oversight role.*

*When looking at alternative approaches to solve problems in complex utility environments, all things are rarely equal amongst alternatives, so quantitative and qualitative trade-offs must be made using management's judgement in the context of the planning processes undertaken.*

*Based on my understanding of the capital expenditure planning processes at BC Hydro, as documented in their proposed guidelines and the RRA materials, having robust quantitative date, analysis and cost trends could be helpful to their evaluation and assessment of alternatives and in the development of their capital spending strategies.*

### **QUESTION #5**

In your view, is it reasonable for the Commission, in performing its oversight role on capital expenditures and investments, to focus on understanding the drivers and strategies of BC Hydro's capital expenditures and investments in order to understand BC Hydro's cost-effectiveness in deploying capital?

*I think focusing on understanding the drivers of capital expenditures, and the strategies that BC Hydro develops to address those drivers, is important in order to first consider*

*whether BC Hydro is focusing in on the right things and second to assess whether the strategies are appropriate. It is an important factor in the assessment of cost effectiveness but in and of itself won't ensure the expenditures are cost effective.*

*The right strategy poorly executed doesn't ensure cost effectiveness. The wrong strategy flawlessly executed similarly doesn't ensure cost effectiveness. That said, for the commission to effectively perform its oversight role, I think it is imperative that they understand the drivers and, on an evolving basis, the strategies and evaluations that BC Hydro makes to address those drivers. In other words, it would be most effective if that understanding is developed prospectively rather than reactively after the money is spent.*

## **QUESTION #6**

As a utility executive, would you find it reasonable for the Commission to provide a framework for gathering cost and benefit information from BC Hydro in order to enable effective ongoing assessment of BC Hydro's capital expenditures and investments?

*The Commission imposes many compliance filing obligations on the utilities under its jurisdiction in order to meet its oversight obligations. If the Commission saw value in having objective, quantitative information available to it to fulfil its regulatory oversight requirements then I think it would not be unreasonable.*

*I would qualify that statement, that to the extent possible, the framework and type of information requested should be reasonably readily accessible to the utility and not impose unreasonable cost or resource impacts on BC Hydro to gather it. BC Hydro should have an opportunity to collaborate on the development of the framework/information requirements or at least provide the Commission with its assessment of the level of effort and cost it might need to incur to gather and compile the requested information. This would help to ensure that where information isn't readily available, there was an opportunity to assess whether the value of the information to be gathered warranted the cost/effort to develop mechanisms to capture and report it.*

*I understand that BC Hydro has made significant investments in its Enterprise Resource Planning systems and other business support systems and may already track many of the metrics that could be useful to the Commission. That said, it would be important for them to have input to the framework before it was finalized and prior to the Commission mandating such reporting.*

*Sometimes utilities are criticized in regulatory proceedings for not providing enough information or the "right" information/evidence in support of their applications. A benefit of the Commission providing a framework (with appropriate opportunity for input from BC Hydro) would be that it would remove a degree of uncertainty as it relates to what is expected of the utility in terms of the information filing requirements.*

## QUESTION #7

The CEC Evidence has set out a Framework for Capital Planning, on Page 4, which identifies the key drivers of Capital Planning as:

- a. Load Growth;
- b. System Sustainment Condition;
- c. External Risk Exposure; and
- d. Stakeholder Concern Standards.

Would you agree that the above-listed categories are or can be key drivers of capital expenditures and investment for utilities?

*I would agree. They certainly were for the utilities I was involved in managing. They all stem from the obligation to provide non-discriminatory service to customers while minimizing negative impacts on stakeholders.*

*Crown corporations such as BC Hydro often have to address broader stakeholder interests than investor-owned utilities and are subject to shifting political drivers and directives as well over time.*

## QUESTION #8

The CEC Evidence lists common strategies for dealing with the drivers identified in question 7. While they are qualified by the CEC Evidence as not exhaustive, would you agree that the CEC Evidence provides reasonable types of strategies categories for a utility responding to the drivers identified?

*As I understand the question, the framework provided at page 5 paragraph 13 of the CEC Evidence lists the strategies being referred to. With the caveat that the list is not exhaustive, these are common approaches to addressing the related drivers in the electric utility industry.*

*It appears that the Extend Life strategy listed under the Customer Load Growth driver would more appropriately address the System Sustainment Condition driver but it is a valid strategy employed by utilities (and other industrial businesses).*

## QUESTION #9

The CEC Evidence contains a framework of proposed templates setting out drivers and strategies. In looking at the potential Commission oversight questions which would drive Commission information requirements in those templates, as a utility executive, would you find any of those questions inappropriate or unreasonable for a Commission to be concerned about answering and getting information to enable it to answer those questions?

*As they are framed in paragraph 50 (and as expanded to the organizational units responsible for planning and deploying capital in paragraphs 57, 63, 69, 75 and 81), I don't find any of the questions posed to be unreasonable for the Commission to be interested in answering. The CEC Evidence appears directed at trying to develop a consistent approach to capturing quantitative information to assist the Commission in its oversight role. It appears that some of the metrics, particularly those concerning risk assessment, would be based on management estimates and/or judgements due to their nature, and may not be able to be precisely or objectively determined. [See also my response to question 11.]*

*That in and of itself should not disqualify the measure, but care should be taken in its interpretation.*

## **QUESTION #10**

The CEC Evidence contains in the framework for the proposed templates for information requirements a four-part structure for each information template to gain information on;

- a. The benefits provided by the type of capital expenditure and investment;
- b. The changes in benefits provided by implementation of a specific strategy;
- c. The costs of implementing the specific strategy; and
- d. The cost-benefit derived by dividing the costs into the benefits of the change effected by the strategy.

As a utility executive, would you find the proposed four-part structure proposed by the CEC Evidence for developing the requisite information requirements inappropriate or unreasonable as a request for information from a Commission interested in answering quantitatively the questions referred to in question 9 above.

*I do not think the structure is unreasonable.*

*However, the utility and value to be derived by the Commission should it adopt such a structure and direct BC Hydro to provide the related requests for information, will in part be dependent on BC Hydro's ability to readily obtain the information and to generate it on a consistent basis both historically, and prospectively in its forecasts, without expending inordinate amounts of time or expense to generate it.*

*I suspect that much of this information exists, at least historically, and could likely be automated and extracted from BC Hydro's information systems. It is less clear whether the capital planning systems would generate the forecast information on a consistent basis, which would have to be confirmed with BC Hydro. If it can, then it would likely be valuable to both the utility for management purposes and communicating with stakeholders and to the Commission in exercising its regulatory oversight.*

## QUESTION #11

Turning to the CEC Evidence on potential proposed information requirement templates, as a starting point for design of an information supply system to answer the proposed Commission oversight questions, and assuming the required information can be made available to the Commission, in reviewing the CEC's proposed templates would you as an executive managing a utility find it reasonable to respond by engaging with the Commission and the proposer of the information templates to understand how best to meet the Commission's needs for information to answer the Commission's key questions and eventually develop an improved and workable design for your utility?

*If the Commission were to determine that the type of information proposed in the templates would be useful to in carrying out its legislated regulatory oversight mandates, then I think it would be necessary to engage with the Commission to best meet their needs for information.*

*As noted in my response to question 9 in this submission, some of the proposed information captured in the templates, particularly the risk management metrics, appear to be derived from risk estimates made by BC Hydro management using a proprietary Corporate Risk matrix (see Appendix G in the 2017-2019 Revenue Requirements Application) and creating index values that weight various factors. By their nature, risk assessments tend to be somewhat subjective and it is important to use a consistent methodology across organizational units and over time for comparability. BC Hydro's RRA evidence suggests that it has processes in place aimed at ensuring consistency of approach to assessing risk and to prioritizing capital expenditures across business units.*

*When considering reporting such cost/benefit information on an historic basis for example, if the cost actually incurred to meet a risk reduction objective could be captured, that could be compared to the change in the risk score as reported from time to time. But as noted, the assessments themselves are somewhat subjective. On a prospective basis (i.e. the forecast period shown in the templates), management would have to estimate the change that would be expected in the risk assessment based on the planned expenditures. It may or may not occur and again would be subjective, so such forecasts may have less value compared to say a more objective measure; for instance, an investment in the life extension of a generating asset that could be translated into the expected cost/MWh of capacity vs the investment in replacement assets cost/MWh of capacity.*

*This is all to suggest that while CEC has laid out a framework that consistently applies across the various business units to address questions of cost effectiveness, there may be areas that would be better suited to this approach than others.*

*A collaborative approach to considering the various templates between BC Hydro and the Commission with input from the proposer to clarify intent would likely be most constructive in my opinion. Should the Commission wish to pursue the development of this type of information, it might consider looking at staging its implementation or*

*selecting one or more business units to pilot the implementation before rolling it out across the organization.*

### **QUESTION #12**

As an executive of a utility if the above information considered in question 11 was developed for your utility would you find such information to be useful to you as an executive managing the utility?

*I believe many of the measures outlined in the templates, if they were relatively easy to capture, would be useful as a tool in managing the utility. I would probably focus on those that were objective measurements that would lend themselves to evaluating alternative approaches to solving problems or issues.*

*For instance, understanding the relative cost of life extension versus renewal/replacement of an asset class in order to facilitate prioritization of capital spend would be very useful.*

*Where multiple solutions are possible to address a problem or opportunity, such as in the area of Demand Side Management (DSM), but for which the supply of each is constrained, then measures that allow comparison of relative cost allow you to rank the various options and select the lowest-cost portfolio.*

*As previously noted, tracking of performance over time provides information that can be valuable to a utility to communicate with its stakeholders and highlight areas for improvement. Care must be taken in interpreting the information gathered. A downward cost trend in real or nominal terms in and of itself does not assure cost effectiveness if a cheaper alternative not chosen was available. Alternatively, an increasing trend may still be cost effective. For instance, in the area of DSM, the strategies available to utilities are constrained and typically subject to declining returns. Incremental improvements tend to cost more to capture over time. These increasing costs could still be the most cost-effective approach.*

*So on balance, my answer to the question posed would be yes, but I would focus initially on those areas where I thought we would obtain the most valuable information for the lowest effort/cost.*

### **QUESTION #13**

In your opinion, would this information, if available to the Commission, provide value to the Commission's oversight of the capital spending and investment of BC Hydro?

*I believe that the information outlined in the templates, with input from BC Hydro and the Commission, could provide value to the Commission. Understanding cost trends and performance over time is imperative for BC Hydro to effectively manage their operations and I think it follows that it would be valuable to the Commission in exercising its oversight role.*

*As I have previously mentioned, it likely has the most value if it can help to inform decisions prospectively rather than in hindsight. In other words, having access to this type of information and performance trends as well as forecasts based on the planned capital spending presented on a consistent basis could be helpful to the Commission in assessing CPNC or Section 44.2 expenditure schedule applications as well as Revenue Requirements applications.*

*One of the challenges faced by the Commission and stakeholders over time is the shifting regulatory oversight responsibilities of the Commission as it relates to BC Hydro. Over the past three decades the powers of the Commission have been modified by Special Directions of various governments based on the political and policy objectives of those respective governments as is their purview.*

*The institution of a compliance type filing that would generate consistently compiled performance information over time could be useful to the Commission and to stakeholders as the responsibilities and powers of the Commission change over time or where there are periods of gaps in oversight. To illustrate this I refer to the Commission's reasons for Decision in the most recent RRA at page 33 [emphasis added], it stated:*

*"Given the limitations on the Commission's discretion because of the current regulatory framework as outlined in section 2.2 of this decision, a key area of focus for the Panel is BC Hydro's base operating costs. The Panel notes that BC Hydro states that test period increases in base operating costs are forecast to be below the rate of inflation<sup>113</sup> at an average of 1.2 percent per annum (excluding Smart Metering and Infrastructure Program costs).<sup>114</sup> The Panel recognizes that in some cases, comparing forecast cost increases to the rate of inflation may be considered an appropriate measure for evaluating the reasonableness of forecast cost increases in the test period. This method is likely suitable in situations where a regulator has consistently been empowered to oversee all aspects of the utility's forecast and historical expenditures through proceedings in which the underlying base costs were initially established. However, given the Commission's limited involvement in the approval of BC Hydro's recent revenue requirements, the Panel does not have a high degree of comfort in BC Hydro's starting point, being the 2016 base operating cost."*

*So maintaining a repository of performance information, on a consistent basis over time, could provide the Commission with useful information as its responsibilities and discretion are modified over time.*

#### **QUESTION #14**

In looking through the balance of the CEC spreadsheet templates laying out drivers, strategies, benefits, and costs, with a view to providing a calculation of cost-effectiveness for the Commission, would you agree that the approach could prove a useful starting point for developing tools for the Commission to provide regulatory oversight of capital expenditures of BC Hydro?

*As noted in my responses to question 11 &12 I think this could provide a useful starting point for a dialogue with the Commission and BC Hydro to develop tools to augment the Commission's regulatory oversight of BC Hydro.*

*BC Hydro will be in the best position to advise on the availability of the information outlined in the templates and the level of granularity and reliability of the data. That would, I suspect, be valuable in developing an implementation plan and prioritizing the measures to be reported to the Commission if the Commission elects to adopt these requirements.*

*They may wish to consider piloting the data capture and reporting in one of more business units to gain an understanding of the level of effort and usefulness of the information to their regulatory oversight. But the templates as laid out would provide a nexus for the initiation of that dialogue.*

## **QUESTION #15**

Are there any areas of the framework of drivers or strategies for group capital plans to which you would propose improvements in order to assist the Commission in assessing the cost-effectiveness of BC Hydro's capital expenditures and investments?

*As the proposal is framed, I understand that the CEC is putting the framework forward as a comprehensive starting point for capturing performance information to aid in the assessment of cost-effectiveness of capital expenditures. The measures while extensive are aggregated and should provide informational value to management and to the Commission.*

*World class asset management systems have amongst their objectives to manage the total cost of ownership or life-cycle costs of assets. These encompass the initial investment, preventive maintenance, corrective maintenance and refurbishment costs of components as well as the business costs of outages and service interruptions. Some of these costs are capital in nature and some operating. Outage costs and impacts can be significant when assets fail in service and the cost of unscheduled outages are normally greater than planned outages.*

*To that extent, some of the strategies outlined in the sustainment driver templates are interrelated and when combined provide for the total cost of ownership or lifecycle cost for an asset or class of assets. It is the optimization through combination of these strategies that drives the overall cost of ownership or lifecycle cost.*

*At a point in time, management must determine whether it is the right time to replace versus refurbish and continue to maintain a given asset. Based on evidence presented in previous regulatory proceedings (notably descriptions of the capital planning processes outlined in the most recent RRA chapter 6), BC Hydro has developed asset management systems, processes and organizational structures geared to making those types of decisions. BC Hydro may have done analysis of different assets or classes of assets as to total cost of ownership as part of its Asset Management processes/programs. Examples*

*of such analysis could be valuable to the Commission in its understanding of the level of rigour employed by BC Hydro to inform its strategy development.*

*The metrics outlined in the framework, while perhaps not perfect, could provide the Commission with valuable information to help it validate the cost-effectiveness of the capital program decisions over time.*

*It is difficult to advance suggestions for improvements to the templates outlined by the CEC without input from BC Hydro in terms of understanding the availability of the information and the cost/effort to populate the templates and the reliability of the underlying information.*

*It may be necessary to drill down by asset class within an organizational unit in some cases to get to the level of detail necessary to provide useful/meaningful information for decision-making purposes.*

*I generally agree with the commentary made by the CEC as it relates to the Capital Expenditure Drivers in paragraphs 18 through 48 in Part 1 of the CEC Evidence. The templates contain metrics and performance measures that will aid in the understanding of performance, and performance trends over time, but will not address all the issues raised in 18-48. It won't for instance guarantee that the most cost-effective solution was adopted, it will only show performance metrics and estimates for those items that were undertaken or considered, but it could be a good starting point to assess performance over time and whether progress is being made.*

*In terms of the individual templates, my most significant comment would be around those that deal with risk management and probability assessments. It should be clearly articulated/footnoted what the basis/source for the measures are, i.e. whether they are estimates, indexes/calculations based on estimates and/or objective measures, etc. I wouldn't necessarily discard the measures simply because they are estimates or are judgement based. Management make many decisions concerning the running of a utility business based on judgement and experience in the absence of completely objective/verifiable data. It still provides insight for the regulator and stakeholders into the thinking and rigour of the management processes employed to operate the utility.*

## **APPENDIX “A”**

Curriculum Vitae of Scott A. Thomson

# SCOTT A. THOMSON, CPA-CA

1178 Kendal Pl  
North Vancouver, BC V7R 1T4

Telephone: 431 998 3324  
Email: scott.a.thomson@hotmail.ca

## CAREER PROFILE

Chief Executive with 30 years of progressive leadership experience within highly complex, capital intensive, multi-division organizations. Possesses in-depth experience in strategic planning, major utility infrastructure development and construction, environmental regulation, stakeholder management, business transformation and M&A, capital markets, finance, and treasury activities. Proven track record of improving operating performance, profitability and business growth. Effective leader, capable of motivating groups and individuals within the organization as well as external stakeholder relations to achieve superior operating and financial results.

### Major Recent Initiatives & Accomplishments

- Led comprehensive strategic review of Corix Infrastructure resulting in securing board and ownership approval to divest one of four core business units and spin out a second business unit into a self-sustaining structure to be turned around and ultimately sold. Restructured the corporate group and continuing operating units resulting in 15% reduction in operating overhead. Improved EBITDA three years in a row from \$100 million to \$165 million during my tenure. Increased enterprise value over the period by over \$200 million.
- Secured Federal and Provincial approvals to construct the \$6.5 billion Keeyask 695MW hydro-electric generating station on the lower Nelson River along with Provincial approval to proceed with development of 500KV AC transmission line from Winnipeg to Duluth, Minnesota. The project is proceeding with the participation of four in vicinity First Nation's equity partners.
- Led a multi-disciplinary team to secure environmental licenses and authority to proceed for the Manitoba Hydro BiPole III 500 KV High Voltage Direct Current transmission line. This \$4.65 billion, 1400 km reliability project was recently completed on schedule. It included direct negotiated contracts with northern aboriginal contractors and joint ventures to perform right of way clearing and involved negotiations with over 450 private land owners.
- Negotiated a 40 year Accord with the Sagkeeng First Nation whose community is impacted by Manitoba Hydro's Winnipeg River systems operations.
- Negotiated a 20 year Relationship Agreement with the Manitoba Metis Federation (the "Turning the Page Agreement") to address past impacts of operations on Metis traditional territory and to explore and develop future business initiatives with the Metis in the Province.
- Directed the renegotiation of a partnership arrangement with the Nisichawayasihk Cree Nation whereby they took up a 33% equity stake in the 200MW Wuskwatim generating station on the Burntwood River, a low head dam and generating station commissioned in 2012.
- Resolved court dispute with the Public Utilities Board through mediation with the Chair of the PUB concerning long disputed access to commercially sensitive information over export contract terms, which paved the way for the Needs for and Alternatives To (NFAT) process on Manitoba Hydro's \$18 billion preferred development plan to proceed.

## SCOTT A. THOMSON, CPA-CA

### BOARD EXPERIENCE

| ORGANIZATION                     | TYPE OF COMPANY      | SIZE (REVENUES) | POSITION                | YEARS SERVED |
|----------------------------------|----------------------|-----------------|-------------------------|--------------|
| CORIX INFRASTRUCTURE INC         | PRIVATE FOR PROFIT   | >\$500 MILLION  | MEMBER                  | 2015-2017    |
| UTILITIES INC                    | PRIVATE FOR PROFIT   | < \$500 MILLION | CHAIR                   | 2015-2017    |
| DOYON UTILITIES LTD              | PRIVATE FOR PROFIT   | <\$500 MILLION  | HRC CHAIR               | 2015-2017    |
| FAIRBANKS SEWER & WATER          | PRIVATE FOR PROFIT   | <\$500 MILLION  | AUDIT CHAIR             | 2015-2017    |
| TERASEN GAS INC                  | PRIVATE FOR PROFIT   | >\$1 BILLION    | MEMBER                  | 2005-2007    |
| CANADIAN GAS ASSOCIATION         | INDUSTRY ASSOCIATION |                 | GOVERNANCE COMMITTEE    | 2009-2015    |
| CANADIAN ELECTRICITY ASSOCIATION | INDUSTRY ASSOCIATION |                 | VICE CHAIR              | 2012-2015    |
| PITT MEADOWS AIRPARK             | NOT FOR PROFIT       |                 | FINANCE COMMITTEE CHAIR | 2009-PRESENT |

### CAREER HIGHLIGHTS

PRESIDENT AND CHIEF EXECUTIVE OFFICER  
Corix Infrastructure Inc

Sept 2015- Dec 2017

- Chief Executive Officer and member of the Board of Directors responsible for providing strategic direction and oversight for the operations and corporate development activities of a multi-divisional organization whose 2200 employees provide regulated and non-regulated energy and water utilities, wholesale industrial and water works product distribution and meter measurement and installation services in six provinces in Canada and 32 states in the US.
- My brief included re-examining the direction of the business after the departure of the founding CEO following an unexpected decline in profitability and under-performance in a number of divisions of the business. I

## **SCOTT A. THOMSON, CPA-CA**

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developed a new strategic plan that refocused the company's corporate development group and increased discipline on acquisition targets and to optimize our base businesses.

- Executive responsibilities included:
  - Management of key relationships with the Board of Directors and our owners (BC Investment Management Corporation) as well as bank relationships with our major lenders in Canada and the US.
  - Chair of the Boards of our major subsidiary companies including Utilities Inc in the US.
  - Chair of the Operating Committee responsible for monitoring ongoing performance of key subsidiaries.
  - Chair of Project (investment management) Committee to monitor growth pipeline and bring forward acquisitions to the board of directors and ownership.
  - Oversight of Enterprise Risk Management Plan
- Restructured the executive leadership team, reducing its size from eleven members to seven and developed succession plans for the executive team. Instilled operational focus and discipline on improving business unit ROEs.
- Directed the divestiture of the Products Division resulting in the achievement of an increase in value for the shareholder of approximately 70% over my tenure.

**PRESIDENT AND CHIEF EXECUTIVE OFFICER**  
**Manitoba Hydro & Centra Gas Manitoba**

Feb 2012- Aug 2015

- Chief Executive Officer and Chair of the Executive Committee responsible for providing strategic direction and oversight to the operations and development planning activities and execution for the vertically integrated Crown electric and gas distribution utilities in Manitoba, whose 6400 employees serve all residents and businesses in the Province. Provide strategic leadership to the organization to ensure an adequate supply of safe, reliable and clean energy to meet the needs of the Province while maintaining the financial integrity of the Corporation and promoting economic development in Manitoba. Executive responsibilities included:
  - Management of key relationships with the Board of Directors, Government (including the Premier's office), the office of the Minister Responsible for Manitoba Hydro, the Minister of Conservation and Water and the Priorities and Planning Committee, the Public Utilities Board, union leadership, Aboriginal groups including First Nations, Metis and aboriginal partners in development projects as well as members of the Manitoba Industrial Power Users Group (MIPUG) of customers and large export customers.
  - Chair of the Export Price Risk Management Committee overseeing long term bilateral sales contracts, MISO and IESO market participation, merchant sales, counterparty credit risk management and natural gas price risk management strategy development, execution and compliance activities.
  - Chair of the Internal Audit Review Committee.
  - Director on the boards of the Canadian Electricity Association (incoming Vice Chair), the Canadian Gas Association and the International Council on Large Electric Systems (CIGRE) Canada.
- Transformed the executive leadership team from a tightly centralized command and control structure to a results focused leadership team with distributed authority and accountability in a highly unionized environment. Executive portfolios were rebalanced and re-aligned with the requirements of the business recognizing the demands of a development program that will almost double the asset base of the corporation from \$17.5 billion to approximately \$30 billion over the next decade.
- Revitalized the executive team replacing five Vice President positions in my first eighteen months as long term leaders retired; three positions filled internally and two from the outside in key roles. Cultivated a performance driven culture from the outset and implemented a merit based compensation system within the confines of a

## **SCOTT A. THOMSON, CPA-CA**

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Crown (constrained) governance structure. Transitioned and integrated the replacement of 8 new board members (out of a total of 11) who were appointed in my first two months on the job.

- Provided overall direction and oversight for the \$18 billion preferred development plan filing with the Public Utilities Board which the Province appointed to review and provide recommendations in the Needs for and Alternatives To proceeding that commenced in August of 2013 and completed in June 2014. The plan included the construction of the 695 MW Keeyask hydro generating station, the 1485 MW Conawapa generating station, a 500KV AC transmission line from Winnipeg to Duluth, Minnesota and long term firm export sale arrangements with a number of US Midwest utilities. A target price general civil contract was awarded and construction commenced July 2014. This risk shared contracting approach is geared towards ensuring risks rest with the corporation where it is in the best position to manage them and incents the contractor to deliver on time and budget for the project.
- Provided direction to and worked with the Executive leadership team to develop cost rationalization and rate management plans to contain rate increases to under 4% while executing on the Corporation's preferred development plan as well as a major capital refurbishment program over the next decade. All in operating cost growth has been limited to 1% or less (nominal) annually.
- Repaired and rebuilt or enhanced relationships with a number of First Nations communities, many of whom are partners on the northern development initiatives, or are involved with facility relicensing.
- Refocused Manitoba Hydro International business segment on core competency consulting assignments with appropriate risk management strategies and controls.

### **EXECUTIVE VICE PRESIDENT, FINANCE, REGULATORY AFFAIRS & ENERGY SUPPLY**

**CHIEF FINANCIAL OFFICER ('10 – '11)**

**Fortis BC Holdings Inc. (Formerly Terasen Inc.)**

**1999 – 2011**

- Senior member of the Executive Leadership Team of the Fortis companies in BC. Direct reports included CFO's of Electric and Gas subsidiaries, VP of Energy Supply and Resource Development and Chief Regulatory Officer. Actively participated with the Executive and Board in the strategic leadership of the organization to increase shareholder value and ensure its future relevance, credibility, and viability. Executive appointments included:
  - Director or Officer in numerous companies in the Fortis corporate family in BC including Director on the Board of Fortis BC Energy (Vancouver Island).
  - Vice Chair of Price Risk Management Committee overseeing hedging, counterparty credit risk management and natural gas price risk management strategy development and execution.
  - Chair of the utilities capital allocation committee (annual sustainment expenditures exceed \$150 million, growth expenditures \$100-150 million dependent on projects).
  - Trustee for joint Union defined benefit pension plan and Company representative for various management and exempt employee pension plans (2004-2010).
  - Canadian Gas Association – Director and member of the Executive Committee; Past Chair, Committee on Corporate Affairs.
  - Chaired the Utility Operating Committee until August 2011 providing leadership and guidance to the senior non-executive management team responsible for executing the annual business plans.
  - In cooperation with other key members of the executive team positioned the organization for long-term financial sustainability by capitalizing on changing Provincial Energy Policy and Climate Change

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Legislation in the face of declining customer use rates and throughput levels. Evaluated acquisition opportunities, clean energy project development, and new business development including entry into emerging energy offerings including Bio-Methane, Natural Gas for Transportation, Thermal Energy Services including geo-exchange, district energy systems, distributed generation (combined heat and power systems fired by bio-mass or natural gas).

Specific initiatives I led included:

- Directed the development of the multi-billion dollar combined 2012/2013 revenue requirements applications and oral public hearing for the four Fortis gas utilities in BC and the 2012/2013 Fortis BC (Electric) revenue requirements and capital plan applications.
  - Concluded negotiations with two First Nations on Vancouver Island to enter into a Limited Partnership arrangement to acquire the \$200M Mt. Hayes LNG storage facility from Fortis Energy Vancouver Island.
  - Negotiated a two year multi-billion dollar rate settlement with customer and stakeholder groups for 2010 and 2011 which included the approval to deliver alternate energy services as a class of service in the regulated utility (unique in Canada at the time) and secured increases in incremental operating funding for important new initiatives totaling approximately \$40M over the two years on a \$225M base.
  - Negotiated six years of performance based rate settlements for Fortis BC Energy and four years of settlements for Fortis BC Energy (Vancouver Island) avoiding annual rate hearings and resulting in the capture of incremental incentive earnings on the order of 100 basis points or \$10 million per year through the period.
  - Led 2009 Cost of Capital initiative resulting in a BCUC approved increase in deemed equity from 35% to 40% and allowed return on equity improvement of 107 basis points. Shareholder financial benefit was an increase in annual earnings of approx. \$24M (25%) for regulated gas operations and an incremental benefit of approx. \$4M annually (12%) for Fortis BC (Electric) and a one-time rate impact of less than 2% to customers.
  - Working with the president, acted as Gas segment lead on sell side due diligence during Kinder Morgan acquisition of Terasen and subsequent divestiture of Terasen Gas to Fortis Inc.
  - Responsible for managing long term public debt issues of \$100-250M annually and maintenance of adequate short term credit facilities for the Fortis BC gas and electric utilities.
  - Managed post acquisition integration activities and transition following change of ownership to Kinder Morgan Inc in 2005 and subsequently to Fortis ownership in 2007. Financial due diligence lead and member of three person negotiating team for plus \$400 million acquisition of Centra Gas BC. Worked with key HR and executive team members to develop and then helped deliver the execution of an integration program to combine management teams of Terasen and Centra eliminating 115 of 315 management and executive level FTEs, capturing in excess of \$10M in annual savings and resulting in the adoption of common processes, policies and technology platforms across the province in all company gas utilities.
  - As member of the executive helped build a strong and cohesive operation by fostering a culture of teamwork and ensuring alignment with the company's mission, values and strategic directives. Built organizational capacity by strengthening succession planning and leadership pipeline. Transformed finance and regulatory areas from disparate departmental silos to an integrated service provider for the entire organization and a training ground for high potential managers.
  - Ensured rigorous accountability to the Board of Directors and Audit & Risk Committee of the Board of Fortis BC. Directed corporate performance measurement and reporting, long range financial planning, regulatory strategy development and annual business planning, quarterly and annual reporting. OSC Financial Officer Certification of quarterly and annual financial statements.
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- Managed regulatory and political relationships with the BC Utilities Commission and the BC Ministry of Energy, Mines and Petroleum Resources and enhanced relations with key intervener groups including the Commercial Energy Consumers, BC Public Interest Advocacy Centre, Old Age Pensioners, BC Sustainable Energy Association, the Sierra Club and the BC Municipal Electric Utilities coalition.

**VICE PRESIDENT REGULATORY AFFAIRS & CHIEF FINANCIAL OFFICER ('07-'10)**

**VICE PRESIDENT AND CHIEF FINANCIAL OFFICER ('05-'07)**

**VICE PRESIDENT FINANCE AND REGULATORY AFFAIRS ('03-'05)**

**CONTROLLER AND DIRECTOR OF FINANCE & STRATEGIC PLANNING ('99-'03)**

Terasen Gas Inc. (formerly BC Gas Utility Limited)

- Progressive leadership responsibility for the company's financial plans and policies, its accounting practices, the conduct of its relationships with lending institutions and the financial community, including rating agencies, the maintenance of its financial records and system of internal controls, Canadian Securities Regulators compliance activities and the preparation of financial reports.
- Member of executive team (UMT), the Technology Steering Committee (overseeing systems implementation programs and projects), and Price Risk Management Committee.
- Conceived/executed COMPASS, a comprehensive assessment of Utility operations and value realization plan.

**PRINCIPAL (NATIONAL DIRECTOR OF VALUE MANAGEMENT) ('97 – '99)**

**CONSULTING MANAGER ('94 – '97)**

**SENIOR CONSULTANT ('90 – '94)**

**Ernst & Young Management Consultants, Vancouver and London, Canada; Riyadh, Saudi Arabia**

**1990 – 1999**

- Lead consultant (Value Management Team) for the SAP implementation at BC Gas. Developed a Value Measurement Framework for BC Gas based on a Balanced Scorecard performance management model.
- Developed business case assessments for a full suite ERP implementation at Toronto Hydro.
- Played a lead role in the 1997 re-organization of the City of Edmonton. Worked with three of eight city departments to identify re-engineering and restructuring opportunities. Total annual savings of \$30M.
- Project managed a multi-disciplinary team of consultants and bank staff to reengineer the civil service pension distribution and payments service provided by a major Saudi bank to over 180,000 retirees and beneficiaries on behalf of the Saudi Pension Fund Authority.
- Worked with an international team of consultants to complete a comprehensive diagnostic assessment of the state owned oil refinery in Bahrain. This project identified initiatives to eliminate approximately 50% of the organization's fixed operating costs and to bring the refinery into line with world class performers.
- Reviewed B.C. Hydro's financial controllership function over power distribution capital expenditures (annual budget exceeded US\$150M).

**AUDIT MANAGER**

**Clarkson Gordon, London, Ontario**

**1986 – 1990**

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### **EDUCATION**

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| Crown Directors Effectiveness Course<br>Institute of Corporate Directors  | 2014 |
| Competitive Excellence in Operations, Executive Development Program<br>Ivey School of Business, University of Western Ontario   | 2001 |
| Chartered Accountant, Chartered Professional Accountant<br>Member of the Institute of Chartered Accountants of Ontario<br>Member of the Institute of Chartered Accountants of Manitoba (2013) | 1988 |
| Honors Business Administration<br>Ivey School of Business, University of Western Ontario  | 1986 |

### **PERSONAL AND COMMUNITY INVOLVEMENT**

- Volunteer Pilot – Angel Flight of British Columbia
- Director Pitt Meadows Air Park
- Instrument rated commercial pilot and aircraft owner
- Past member of the SKYWARD fundraising cabinet for the redevelopment of the Western Canada Aviation Museum
- Actively pursue fitness through cycling, hiking, skiing and golf