Deloitte.

Tennant Energy, LLC v. Government of Canada

Expert Report in the matter of an arbitration under Chapter 11 of the North America Free Trade Agreement and the UNCITRAL Arbitration Rules

August 7, 2020

Private and Confidential

Table of Contents

1	Inti	roduction	3
	1.1	Introduction and Mandate	3
2	Exe	cutive Summary	б
3	Sco	pe of Review	8
4	Ove	erview and Background	9
	4.1	Summary of Dispute	9
	4.2	The Claims	. 11
5	Con	npany and Project Description	. 14
	5.1	Company and Project Description	. 14
	5.2	OPA and the FIT Program	. 14
	5.3	Overview of the Project	. 16
	5.4	Status of the Project	. 16
6	Ind	ustry and Economic Analysis	. 19
7	Eco	nomic Loss Analysis	. 20
	7.1	Summary of Conclusions	. 20
	7.2	Methodology and Approach	21
	7.3	Components of Our Economic Loss Calculation	. 24
	7.4	Market Approach	. 43
8	Maj	or Assumptions	. 47
9	Res	trictions and Qualifications	. 48
10) Sch	edules	. 49
Αŗ	•	ices	
11	L App	endix A: Scope of Review	. 61
12	2 App	pendix B: Industry and Economic Overview	. 66
		Industry Overview – Renewable Energy	
	12.2	Wind Energy	. 67
	12.3	Economic Overview	. 68
13	3 Арр	endix C: Restrictions and Qualifications	. 71
14	l App	endix D: Qualifications of Financial Advisory Partners	. 72
	Larry	Andrade, CPA, CA, CBV, CFF, CFE, MBA	. 73
	Richa	ırd Taylor, CPA, CA, FCBV	. 76

PRIVATE & CONFIDENTIAL

August 7, 2020

Appleton & Associates International Lawyers 121 Richmond St W, Suite 304 Toronto ON M5H 2K1 Reed Smith LLP 1001 Brickell Bay Dr, 9th Floor, Miami, Florida 33131

Attention: Mr. Barry Appleton and Mr. Edward Mullins

Re: Tennant Energy, LLC v. Government of Canada

1 Introduction

1.1 Introduction and Mandate

- 1.1.1 Deloitte LLP ("Deloitte") has been retained by Appleton & Associates International Lawyers and Reed Smith LLP ("Counsel") on behalf of Tennant Energy, LLC (the "Company" or "Tennant") to provide litigation support services with respect to a dispute between Tennant and the Government of Canada related to the 100MW wind energy project, Skyway 127 Energy Inc. located in the Bruce Transmission zone ("Skyway 127", the "Investment", or the "Project")).
- 1.1.2 We understand that Tennant has filed a Notice of Arbitration, dated June 1, 2017, pursuant to the provisions of the North American Free Trade Agreement ("NAFTA").
- 1.1.3 Tennant alleges that Canada, through the Province of Ontario ("Ontario"), violated Article 1105 of Section B of NAFTA Chapter Eleven resulting in damages to Tennant.¹
- 1.1.4 Assuming that the Government of Canada ("Canada") is found liable in this matter and that Tennant has suffered losses as a result of such liability, you have requested our opinion of the economic losses (the "Economic Losses") suffered as at August 15, 2015 (the "Valuation")

¹ Notice of Arbitration dated June 1, 2017, Paragraph 90.

- Date") and have instructed us that the appropriate date of loss is August 15, 2015.²
- 1.1.5 We do not assume any responsibility or liability for losses incurred by Tennant or any other parties because of the circulation, publication, reproduction, or use of this report.
- 1.1.6 None of our comments herein should be construed as opinions or conclusions in respect of liability or other legal matters that are beyond our scope of expertise and are subject to legal determination.
- 1.1.7 Our report has been prepared in conformity with the Practice Standards of the Canadian Institute of Chartered Business Valuators (the "CICBV") for an Expert Report.³
- 1.1.8 No part of Deloitte's fee is contingent upon the conclusions reached in our report or any action or event contemplated in, or resulting from the use of, the report. The principal experts and other staff involved in the preparation of the report acted independently and objectively in completing this engagement.
- 1.1.9 This report is subject to the Restrictions and Qualifications included in Section 8.0 and in Appendix B herein.
- 1.1.10 Richard Taylor and Larry Andrade have prepared this report with the assistance of other professionals under our direction and supervision. We have reviewed the materials underpinning their report, and the conclusions herein are our own conclusions. The curriculum vitae for Richard Taylor and Larry Andrade is attached as Appendix D.
- 1.1.11 In addition to the foregoing we confirm the following:
 - a. Deloitte was engaged by Appleton & Associates International Lawyers in previous matters within the last five years and Richard Taylor, a co-author of this report was a co-author of the following reports:
 - i) Mesa Power LLC vs the Government of Canada Expert Witness Report dated November 18, 2013. Arbitration under

² Skyway 127 lost its position in the existing contract ranking and was not offered a contract on July 4, 2011. Skyway 127 received a letter from the OPA informing it that Skyway 127 was placed on a priority waitlist for a FIT Contract as of that July 4, 2011 date. Skyway 127 was not offered a FIT Contract. We understand that none of the projects included in the priority waitlist received a FIT contract. While Skyway 127 did not know the reasons for its failure to obtain a FIT Contract from the OPA communications, Skyway 127 was effectively denied a FIT contract as of July 4, 2011. While the communication of the ranking was provided on July 4, 2011, we have been instructed by Counsel that Skyway 127 became aware of the cause of action on August 15, 2015.

³ As defined in Standard 310 of the Practice Standards of the CICBV.

- Chapter 11 of the North American Free Trade Agreement and the Uncitral Arbirtation Rules.
- ii) ELA USA Inc. vs the Government of Estonia Draft report dated July, 2019. Arbitration under the US-Estonia Bilateral Investment Treaty;

Deloitte has also been engaged by the Government of Canada on a number of matters in the last five years. None of those engagements are related to this matter;

- Other than disclosed herein, the co-authors of this report have no past and present relationship with the Parties, counsel, or members of the Tribunal;
- c. The co-authors of this report confirm that the conclusions provided in this report reflect their own, impartial, objective, unbiased opinion which has not been influenced by the pressure of the dispute resolution process or by any party to the arbitration;
- d. The co-authors understand that, in submitting this report, their duty is to the Tribunal, and that they have complied with that duty;
- e. The co-authors confirm their genuine belief in the opinions expressed in the expert report;
- f. The co-authors will notify the parties to this arbitration and the arbitral Tribunal forthwith if any corrections are required to this report; and
- g. The co-authors, are both responsible for the entire report.
- 1.1.12 Unless otherwise noted, all amounts shown in this Report and attached schedules are expressed in Canadian dollars ("CAD\$"). Translation of monetary amounts expressed in other currencies, if any, has been made at the rate of exchange prevailing on the Valuation Date.

2 Executive Summary

2.1.1 Based on our scope of review (Appendix A), our research, analysis, experience, restrictions and assumptions (Appendix B), in our opinion, the Economic Losses suffered by Tennant as a result of the alleged actions of Canada are set out in Table 2.1.1 below as at the Valuation Date.

CAD '000s	Schedule	Low	Mid	High
Pre-Valuation Date cash flows	Schedule 2	(34,300)	(32,624)	(30,949)
Net present value of post- Valuation Date cash flows	Schedule 2	146,112	158,961	171,810
Post-tax adjusted net present value of cash flows, rounded	Schedule 2	111,813	126,337	140,861
Gross pre-tax adjusted net present value of cash flows, rounded	Schedule 2	152,000	172,000	192,000
Pre-Judgement Interest	Schedule 2	10,615	12,012	13,408
Total Losses at the Valuation Date	Schedule 2	162,615	184,012	205,408
Moral damages ⁴	Schedule 2	35,000	35,000	35,000
Total claim	Schedule 2	197,615	219,012	240,408

Table 2.1.1

- 2.1.2 If requested to select a single point estimate of the Economic Losses, we would suggest the midpoint of the range of \$162.6 million to \$205.4 million, or \$184.0 million.
- 2.1.3 The Economic Losses presented herein exclude any consideration for moral damages, as well as any legal or other fees incurred by Tennant

⁴ We understand that the Plaintiffs have filed a claim for moral damages in the amount of \$35.0 million. We do not provide our opinion as to the nature or quantum of the moral damages as filed but have included that amount in our determination of total claim for completeness purposes.

- in this matter. Further, the Economic Losses are calculated a pre-tax basis, and this assumes that the Economic Losses are taxed as income.
- 2.1.4 We determined the Economic Losses as at the Valuation Date. The Economic Losses are calculated from the commencement of the development of the Project to March 31, 2034⁵ (the "Period of Loss"). The Period of Loss includes the development period for the Project and the period of commercial operation to the end of the FIT contract.
- 2.1.5 We note that the estimate presented assumes the discount rates and the considerations as at the valuation date. If the current assumptions for financing rates and discount rates were used, then the value of the project would be materially higher.

⁵ We have assumed a commencement date of March 31, 2014 for a 20 year FIT contract.

3 Scope of Review

- 3.1.1 In preparing the Deloitte Report, we have reviewed and relied upon the information contained in the documents listed in Appendix A (the "Scope of Review").
- 3.1.2 Our information and document-gathering consisted of preparing an initial information request list and receiving responses from you, requesting production of the relevant documents and relying upon you to provide us with the relevant documents based on our scope of services. The information listed in Appendix A also includes public documents that we have obtained through independent research.
- 3.1.3 We have not audited or performed any audit or other verification procedures on the documents and information listed in Appendix A except as noted herein.
- 3.1.4 Our scope and calculations herein have been limited by certain information that we requested but that we understand was not available and thus not provided to us. We understand such information is not available due to the passage of time and changes in the business operations and personnel at Skyway's shareholders.
- 3.1.5 Where information was not available, we adopted and relied upon alternative information and procedures, including publicly available information and reliance upon representations from management related to meetings with General Electric (the shareholder primarily responsible for project analysis and financial forecasting).
- 3.1.6 Our conclusion is subject to change should new information be provided to us that conflicts with or contradicts information that we have relied upon.

4 Overview and Background

4.1 Summary of Dispute

Tennant's FIT Program and Application Process

- 4.1.1 Tennant applied to the Ontario Power Authority's ("OPA") Feed-in Tariff ("FIT") program on November 24, 2009 for its 100 megawatt ("MW") wind energy project, Skyway 127 Energy Inc. ("Skyway", the "Investment", or the "Project") in the Bruce Transmission zone. The project was located near the town of Port Elgin in the Province of Ontario.⁶
- 4.1.2 Prior to June 2011, the available capacity in the Bruce region was approximately 1,200 MW. Based on the Ministerial directive issued on June 3, 2011 (as described further below), the capacity in the Bruce region was reduced to 1050 MW and then further reduced to 750 MW as a result of the transfer of 300 MW to the West of London region. Initial FIT project rankings were issued in December 2010. In those rankings, Skyway was ranked sixth of the thirty one projects within the eligible capacity for the Bruce Region of 1,200 MWs.⁷ The five projects that were ranked ahead of Skyway had an aggregate capacity of 280 MW and as a result, Skyway was well within the 1,200 MW capacity limit in the Bruce Region⁸ and also within the 1050 MW capacity level prior to the transfer of 300 MW of capacity to the West of London region.
- 4.1.3 Pursuant to the Ministerial directive, on June 3, 2011, the OPA issued a new set of rules with respect to awarding FIT program contracts (the "New Rules"). The New Rules included four significant changes, among other things:
 - a. The OPA was then able to award 750 MW of contracts in the Bruce Region transmission zone and 300 MW of contracts in the West of London Region transmission zone;
 - b. All projects were given a five day opportunity period to change their interconnect point starting Monday June 6, 2011;

⁶ Notice of Arbitration dated June 1, 2017, Paragraphs 4 and 28.

⁷ Investor's Schedule of Exhibits **C-104** (000279) FIT website: http://www.fit.powerauthority.on.ca/Storage/102/11184_Launch_Project_Information_- Dec 21 2010.pdf

⁸ Notice of Arbitration dated June 1, 2017, Paragraph 29.

⁹ Investor's Schedule of Exhibits **C-044** (000216) Ontario Power Authority Feed-In Tariff Program, FIT Rules Version 1.5, June 3, 2011

- c. Projects in the Bruce or West of London Region were able to change or select interconnect points outside their own region; and
- d. Projects were then to be evaluated using a provincial-wide ranking.
- 4.1.4 As a result of the New Rules, projects in the West London Region that had higher provincial rankings than those ranked in the Bruce Region were able change their interconnect point to the Bruce Region and therefore could be eligible for FIT contracts in that region. With the transfer of 300 MW of capacity to the West of London region and given the additional projects that moved to the Bruce Region, projects that were initially ranked within the 750 MW of eligible capacity (1050 prior to the transfer of 300 MW to the West of London region) moved below the eligible capacity. As a result, Skyway was re-ranked twelfth. The projects that were ranked higher had an aggregate capacity in excess of 750 MW and therefore Skyway was no longer within the 750 MW capacity constraints for the Bruce Region. Based on the prior project ranking, but for the changes in the program issued by the OPA on June 3, 2011, the Skyway project would have received a FIT contract.
- 4.1.5 On July 4, 2011 (the "Notification Date"), Tennant was notified by the OPA that the ranking of its wind farm investment had been lowered and would not be offered a FIT contract in the Bruce Region at the time. 11

Exceptional Opportunities Provided to International Power Canada

4.1.6 On July 4, 2011, the OPA awarded FIT Contracts for 198 MW to two wind projects owned by International Power Canada¹². These projects were located in the London zone and had been unsuccessful previously in 2010 when FIT Contracts were issued for that region. We understand that evidence of Senior Ontario Energy Officials at the Mesa Power NAFTA Hearing, released through the public version of the Mesa Power Investor's Post Hearing Brief, confirmed that special protection for the business interests of these companies was provided by senior officials in the Government of Ontario. In June 2011, a Ministerial Directive to the OPA reduced the amount of available transmission capacity to the Bruce transmission zone from 1200 MW to 750 MW¹³. 300 MW of the capacity was transferred to projects in the London transmission zone, although FIT Contracts had already been awarded in that transmission region¹⁴. We understand that had the 198 MW of energy transmission

¹⁰ Investor's Schedule of Exhibits **C-025** (000071) Project Rankings. Dated July 4, 2011.

¹¹ Investor's Schedule of Exhibits **C-027** (000146) Skyway 127 Project History.

¹² Investor's Schedule of Exhibits **C-025** (000071) Project Rankings. Dated July 4, 2011.

¹³ Investor's Schedule of Exhibits **C-176** (000299) Letter from Minister Brad Duguid to Colin Anderson, dated June 3, 2011.

¹⁴ Exclusive of the transfer of 300 MW of capacity to the West of London region, the June 2011 Ministerial Directive to the OPA reduced the available capacity in the Bruce region to 1050 MW.

not been moved to the London region by the Ministerial directive then Skyway 127 would have been able to obtain its contracts successfully, but for the changes in the program, Tennant would have received a FIT contract.

Agreement Between Samsung C&T Corporation, Korea Electric Power Corporation and the Government of Ontario

- 4.1.7 On January 21, 2010, Samsung C&T Corporation ("Samsung"), a Korean-based company, and Korea Electric Power Corporation (together, the "Korean Consortium") signed the Green Energy Investment Agreement ("GEIA"), valued at \$7 billion, with the government of Ontario, represented by Ontario's Premier and Ontario's Minister of Energy. 15 Based on our understanding, this agreement resulted in the Korean Consortium's access to supply renewable energy under undisclosed terms including a guaranteed total of 2,500 MW of capacity in Ontario. Of this amount, 2,000 MW of capacity was designated as wind generation capacity to be carried out in five phases, with each phase targeting 400 MW of production. 16
- 4.1.8 Pursuant to the GEIA, the Government of Ontario was required to facilitate the necessary regulatory approvals and permits.¹⁷
- 4.1.9 On July 28, 2011, the Korean Consortium signed an amended agreement to the GEIA ("Amended GEIA") which delayed the targeted commercial operating dates for the five phases specified in the GEIA by one year, to approximately two years and eight months after the date of the Amended GEIA.

4.2 The Claims

4.2.1 In response to the actions and circumstances set out above, on June 1, 2017, Tennant submitted a Notice of Arbitration against Canada alleging a breach of Section B of Chapter 11 of the North American Free Trade Agreement ("NAFTA"). In particular, Tennant alleges that Canada violated at least NAFTA Article 1105. 18 We have described the claims and the related economic losses under NAFTA article 1105 herein.

¹⁵ Notice of Arbitration dated June 1, 2017, Paragraphs 30.

¹⁶ Investor's Schedule of Exhibits **C-210** Green Energy Investment Agreement January 21, 2010 (article 3.2).

¹⁷ Investor's Schedule of Exhibits **C-210** Green Energy Investment Agreement January 21, 2010 (article 7.3a).

¹⁸ Notice of Arbitration dated June 1, 2017 Paragraphs 4 and 28.

Article 1105 - Minimum Standard of Treatment

- 4.2.2 Article 1105 states each party shall accord to investments of investors of another party treatment in accordance with international law, including fair and equitable treatment and full protection and security.
- 4.2.3 We understand from counsel that the primary claim in this arbitration relates to unfair treatment covertly and systematically provided in 2011 by Ontario to improperly allocate FIT contracts to International Power Canada from a limited pool of available FIT contracts. claims that Canada failed to meet its obligations under Article 1105 by: 19
 - a. unfairly manipulating the award of access to the electricity transmission grid, resulting in unfair treatment of the Investment;
 - b. unfairly manipulating the dissemination of program information under the FIT Program;
 - c. unfairly manipulating the awarding of Contracts under the FIT Program; and
 - d. improperly destroying necessary and material evidence of their internationally unlawful actions in an attempt to avoid liability for their wrongfulness.
- 4.2.4 Based on the above, and our understanding of the requirements of Article 1105, the Economic Losses related to Article 1105 includes:
 - the lost profits that Tennant would have earned from its project, had a FIT Contract been obtained; and
 - b. the costs already incurred by Tennant in relation to preparing the project for commercial operation.
- 4.2.5 Article 1105 Minimum Standard of Treatment states that each Party shall accord to investments of investors of another Party treatment in accordance with international law, including fair and equitable treatment and full protection and security.
- 4.2.6 Skyway 127 lost its position in the existing contract ranking and was not offered a contract on July 4, 2011. Skyway 127 received a letter from the OPA informing it that Skyway 127 was placed on a priority waitlist for a FIT Contract as of that July 4, 2011 date. Skyway remained on the priority waitlist until June 12, 2013 when the FIT program was ended for projects over 500 Kw and Skyway was therefore certain that it would not receive a FIT contract.
- 4.2.7 We understand that none of the projects included on the priority waitlist received a FIT contract. While Skyway 127 did not know the reasons

_

¹⁹ Notice of Arbitration dated June 1, 2017. Paragraph 91.

- for its failure to obtain a FIT Contract from the OPA communications, Skyway 127 was effectively denied a FIT contract as of July 4, 2011.
- 4.2.8 As a result of the notification on July 4, 2011 that it would not receive a FIT contract but would be placed on a priority waitlist (where none of the projects on the priority waitlist received a FIT contract), Tennant had been treated unfairly by July 4, 2011 given that it expected a higher ranking based on its FIT Applications. However, Tennant did not become aware of the NAFTA inconsistent reason for this unfairness until much later.
- 4.2.9 We understand from Counsel that the Tennant Energy NAFTA claim first arose under NAFTA Article 1116 on August 15, 2015. August 15, 2015 was the first date where the two specific necessary conditions under NAFTA Article 1116 were met namely that Tennant Energy could be able to (i) obtain knowledge of Ontario's special conduct that gave unique business opportunities in favour of International Power Canada in the FIT Process and (ii) where Tennant Energy and Skyway 127 would be in a position to associate its losses from the failure to obtain a contract under the FIT Program to the knowledge of a breach of a NAFTA obligation.
- 4.2.10 We understand from counsel that this August 15, 2015 date of a breach under NAFTA Article 1116 would be the same if the breach were to be considered a single act or as part of a composite act involving systemic state practice as the disclosure of the systemic practice also first occurred on August 15, 2020 (although information of additional violations has become known subsequently to that date).
- 4.2.11 You instructed us and we have assumed that the date for measurement of the losses (the "Valuation Date") for the claim related to Article 1105 is August 15, 2015, the day that the claim first arose (as described above).

5 Company and Project Description

5.1 Company and Project Description

- 5.1.1 Tennant is a California limited liability corporation. The Company owns and controls the shares in Skyway 127 Energy Inc, an on-shore renewable energy power project designed to produce approximately 100 megawatts ("MW") of wind power, located in the Bruce Transmission zone, near the town of Port Elgin in the province of Ontario ("Skyway").
- Tennant obtained its equity in Skyway 127 from General Electric Energy LLC. ("General Electric Energy") and John Tennant, an American citizen. General Electric Energy acquired its initial equity investment in Skyway as of November 24, 2009. and John Tennant received an interest as a bare trustee on behalf of a California holding company that would be renamed Tennant Energy LLC by June 2011.

5.2 OPA and the FIT Program

- 5.2.1 The FIT program was enabled by the Green Energy and Green Economy Act, 2009 and was implemented by the OPA. Ontario's FIT program provides standard pricing for renewable electricity production sources including solar, wind, water and bioenergy. The prices are expected to cover costs and provide a reasonable return on investment. The different renewable fuel sources, such as solar, waterpower, wind and biogas each have different pricing structures.²⁰
- 5.2.2 The Proposed FIT price schedule presentation, dated April 2009 and prepared by the OPA, outlines the initial valuation assumptions used to determine the pricing structure for the renewable energy projects. The costs included in the analysis are capital costs, operating, maintenance and connection costs at an assumed contract term of 20 years (40

²⁰ Investor's Schedule of Exhibits C-045 (000217) Feed-In Tariff (FIT) Program, Program Overview 2

- years for waterpower projects). The financing structure expectations include an after-tax return on equity of 11%.
- 5.2.3 Throughout the duration of the program, the OPA is required to review the pricing structure to adjust the prices. According to the FIT program Two-Year Review Report, the evolving global market has contributed to project cost reductions resulting in lower prices. ²² The FIT pricing schedule version two was implemented April 5, 2012 resulting in a decline in wind prices from \$13.5²³ cents per kilowatt hour to \$11.5²⁴ cents per kilowatt hour for new FIT contracts. Based on our understanding of the conditions for the price change (impacted projects with contracts awarded after April 5, 2012) and direction from counsel, the price changes announced April 5, 2012 would not impact the pricing for the FIT contract that Skyway 127 would have been awarded absent the Governments' actions.
- 5.2.4 In March 2013, the OPA sent out a stakeholder feedback questionnaire to aid in the development of the 2013 pricing schedule. The stakeholders included Ontario consumers, developers, distributors and generators. The questions covered cost of capital requirements, key cost drivers, Ontario versus global pricing differentials, rates of return on equity, current return on investment, price recommendations and other important information used to create a price structure.²⁵
- 5.2.5 On June 12, 2013, the Minister of Energy directed the OPA to change the FIT program, by ending all projects over 500 kW. This effectively ended the FIT Program for Skyway 127²⁶ Pursuant to the June 12, 2013 direction, going forward, the FIT program will only be open to Small FIT projects (less than 500kW) for solar and on-farm biogas renewable projects.²⁷

²¹ Investor's Schedule of Exhibits **C-047** (000219) Proposed Feed-in Tariff Price Schedule, Stakeholder Engagement – Session 4, April 7, 2009

²² Investor's Schedule of Exhibits **C-048** (000220) Ontario's Feed-in Tariff Program, Two-Year Review Report, March 2012

²³ Investor's Schedule of Exhibits **C-049** (000221) Ontario Power Authority, Pricing Schedule, August 2010.

²⁴ Investor's Schedule of Exhibits **C-050** (000222) Ontario Power Authority Pricing Schedule, April 2012

²⁵ Exhibits Investor's Schedule of **C-051** (000223) 2013 FIT Price Review Stakeholder Feedback, March 2013,

²⁶ Investor's Schedule of Exhibits **C-052** (000224) Ontario Power Association, Development of a New Large Renewable Procurement Process, August 30, 2013.

²⁷ Investor's Schedule of Exhibits **C-053** (000225) Ontario Power Association, FIT Rules Version 3.0- Draft, September 4, 2013

5.3 Overview of the Project

- 5.3.1 Skyway 127 was designed to generate 101.8MW of wind power using 37 2.75xle turbines, representing the type of turbine that would have met the Domestic Content Requirements of the FIT program. This Project is located in the Municipality of Arran-Elderslie, Bruce County, Ontario, and situated on agricultural land. The development of the Project started in 2008 when the first land option contract was signed and has been ongoing. The Project had 39 properties comprising 6,617 acres under option as at September 2011²⁸.
- 5.3.2 The following chart is the forecast timeline for the Skyway wind farm project based on the three stages of development, construction and operation:²⁹

Develo	Development		Construction		ation
Start	End	Start	End	Start	End
January 1, 2008	May 31, 2013	June 1, 2013	March 31, 2014	March 31, 2014	March 31, 2034

Table 5.3.2

5.4 Status of the Project

- 5.4.1 As of the date of the FIT contract awards for the Bruce Transmission zone in July 2011, Skyway had completed numerous steps in relation to the project development.
- 5.4.2 Specifically, Skyway had initiated the process of obtaining Renewable Energy Approval ("REA"), having received a proposal from ORTECH Consulting Inc. ("ORTECH") on May 17, 2010 detailing the scope of work that would be undertaken by ORTECH to allow for the Project to obtain REA.³⁰ We understand that the risk of the Project receiving REA approval is not significant as a result of the following:
 - a. The ORTECH consulting proposal outlined the scope of work and the studies required to obtain the REA. Based on our understanding, a number of the studies were being or had been completed.
 - In regard to the required approvals for REA and connection point, we understand that the Government of Ontario was reasonably expected to consistently apply their administrative practice to all

²⁸ Investor's Schedule of Exhibits **C-038** (000166) Skyway 127 Leaseholders Data

²⁹ Commercial operation date ("COD") is based on consideration of the timeline in the Amended GEIA Investor's Schedule of Exhibits **C-221**, FIT program application **C-026** (000080) OPA FIT program application), and other actual CODs achieved by wind power projects in the Bruce region. Please refer to Section 6.3 for further details.

³⁰Investor's Schedule of Exhibits **C-039** (000169) ORTECH REA Budget Proposal P90809

applicants thereby treating all applicants equally and equitably. As a result, it was reasonably expected that Tennant would receive the same treatment as other applicants, including the members of the Korean Consortium, where pursuant to the terms of the GEIA, the Government of Ontario agreed to assist the members of the Korean Consortium in obtaining necessary regulatory and connection point approvals.

c. Based on the Bruce – Milton Contracts list published on July 4th, 2011,³¹ 14 projects were awarded FIT contracts in the Bruce region in the FIT 1 program. 13 of the 14 projects and 99.2% (743.7 MW of 750 MW) on a capacity basis had achieved Commercial Operation by 2016, and while the Meyer wind project did not reach COD, the project did receive all REA approvals indicating a high probability that projects that received a FIT contract as of July 4, 2011 would receive all required REA approvals to allow commercial operation. See below for table 5.4.2 summarizing the COD:

Provincial Wide Ranking	Applicant legal name	Project Name	Project City	Date Approved	COD Date
4	Boulevard Associates Canada	Bluewater Wind Energy Centre	Zurich	July 4, 2011	2014 ³²
5	Boulevard Associates Canada	Jericho Wind Energy Centre	Thedford	July 4, 2011	2015 ³³
7	Bornish Wind, LP	Bornish Wind Energy Centre	Keyser	July 4, 2011	2014 ³⁴
9	Boulevard Associates Canada	Goshen Wind Energy Centre	Dashwood	July 4, 2011	201535
10	Suncore Energy Products Inc.	Cedar Point Wind Power Project Phase II	Forest	July 4, 2011	2015 ³⁶
11	Summerhaven Wind, LP	Adelaide Wind Energy Centre	Kerwood	July 4, 2011	2014 ³⁷

³¹ Investor's Schedule of Exhibits C-025 (000071) Bruce-Milton Contract List - July 4 2011 (7) SECURED

³² Investor's Schedule of Exhibits **C-070** (000243) Bluewater Wind Energy Centre Factsheet

³³ Investor's Schedule of Exhibits **C-103** (000278) Jericho Wind Energy Centre Factsheet

³⁴ Investor's Schedule of Exhibits **C-071** (000224) Bornish Wind Energy Centre Factsheet

³⁵ Investor's Schedule of Exhibits **C-072** (000245) Goshen Wind Energy Centre Factsheet

³⁶ Investor's Schedule of Exhibits **C-073** (000246) Cedar Point II Wind Energy Centre Factsheet

³⁷ Investor's Schedule of Exhibits **C-074** (000247) Adelaide Energy Centre Factsheet

18	Boulevard Associates Canada	East Durham Wind Centre	Priceville	July 4, 2011	2015 ³⁸
20	Grand Bend Wind L.P.	Grand Bend Wind Farm	Zurich	July 4, 2011	2016 ³⁹
21	Grand Valley Wind Farms Inc.	Grand Valley Wind Grand Farms (Phase 3) Valley		July 4, 2011	2015 ⁴⁰
37	St. Columban Energy LP	St. Columban 2 Wind Energy Project Seasfort		July 4, 2011	201541
75	St. Columban Energy LP	St. Columban 1 Wind Energy Project	Seasforth	July 4, 2011	2015 ⁴²
120	Majestic Energy inv.	Majestic Wind Farm	Paisley	July 4, 2011	2012 ⁴³
124	2224772 Ontario Inc	Meyer Wind Farm	Paisley	July 4, 2011	REA Issued
136	Quixote One Wind Energy Corp	Q1wec	Tiverton	July 4, 2011	REA issued

Table 5.4.2

 $^{^{38}}$ Investor's Schedule of Exhibits **C-075** (000248) East Durham Wind Energy Centre Factsheet

 ³⁹ Investor's Schedule of Exhibits C-076 (000249) Grand Bend Wind Energy
 ⁴⁰ Investor's Schedule of Exhibits C-077 (000250) Grand Valley III Wind Project
 ⁴¹ Investor's Schedule of Exhibits C-078 (000251) St. Columban Wind Facility 1 and 2

⁴² Investor's Schedule of Exhibits **C-078** (000251) St. Columban Wind Facility 1 and 2 ⁴³ Investor's Schedule of Exhibits **C-079** (000252) Majestic Wind Farm

6 Industry and Economic Analysis

6.1.1 We have set out the industry and economic factors that were considered relevant for the purpose of our analyses in Appendix C.

7 Economic Loss Analysis

7.1 Summary of Conclusions

7.1.1 Based on our scope of review (Appendix A), our research, analysis, experience, restrictions and assumptions (Appendix B), in our opinion, the Economic Losses suffered by Tennant as a result of the alleged actions of Canada are set out in Table 7.1.1 below as at the Valuation Date.

CAD '000s	Schedule	Low	Mid	High
Pre-Valuation Date cash flows	Schedule 2	(34,300)	(32,624)	(30,949)
Net present value of post- Valuation Date cash flows	Schedule 2	146,112	158,961	171,810
Post-tax adjusted net present value of cash flows, rounded	Schedule 2	111,813	126,337	140,861
Gross pre-tax adjusted net present value of cash flows, rounded	Schedule 2	152,000	172,000	192,000
Pre-Judgement Interest	Schedule 2	10,615	12,012	13,408
Total Losses at the Valuation Date	Schedule 2	162,615	184,012	205,408
Table				

- *Table 7.1*.1
- 7.1.2 If requested to select a single point estimate of the Economic Losses, we would suggest the midpoint of the range of \$162.6 million to \$205.4 million, or \$184.0 million.
- 7.1.3 The Economic Losses presented herein exclude any consideration for moral damages as well as any legal or other fees incurred by Tennant in this matter. Further, the Economic Losses are calculated a pre-tax basis, and this assumes that the Economic Losses are taxed as income.
- 7.1.4 We determined the Economic Losses as at the Valuation Date and was calculated for the Period of Loss. The Period of Loss includes the development period for the Project and the period of commercial operation to the end of the FIT contract.

7.2 Methodology and Approach

- 7.2.1 Our calculation of Economic Losses calculates the net present value of the incremental cash flows that we estimate Tennant would have received over the Period of Loss, as at the Valuation Date, but for the alleged actions in this matter.
- 7.2.2 Our calculation approach considers the differential between the "but for" cash flows" and "actual cash flows". But for cash flows are determined as the difference between the cash flows that Tennant would have expected to receive over the Period of Loss, net of the cash outflows that Tennant would have had to incur to earn such incoming cash flows.
- 7.2.3 Our calculation of Economic Losses is detailed in Schedules 1 to 8 and described as follows:
 - a. Project net present value ("Project NPV"): This component is based on the assumption that Tennant obtained a FIT contract for the project and would have operated the Project to the end of its FIT contract, being entitled to the net present value of the cash flows generated by Skyway. As the Valuation Date is subsequent to the Notification Date, the Project NPV is divided into two components:
 - The total cash flows prior to the Valuation Date (the "Pre-Valuation Date Cash Flows"), determined on an undiscounted basis reflecting that such cash flows would be realized as at the Valuation Date; and
 - The total cash flows subsequent to the Valuation Date (the "Post-Valuation Date Cash Flows"), determined on a discounted present value basis to reflect the risk of achieving the cash flows as forecast given that such cash flows would be unrealized as at the Valuation Date;

Both of the above components are aggregated to form the Project NPV as at the Valuation Date; and

b. Past Costs ("Past Costs"): All costs that would have been incurred to develop and construct the Project were deducted within the forecast project cash flows (i.e. the forecast project cash flows consider all costs required, irrespective of whether that have already been incurred). As a result, we have added the past costs that have already been incurred (i.e. incurred prior to the Notification Date) to the present value of the Project cash flows to determine the Project NPV.

Project NPV

7.2.4 A discounted cash flow ("DCF") approach was selected as the most appropriate approach for the purpose of determining the Economic

- Losses (i.e. the Project NPV") for this matter. The project NPV is equal to the aggregate of total cash flows prior to the Valuation date (on an undiscounted basis) and the present value of cash flows subsequent to the Valuation Date, discounted to reflect both the time value of money and the risk of achieving the cash flows as forecast.
- 7.2.5 We also considered a market approach, considering observable market multiples and value relationships, as a secondary check on the conclusion reached under a DCF approach. See Section 7.4 for our analysis of the market approach.
- 7.2.6 Under the DCF approach, the Economic Losses are based on the net present value of expected future cash flows to be generated from developing and operating the Project in addition to the net cash flows prior to the Valuation Date.
- 7.2.7 Specifically, the discretionary, post-interest, after-tax cash flow that the business is expected to generate is projected over an explicit forecast period, which in this case is consistent with the 20-year term of the FIT contract. The forecasts provided are dated as of April 12, 2012, and we acknowledge that the date of these forecasts are not contemporaneous with the date of this action. We understand that a detailed financial forecast prepared coincident with the date of this action was not available. Based on representations provided by management, we understand that the forecasts prepared as of April 12, 2012 are considered relevant as at the Valuation Date.
- 7.2.8 The projected cash flows over the Period of Loss were split into two components, the cash flows prior to the Valuation Date (the "Pre-Valuation Date Cash Flows") and the cash flows subsequent to the Valuation Date (the "Post-Valuation Date Cash Flows"). The forecast net cash flows prior to the Valuation Date (which are a net outflow) were included on an undiscounted basis. The forecast cash flows subsequent to the Valuation Date were discounted to their present value equivalent using an appropriate risk adjusted rate of return, resulting in the Economic Losses of the Project at the Valuation Date as related to Article 1105.
- 7.2.9 A DCF approach was considered to be the most appropriate and reliable approach for the following reasons:
 - a. Revenue can be reasonably forecast.
 - i) The price per KWh is established by contract while the wind production can be reasonably estimated, with resource estimates supported by wind data analysis and capacity factors supported by consultation with industry participants.

- ii) Wind production is based on a 50% probability factor ("P50") which reflects the long term median wind production wind production is expected to be higher in 50% of the cases and lower in 50% of the cases. Given the twenty year term of the FIT contract production based on a P50 wind factor is the most reasonable assumption and supported by industry practice;
- b. The majority of the capital costs would have been incurred based on contractual commitments, and industry benchmark data to assess the reasonability of capital costs is available. Specifically, we note that the largest component of the capital costs, the wind turbines, were subject to a contract with General Electric;
- c. Operating costs over the Period of Loss could be reasonable estimated. A large portion of operating costs would have been contractually committed and reasonably estimated using benchmark data. Operating costs which are not contractually established are not expected to be significant; and
- d. The Project was similar to other domestic and international projects and thus the engineering for the Project does not involve any unique or unproven technology.
- 7.2.10 As a result, the inputs to the DCF approach can be reasonably estimated for the purposes of calculating Economic Losses herein.
- 7.2.11 Further, the DCF approach takes into account the amount, timing, and expectation of achieving projected levered cash flows expected to be generated by the net operating assets, which provides a detailed reflection of the future cash flow generated by the Project.
- 7.2.12 Based on our experience, project developers would use a DCF approach to evaluate wind projects and purchasers would use a DCF approach to determine the price they would be willing to pay to acquire a wind project such as the Project.
- 7.2.13 We have not included a reclamation cost or salvage value in the DCF. We have assumed the costs required to restore the land to its initial use would approximate the value related to the continued use or salvage value of the turbines.⁴⁴ Notwithstanding the above, operating expenses as forecast include a retrofit and decommission reserve of \$0.2 per year, increased annually by inflation resulting in a total expense of approximately \$5.2 million over the 20 year operating

⁴⁴ While at a current date, we believe that market participants would consider a terminal value that reflects the repowering of the assets at end of the FIT contract term (and a higher terminal value), at the Valuation Date we believe that market participants would have adopted terminal value assumptions as reflected in our analysis (i.e. value through continued use or salvage would offset any required reclamation or site remediation costs).

- period, which is included to further cover any reclamation cost not offset by the salvage value of the turbines.
- 7.2.14 The discount rate is determined based on our review of the available returns on alternative investments, the reasonably expected operations of Skyway 127, the relative risks of the Project, and assuming a market based capital structure, as discussed in further detail below.
- 7.2.15 We assumed the Valuation Date to be August 15, 2015, as described above. As such, we used that date for the purpose of estimating appropriate rates of return and for the present value calculations (i.e. the Economic Losses were determined as of August 15, 2015).
- 7.2.16 Further to the above, we added costs incurred prior to the Notification Date related to the development of the Project to the present value of project cash flows to determine the Project NPV. These costs are estimated at \$0.9 million, as per the Project financial statements for the period ended December 31, 2010, 45 which is assumed to reflect the development costs incurred as of the Notification Date.

7.3 Components of Our Economic Loss Calculation

- 7.3.1 A detailed calculation of the Economic Losses is included in Schedules 1 to 8 and the accompanying notes therein.
- 7.3.2 This section includes both the key assumptions and components of our Economic Loss calculation.

Key Assumptions of Economic Loss Calculations

- 7.3.3 The key assumptions in our calculation are set out below and additional assumptions are included in Section 8:
 - a. The Project obtained a FIT contract, absent the alleged actions of the Government and consistent with the initial (December 2010) ranking of projects in the Bruce Region, and assuming Canada did not engage in behavior that resulted in Skyway 127 losing its ranking;
 - b. There is a very high probability that all environmental and other associated approvals are received under the REA process and therefore a notice to proceed is obtained for the Project;
 - c. Skyway 127 was able to complete a significant amount of the REA and its shareholder, General Electric had the experience and expertise to bring the Project to commercial operation, and that Ontario would have treated Skyway 127 fairly and consistently with

 $^{^{45}}$ Investor's Schedule of Exhibits **C-029** (000149) Statement for the year ended December 31, 2010

other FIT Contract recipient and in the same fashion as it accorded regulatory treatment to the joint venture partners of the Korean Consortium with necessary regulatory approvals and permits. .⁴⁶

- The reasonability of the receipt of required approvals is supported by our understanding that virtually all of the projects that received a FIT contract on July 4, 2011 achieved COD status by 2016 and therefore received all necessary regulatory and connection point approvals, as discussed previously;
- d. Financing is secured, which is reasonable given that Skyway 127 and its investors had preliminary discussions with lenders, including the GE internal lending division.
 - Although financing commitment letters had not been obtained, we understand there was significant interest on the part of lenders.
 - ii) Based on our market research presented further below, we identified that similar projects had been financed at or around the Valuation Date. As a result, we understand that financing was available for these types of projects. In addition, we understand that GE Energy had completed discussions with its internal lenders in the General Electric corporate family regarding financing. As discussed later in this report, documentation to support the financing terms negotiated by GE was not available, and therefore we have not adopted the more favorable financing rates considered by GE;
- e. Skyway 127 and its investors had the financial capacity to fund the equity required to reach commercial operation. Skyway 127's equity partner at that time of the FIT application and development, was GE Energy, and GE Capital (a related entity) had offered to finance the Project fully. General Electric issued a letter of credit directly to the OPA for the Project. GE Capital and GE had the capacity to provide that funding; and
- f. The Project was able to meet the construction timeline set out in the development budget. This assumption is reasonable as these timelines are consistent with the construction timelines provided by GE, as reflected in the GE turbine agreement and with other development timelines we have observed in other wind projects.

⁴⁶ Investor's Schedule of Exhibits **C-210** Green Energy Investment Agreement January 21, 2010 (article 7.3a).

Key Components of Economic Loss Calculations

- 7.3.4 The Economic Loss calculation considers eight primary components. The primary components of the Economic Loss calculation are as follows:
 - a. Time period of loss;
 - b. Commercial operation date;
 - c. Forecast revenue;
 - d. Development and construction costs;
 - e. Operating costs;
 - f. Tax attributes;
 - g. Financing; and
 - h. Discount rate.
- 7.3.5 Each of the above components are discussed in the following sections of this document.

Time period of loss

- 7.3.6 Economic Losses have been determined for the Period of Loss considering the following:
 - Historical development expenditures have been incurred from the commencement of the Project to the Valuation Date related to Article 1105;
 - b. A remaining development period of 23 months for Skyway leading up to the construction period;
 - c. A ten-month construction period from the end of the development period to the commercial operating date ("COD");
 - d. A 20-year operating period starting March 31, 2014, reflecting the term of the FIT contract; and
 - e. No terminal value, as we have assumed the continued use or salvage value approximates the reclamation costs.

Commercial Operation Date

- 7.3.7 We have assumed a Commercial Operation Date ("COD") based on the Korean Consortium's proposed timelines for its project, which is consistent with Tennant's allegations in the NAFTA claim.
- 7.3.8 We have assumed that such timelines represent an approval timeline that would be achievable had Tennant received the same treatment as other applicants.

7.3.9 The timelines proposed for the Korean Consortium's projects in the Amended GEIA are as follows:

Phase	Targeted Generation Capacity – Wind (MW)	Targeted COD (as set in Jan 21, 2010 agreement) ⁴⁷	Targeted COD (as set in July 28, 2011 amended agreement) ⁴⁸
Phase 1	400	March 31, 2013	March 31, 2014
Phase 2	400	December 31, 2013	December 31, 2014
Phase 3	400	December 31, 2014	December 31, 2015
Phase 4	400	December 31, 2015	December 31, 2016
Phase 5	400	December 31, 2016	December 31, 2017
	· · · · · · · · · · · · · · · · · · ·	·	

Table 7.3.9

- 7.3.10 We note that the initial Skyway 127 FIT application estimated a COD of January 30, 2013, ⁴⁹ which is before assumed COD. We conducted research of other known FIT 1 contracts awarded (see analysis contained within section 4.4.1c above) and observed that the earliest COD dates for awarded contracts was 2014.
- 7.3.11 Based on the above, we assumed a COD of March 31, 2014 for Skyway, as this is consistent with the expected COD for the Korean Consortium's phase 1 projects, 50 as well as the indications from other projects that received FIT 1 contracts on July 4, 2011 for the Bruce Region.
- 7.3.12 COD of March 31, 2014 was determined to be reasonably achievable given that The Korean Consortium would have had approximately 2 years and 8 months from the Amended GEIA to the targeted COD. Therefore, the Korean Consortium's proposed timeline was in line with the expected timeline for Tennant's Project had they received a FIT Contract on July 4, 2011, given that they would have had approximately 2 years and 9 months to the targeted COD.

Forecast Revenue

7.3.13 The following describes the components of revenue that were considered and estimated as part of our analysis.

⁴⁷ Investor's Schedule of Exhibits **C-210** Green Energy Investment Agreement January 21, 2010 (article 3.2).

⁴⁸ Investor's Schedule of Exhibits **C-221** Green Energy Investment Agreement – Amending Agreement July 29, 2011 (article 7).

 $^{^{49}}$ Investor's Schedule of Exhibits **C-026** (000080) OPA FIT Program Application - Skyway 127 (Final) - Nov 26 2009

⁵⁰ Investor's Schedule of Exhibits **C-221** Green Energy Investment Agreement – Amending Agreement July 29, 2011 (article 6).

- a. Power price: We assumed a contract price of \$0.135 per kWh, equivalent to \$135.0 per MWh, which was the guaranteed power price set out by the OPA in July 2011 for onshore wind energy projects. In accordance with the terms set out in the FIT contract, ⁵¹ we also inflation-indexed the price per MWh to reflect the period between the date the FIT pricing was set and the COD. The inflation-indexed price in effect at the COD is \$144.4 per MWh.
- b. Power price escalation: Based on the terms of the FIT contract, the escalation percentage is 20.0%, meaning that 20.0% of the price per MWh is to be inflation-adjusted on an annual basis during the operation of the Project based on the historical inflation for the years up until 2020, and inflation forecast onwards. We have escalated the power price annually by 0.4% which is equal to 20.0% of the forecast consumer price index inflation rate ⁵² from the Economist Intelligence Unit and the mid-point of the Bank of Canada target inflation range of 1.0% to 3.0%.
- c. Annual energy production: We assumed an average annual energy production volume based on the financial projects provided. Based on the project's rated capacity, the annual energy production volumes translate to net capacity factors as summarized below.

	2.75XL turbine						
	Average annual energy production	Capacity	Net capacity factor				
Skyway	294,139	101.8	33.0%				
Skyway	294,139	101.8	33.0%				

Table 7.3.13

d. The net capacity factor is based on a P50 statistical assumption which we understand reflects the mean outcome (i.e. expected value) of wind energy production. The wind capacity factor has been reviewed by industry participants as at the date of the preparation of this report and is consistent with wind data for the Skyway site, wind studies for a site that is adjacent to and overlaps the Skyway site (the Arran site that was to be developed by Mesa energy) and industry expectations, given the use of the 2.75 WM turbines. GL Garrad Hassan prepared a wind study for the Arran Wind Project dated June 25, 2010. The P50 output production

⁵¹ Investor's Schedule of Exhibits **C-057** (000230) FIT Contract Version 1.5.1 July 15, 2011, Indexation (Exhibit B, Article 1.3)

⁵² Investor's Schedule of Exhibits **C-058** (000231) Economic Intelligence Unit Canada Country Report, August 2015. Based on the FIT Standard Definitions Version 1.5.1 July 15, 2011, the consumer price index used to calculate the power price escalation is the Bank of Canada target inflation rage

conclusions in that report reflect a capacity factor for a 2.5 xl turbine with a 100 M hub height of 29.3%. The GL Garrad Hassan wind study for the Arran project is consistent with the capacity factor of 30.6% for the 2.5xl turbine with a 100 M hub height for the Skyway 127 Project and supports the capacity factor of 33.0% for the 2.75 xl turbine with a 100 M hub height for the Skyway Project. Based on discussions with Mr. Chuck Edey, we understand a higher capacity factor is expected for a larger turbine and that the 33% capacity factor for the 2.75 xl turbine with a 100 M hub height is reasonable based on the capacity factor of 29.3% for the 2.5 xl turbine with a 100 hub height for the Arran wind project.

Development and Construction Costs

- 7.3.14 This section discusses our analysis and estimate of development and construction costs included in our Economic Loss calculations.
- 7.3.15 Development costs include all costs incurred to plan the development of the Project, to obtain the necessary feasibility and environmental studies for approvals, and any other costs incurred prior to construction which are necessary to bring the project to the construction stage.
- 7.3.16 The development costs and remain development period (from the date of the FIT contract award to the start of construction) are summarized below:

	Development costs	Development period (months)
Skyway	\$4,998,000	23

Table 7.3.16

- 7.3.17 In respect of construction costs, the two main components include 1) the wind turbines and 2) costs paid to a contractor to construct the infrastructure, the foundations and install / erect the wind turbines.
 - a. Wind turbine pricing: We considered the cost of the 2.75xle wind turbines based on the component costs of the wind turbines and the prices provided by GE. ⁵⁴ GE provided a quote letter dated January 17, 2012⁵⁵ that contained pricing for the 2.75xle turbines consistent with GEE Budget Model.

⁵³ Investor's Schedule of Exhibits **C-108** (000324) Assessment of the Energy Production of the Proposed Arran Wind Energy Project – June 25, 2010

⁵⁴ Investor's Schedule of Exhibits **C-035** (000163) Skyway 127 - GEE Budget Model - 70% to 100% Equity - April 26, 2012

⁵⁵ Investor's Schedule of Exhibits **C-034** (0001156) Quote Letter GE Energy Skyway 127 – Jan 17, 2012

- b. Engineering, procurement and construction ("EPC") pricing: Based on our understanding, we obtained the EPC cost from the Skyway 127 GEE budget model (the "GEE Budget Model") assumptions.⁵⁶ EPC costs relate to various elements including access roads, the turbine foundation, turbine erection, the overhead collector system. We have considered the contractor costs based on price quotations provided by the GEE Budget Model.
- c. Development Fees available for distribution: We note that the GEE Budget Model ⁵⁷ included additional development fees of \$10.0 million that was indicated as being available for distribution (i.e. the total amount contributes immediately positively to the net present value as an immediate distribution). Based on our understanding of the mechanics of this fee, we exclude this amount from the composition of capital costs as it represents additional profit to the developer rather than a capital cost.
- d. Other capital costs: Based on our understanding, the other capital costs are comprised of a working capital investment and debt reserve costs as presented within the Skyway 127 GEE budget model. 58 The debt reserve is assumed to be released when the total debt is repaid, and working capital is assumed to be released at the end of the Project operating life. Both elements are assumed to be funded at the termination of the construction period.
- e. Contingency costs: based on our understanding, the contingency costs are calculated at 2.0% of the total EPC costs as per the Skyway 127 GEE budget model assumptions⁵⁹.
- 7.3.18 We summarize the capital costs below based on 2012 GEE Budget Model assumptions for turbines, engineering, procurement, other capital costs, and contingency costs. The total construction costs have been adjusted for inflation and stated in Canadian dollars:

CAD	2.75Xxle turbine
Wind Turbine Generator ("WTG") cost	\$3,493,500/WTG
Other WTG related costs	\$1,099,500/WTG
Project development, management, and legal costs	\$4,997,900

 $^{^{56}}$ Investor's Schedule of Exhibits $\textbf{C-035} \pmod{000163}$ Skyway 127 - GEE Budget Model - 70% to 100% Equity - April 26, 2012

 $^{^{57}}$ Investor's Schedule of Exhibits **C-035** (000163) Skyway 127 - GEE Budget Model - 70% to 100% Equity - April 26, 2012

 $^{^{58}}$ Investor's Schedule of Exhibits **C-035** (000163) Skyway 127 - GEE Budget Model - 70% to 100% Equity - April 26, 2012

⁵⁹ Investor's Schedule of Exhibits **C-035** (000163) Skyway 127 - GEE Budget Model - 70% to 100% Equity - April 26, 2012

Total construction costs (CAD)	\$192,926,000
Contingency	\$3,477,000
Other capital costs	\$10,616,000

Table 7.3.18

- 7.3.19 In addition to the above, financing fees and capitalized interest are added to the total construction costs. Financing fees are calculated as 3.0% of total debt in accordance with the assumption contained within the GEE Budget Model. 60 Capitalized interest is assumed to accrue at a rate of 6.0%, which is consistent with the long-term financing rate assumed for the Project which is discussed below. Capitalized interest is assumed to be paid in kind by the drawdown of additional debt principal until the construction period is complete and the repayment of term debt commences.
- 7.3.20 In order to assess the reasonability of the estimated capital costs, we considered capital costs per MW based on industry reports summarized below as a benchmark for the Project's capital costs (including development costs).

Sk	Skyway 127			ndustry Reports			
	Project capacity	Total capital costs (CAD\$M)	Capital costs US\$ million per MW	Low	Averag e	Median	High
Skyway	101.8	\$192,926	1.97	1.75	2.03	2.05	2.22
T-61- 7 2 2	20						

Table 7.3.20

- 7.3.21 Industry reports suggest that capital costs are in the range of \$1.8 million to \$2.2 million per MW. The capital costs estimated for the Project are within the range of the benchmark data, and approximate the median capital cost per MW. Therefore, we consider the capital costs estimated to be reasonable.
- 7.3.22 Further to the above, we additionally consider the capital cost per MWh based on indicative data for Canadian on-shore wind pre-construction projects, as summarized below:

	Skyway 127			Industry Reports			
	Project capacity	Total capital costs (CAD\$M)	Capital costs US\$ million per MW	Low	Average	Median	High
Skyway	101.8	\$192,926	1.97	1.46	2.44	2.50	3.47

Table 7.3.22

 $^{^{60}}$ Investor's Schedule of Exhibits **C-035** (000163) Skyway 127 - GEE Budget Model - 70% to 100% Equity - April 26, 2012

7.3.23 This analysis of Canadian on-shore wind pre-construction projects suggests that indicative capital costs are within the range of \$1.5 million to \$3.5 million per MW. Each Canadian On-shore wind preconstruction project considered has the following specification:

Project/Link	Size of Turbine Used	Capital costs US\$ million per MW			
Canadian On-Shore Wind Pre-Construction Projects					
Des Moulins 135.7MW Wind Farm ⁶¹	2.0 MW	2.27			
C2C Power Portfolio Financing (2012) ⁶²	N/A	N/A			
L'erable 100MW Wind Farm ⁶³	2.0 MW	2.51			
Monteregie 100 MW Wind Farm ⁶⁴	2.3 MW	2.54			
Seigneurie de Beaupre 272MW Wind Farm ⁶⁵	N/A	2.70			
Le Plateau 138MW Wind Farm ⁶⁶	2.3 MW	N/A			
Pointe Aux Roches 48.6MW Wind Farm ⁶⁷	1.8 MW	N/A			
Glen Dhu 62MW Wind Farm ⁶⁸	2.3 MW	1.88			
Comber 165MW Wind Farm ⁶⁹	2.3 MW	3.47			
Amherst 31.5MW Wind Farm ⁷⁰	2.1 MW	1.94			
Gosfield Wind Farm ⁷¹	2.3 MW	2.80			
St Joseph Wind Farm ⁷²	2.3 MW	2.50			
Halkirk I Wind Farm ⁷³	1.8 MW	2.50			
Mount Louis ⁷⁴	1.5 MW	1.46			
Lac Alfred Wind Farm ⁷⁵	2.0 MW	2.20			
Kruger Energy Chatham Wind Project ⁷⁶	N/A	2.76			
McLean's Mountain ⁷⁷	2.9 MW	3.17			
Montange Seche ⁷⁸	N/A	1.89			

Table 7.3.23

The capital costs estimated for the Project are within the range of the 7.3.24 benchmark data. Capital costs can be influenced by project specific factors and geography, and we note that the assumed capital cost for Skyway exceeds that identified for four projects and is less than that

⁶¹ Investor's Schedule of Exhibits **C-080** (000253) – Des Moulin Wind Farm

⁶² Investor's Schedule of Exhibits C-081 (000254) - C2C Power

 ⁶³ Investor's Schedule of Exhibits C-082 (000255) – De L'erable Wind Farm
 ⁶⁴ Investor's Schedule of Exhibits C-083 (000256) – Parc eolien Monteregie Wind Farm

⁶⁵ Investor's Schedule of Exhibits **C-084** (000257) - Seigneurie de Beaupre Wind Farm

⁶⁶ Investor's Schedule of Exhibits C-085 (000258) - Le Plateau Wind Power

⁶⁷ Investor's Schedule of Exhibits **C-086** (000259) – Pointes Aux Roches Wind Farm

⁶⁸ Investor's Schedule of Exhibits **C-087** (000260) – Glen Dhu Wind Energy

⁶⁹ Investor's Schedule of Exhibits **C-088** (000261) - Comber Wind Project

⁷⁰ Investor's Schedule of Exhibits **C-089** (000262) – Amherst Wind Farm

⁷¹ Investor's Schedule of Exhibits **C-090** (000263) – Gosfield Wind farm

⁷² Investor's Schedule of Exhibits **C-091** (000264) – St Joseph Wind Farm

 ⁷³ Investor's Schedule of Exhibits C-092 (000265) – Halkirk Wind Capital Power
 74 Investor's Schedule of Exhibits C-093 (000266) – Northland Power Mont Louis

⁷⁵ Investor's Schedule of Exhibits **C-094** (000267) - Lac-Alfred Wind

⁷⁶ Investor's Schedule of Exhibits **C-095** (000268) - Kruger Energy

⁷⁷ Investor's Schedule of Exhibits **C-096** (000269) – McLean's Mountain

⁷⁸ Investor's Schedule of Exhibits **C-097** (000270) – Montage Seche

identified for eleven projects for which data is available. Further, the largest element of the capital costs is the cost of the turbines, which is contractually established for Skyway. Therefore, we consider the capital costs estimated to be reasonable.

Operating Costs

7.3.25 Below is a summary of the operating costs assumed for the Project:

CAD	Skyway
Land lease payment	3.7% of revenue
Service and maintenance (first 10 years)	\$109,954/ WTG
Service and maintenance (remaining years)	\$49,979/WTG
BoP O&M	\$4,998/WTG
Property tax	\$1,698,918/year
Insurance	\$399,832/year
Retrofit and decommissioning reserve	\$199,916/year
Administration	\$85,214/year
Miscellaneous	1.8% of revenue

Table 7.3.25

- 7.3.26 As outlined above, we consider the following operating costs in our determination of the Economic Losses of the Project:⁷⁹
 - a. Land royalty payments: We understand that Skyway 127 entered into land option agreements for the project. Based on the information that we have received as at the writing of this report, the land royalty payments are 3.7% of revenue based on the GEE Budget Model, and are estimated to grow at a rate of 1.5% of historical inflation until 2020, and 2.0% annually thereafter based on the applicable long term rate of inflation as at the Valuation Date;
 - b. Service & maintenance of WTGs: These costs are incurred to service and maintain the turbines. Based on the GEE Budget Model, we understand that service and maintenance is split into two distinct periods. Annual costs per WTG are \$109,954 for the first ten years (i.e. the warranty period), which then decreases to \$49,979 for the remaining ten years until the end of the operating period. These costs are and are estimated to grow at a rate of 1.5% of historical inflation until 2020, and 2.0% annually thereafter based on the applicable long term rate of inflation as at the Valuation Date;
 - c. Balance of plant ("BOP") maintenance: BOP maintenance costs relating to the wind farm, other than the wind turbines, are forecast

 $^{^{79}}$ Investor's Schedule of Exhibits **C-035** (000163) Skyway 127 - GEE Budget Model - 70% to 100% Equity - April 26, 2012

- to be \$5.0 million in the first year of operations based on the GEE Budget Model and are estimated to grow at a rate of 1.5% of historical inflation until 2020, and 2.0% annually thereafter based on the applicable long term rate of inflation as at the Valuation Date;
- d. Property taxes: The GEE Budget Model has indicated that property taxes would be \$1.7 million annually, which we assume will increase at 1.5% of historical inflation until 2020, and annually thereafter based on the applicable long term rate of inflation as at the Valuation Date;
- e. Insurance: Based on the GEE IRR forecast ⁸⁰ for 101.8MW, insurance costs are estimated to be \$0.4 million in the first year of operations. We understand that the GEE Budget Model has assumed a \$4.0 million annual insurance cost, though we have utilized the insurance cost in the IRR forecast to align with market expectations for operating costs per MWh. We note that comments embedded within the GEE Budget Model indicated uncertainty with respect to the magnitude of the assumption included therein. The insurance costs are estimated to increase at a rate of 1.5% of historical inflation until 2020, and 2.0% annually thereafter based on the applicable long term rate of inflation as at the Valuation Date;
- f. Retrofit and decommissioning reserve: Retrofit and decommissioning costs are forecast to be \$0.2 million in the first year of operations based on the GEE Budget Model and are estimated to grow at a rate of 1.5% of historical inflation until 2020, and 2.0% annually thereafter based on the applicable long term rate of inflation as at the Valuation Date. Repowering / salvage value of the project assets would offset any reclamation / As a result, the inclusion of retrofit and remediation costs. decommissioning costs which total \$5.2 million over the term of the FIT contract is conservative;
- g. Administration: Each wind farm requires an individual to manage the project during commercial operation. Administration costs are forecast to be \$0.1 million in the first year of operations based on the GEE Budget Model and are estimated to grow at a rate of 1.5% of historical inflation until 2020, and 2.0% annually thereafter based on the applicable long term rate of inflation as at the Valuation Date;

 $^{^{80}}$ Investor's Schedule of Exhibits **C-037** (000163) Skyway 127 – IRR forecast 100 MW - FIT Pricing – 40 GE 2.5xl 100M

h. Miscellaneous: Miscellaneous expenses such as the community trust fund expenses are calculated at calculated in the order of 1.7% of revenue generated each year based on the GEE Budget Model.

Reasonability assessment

7.3.27 To assess the reasonability of Skyway 127's estimated operating costs per MWh of production, we have considered the operating costs per MWh of production discussed in industry reports, as summarized below:

	Skyw	ay 127	Industry Reports			
	Project capacity	Operating costs (\$/MWh)	Low	Average	Median	High
Skyway	101.8	30.11	9.00	14.89	15.00	24.00
Table 7.3.27						

Industry reports suggest that operating costs should be in the range of 7.3.28 \$9.00 to \$24.00 per MWh. The operating costs estimated for the Project by Tennant, and used in our Economic Loss calculations, are above the range of the industry benchmarks noted above, as such, it is implied that the Project's margins were forecast to be lower than industry benchmarks when considering a consistent revenue structure.

Tax Attributes

- 7.3.29 We considered the tax attributes available to Skyway 127 in our DCF analyses including specific tax incentives available for renewable energy projects as at July 4, 2011.
- 7.3.30 The following tax attributes are relevant to our Economic Loss analysis:
 - Capital cost allowance ("CCA") Class 1b: This class relates to costs a. incurred to purchase or bring buildings into use for the Project. The costs can be deducted against taxable income on a declining balance basis, to the extent available, at a rate of 6.0% and carried forward indefinitely;
 - CCA Class 17: This class relates to costs incurred to construct b. access roads for the Project. The costs can be deducted against taxable income on a declining balance basis, to the extent available, at a rate of 8.0% and carried forward indefinitely;
 - CCA Class 43.2: This class relates to costs incurred to purchase c. renewable energy equipment, such as the wind turbines. Balances

- in this class can be deducted against taxable income on a declining balance basis, to the extent available, at an accelerated rate of 50.0% and carried forward indefinitely; and
- d. Canadian Renewable Conservation Expenses ("CRCE"): This class relates to costs that generally include expenditures for the preproduction development phase of projects, such as pre-feasibility and feasibility costs, for which equipment is included in CCA class 43.1 or 43.2. Based on our understanding, the development costs incurred and anticipated by Skyway 127 would qualify as CRCE and can be fully deducted against taxable income, to the extent available, and carried forward indefinitely.

Financing

- 7.3.31 We considered financing costs for the Project based on specific factors and industry benchmarks.
- 7.3.32 We understand that Management had preliminary discussions with various lenders relating to the financing of the Project. In addition, we understand that GE had completed discussions with lenders regarding financing.
- 7.3.33 The GEE Budget Model reflected financing equal to 70% of the total project development costs. The financing had a 15 year term and an interest rate of 4.74% Documentation to support the financing terms negotiated by GE was not available and therefore we have not adopted the more favorable financing rates considered by GE.
- 7.3.34 The following summarizes the financing terms estimated and reflected for the purpose of our analysis:
 - a. the debt capacity for the Project was estimated at 70.0% of the construction costs (with the debt capacity reflecting a lower proportion of the total capitalization of the Project when the initial equity is considered); and
 - b. the financing would have been obtained through a term loan at an interest rate of 6.0%, and is assumed to be amortized over 15 years. Further, construction financing would also have been obtained at an interest rate of 6.0%.
 - c. we note that the model assumes the discount rate and the considerations as at the Valuation Date. If the current assumptions for financing and discount rates were used, then the value of the project would be materially higher.
- 7.3.35 The aforementioned financing terms are consistent with Deloitte's internal knowledge of financing of renewable energy projects and market research, which is presented below.

7.3.36 Based on our analysis, the above financing terms are consistent with our research of Canadian on-shore wind pre-construction projects with the COD of 2011 to 2014, as summarized in table below:

Project	
Canadian On-Shore Wind Pre-Construction Projects	Cost of Debt
Seigneurie de Beaupre 272MW Wind Farm	3.20%81
Comber 165MW Wind Farm	4.85%82
Amherst 31.5MW Wind Farm	6.20%83
Gosfield Wind Farm	6.30%84
Mount Louis	6.60%85
McLean's Mountain	$6.01\%^{86}$
Montange Seche	6.47%87

Table 7.36A

Summary	Sky	way 127		Market Co		
	Project Cost of debt		Low	Average	Median	High
Skyway	101.8	6.0%	3.2%	5.7%	6.2%	6.6%

Table 7.3.36B

- 7.3.37 Deloitte's market research suggest that the cost of debt to be in the range of 3.2% to 6.6%, with an average of 5.7% and median of 6.2%.
- 7.3.38 The selected cost of debt for Skyway 127's Project is between the average and the median of the cost of debt observed in the market during the period that coincides with the expected development of Skyway.
- 7.3.39 Overall, based on the above analysis, we have assessed that the financing terms of 15 years and at 6.0% for the Project to be reasonable.

⁸¹ Investor's Schedule of Exhibits **C-098** (000271) – Seigneuire de Beaupre Wind Farm Debt

 ⁸² Investor's Schedule of Exhibits C-099 (000272) - Comber Wind Farm Debt
 83 Investor's Schedule of Exhibits C-100 (000273) - Amherst Wind Farm Debt

⁸⁴ Investor's Schedule of Exhibits **C-101** (000274) - Gosfield Wind Farm Debt

⁸⁵ Investor's Schedule of Exhibits **C-102** (000275) – Mount Louis Debt

⁸⁶ Investor's Schedule of Exhibits **C-109** (000276) – Mount McLean's Debt

⁸⁷ Investor's Schedule of Exhibits **C-110** (000277) - Montage Seche Debt

Discount Rate

- 7.3.40 For the purpose of our analysis, we determined a discount rate as at the Valuation Date being August 15, 2015. The discount rate is used to determine the present value of cash flows that would have occurred subsequent to the Valuation Date.
- 7.3.41 We highlight that the discount rate is applied exclusively to the Post-Valuation Date Cash Flows, as the Valuation Date is subsequent to the date at which the Project would have achieved COD. As a result of the discount rate being applied to operating cash flows (i.e. cash flows subsequent to COD), the discount rate that is determined is intended to reflect the risk associated with an operating project. While construction risk is accounted for in the calculation of the Pre-Valuation Date Cash Flows in the form of a contingency factor (see 7.3.58 below), we also consider that development and construction risk continues to exist within the Post-Valuation Date Cash flows, given that the Project has not been developed or constructed.
- 7.3.42 The forecast cash flows are on a levered basis (included interest and principal repayments) and therefore the discount rate is a cost of equity. The methodology and each of the components of the discount rate is discussed below.
- 7.3.43 One of the most common approaches to estimate an appropriate cost of equity is through the use of the capital asset pricing model ("CAPM").
- 7.3.44 The CAPM is based on the theory of portfolio diversification where investors are compensated through increased return for taking on the systematic risk of an investment, which is risk that cannot be eliminated through diversification.
- 7.3.45 The CAPM estimates the cost of equity based on the following formula:

Cost of Equity =
$$Rf + (ERP * \beta) + SP + CSRP$$

- 7.3.46 The CAPM relies on observable market inputs to reflect a market based method to estimate an appropriate risk adjusted rate of return. The elements of the formula are defined as follows:
 - A risk free rate of return ("Rf");
 - A general equity risk premium ("ERP");
 - A measure of the industry specific risk, the beta coefficient (" β ");
 - A size premium ("SP"); and,
 - A Company specific risk premium ("CSRP").
- 7.3.47 The specific components that are considered in estimating a company's cost of equity using the CAPM are described as follows:

Risk free rate

7.3.48 The risk-free rate represents the rate of return associated with very low-risk investments. The horizon of the chosen security is based on the likely investment horizon for an investment in the particular asset or shares that are subject to analysis. Accordingly, yields on medium or long-term government bonds are typically used to reflect the risk free rate for a business that is being treated as a going-concern.

Equity risk premium

7.3.49 The equity risk premium represents the additional return an investor expects to receive to compensate for the additional risk associated with investing in equities as opposed to investing in riskless assets. The equity risk premium is essentially the difference between the expected rate of return on the market portfolio and the risk-free rate. The equity risk premium is calculated as the historical return on the market portfolio less the historical risk-free rate of return.

Beta coefficient

7.3.50 To adjust for the differing risks of particular industries versus the equity market in general, the CAPM uses a multiple of the equity risk premium that reflects the volatility of the return on a stock relative to the stock market in general. This beta factor considers industry specific volatility. Beta describes how the expected return of a stock or portfolio is correlated to the return of the financial market as a whole. By analyzing the beta factors for companies in the same industry, a measure of industry risk can be estimated.

Unsystematic risk factors

- 7.3.51 Unsystematic risk factors relate to risks specific to the company or investment in question and are typically categorized as country risks, size risks and company or investment specific risks. A country adjustment factor is typically included to adjust for the differing risks related to an investment in a non-U.S. entity compared to an investment in a U.S. entity. This adjustment is required as the risk free rate, equity risk premium and size premium are all derived from US financial and equity market data while the investment in question would reflect risks associated with an investment in Canada.
- 7.3.52 To adjust for the differing risks related to a company's size, the CAPM considers a size premium as one element of company or investment specific risk.

7.3.53 A Company specific risk premium is an expansion to the traditional CAPM and considers the specific risk that may be attributable to a company or investment as a result of size, customer concentration, management depth, key person dependence, forecast risk and other items specific to the company or investment.

Cost of equity calculation

- 7.3.54 On Schedules 6, we estimate the cost of equity ("COE") considered appropriate for the Project.
- 7.3.55 The COE represents the after-tax cost of equity. We determined the COE for the Project to be in the range of 8.5% to 11.0% on the basis of the following:

Component	Calculation Methodology	Assumption
Risk-free rate	Calculated as at August 15, 2015, based on the 20 year U.S Treasury Constant Maturity Yield.	2.5%
Equity risk premium	Based on Deloitte independent calculations and Duff & Phelps annual equity risk premium calculations. 88 An equity risk premium provides an allowance for additional risks, associated with an investment in common shares relative to an investment in government bonds.	6.5%
Unlevered beta	Based on the betas of selected publicly-traded companies in the same or similar business as that of the Company. The beta factor is applied to the equity risk premium to reflect the relative risk of the renewable energy industry relative to the entire equity market.	0.33
Debt to capital ratio	Based on the expected leverage of the Project, considering the forward-looking capital structure implied by the Project cash flows and amortizing term debt, as well as the capital structure observed for guideline public companies. This is estimated for the purposes of relevering the unlevered beta.	30.0% to 40.0%
Country risk premium	Based on the Damodaran Country Risk Premium as at July 2015.89	0.0%

 $^{^{88}}$ Investor's Schedule of Exhibits C-059 (000232) – Duff & Phelps Valuation Handbook 2015 Guide to Cost of Capital.

⁸⁹ Investor's Schedule of Exhibits **C-060** (000233) - Country Risk Damodaran - July 2015

Size premium	A size premium increases the return on equity to compensate for the perceived additional risk typically associated with factors related to entity size such as liquidity (i.e. higher default risk), reduced access to capital markets and lack of pricing power. The size premium is related to earnings / cash flow volatility. Given the contractual nature of the project, the size of the project does not impact cash flow volatility (other than the diversification impact) nor does it impact liquidity or pricing power. The cash flows for the Project are based on having a FIT Contract and therefore the impact of the size of the Project is not a relevant consideration in the determination of the cost of equity for the Skyway project.	0.0%
Specific risk premium	A specific risk premium was determined considering the following factors:	3.0 to 4.0%
	 Pursuant to the GEIA, the Government of Ontario was required to facilitate the necessary regulatory approvals and permits;⁹⁰ 	
	 It is assumed that all necessary regulatory approvals and permits would be received. The limited risk is based on the requirement for the Government of Ontario to treat all applicants equally and the experience that virtually all of the applicants who received a FIT contract on July 4, 2011 achieved COD (and therefore received all necessary regulatory approvals and permits); 	
	 The Project was exposed to development and construction risk, which provides incremental risk relative to the guideline companies used 	

 The projects and operations of the guideline companies are more diversified than Skyway's single project;

to estimate beta as a portion of the guideline companies' projects would be operational and therefore not subject to development and

• Some of the guideline companies have projects that are less developed than the

construction risk;

 $^{^{90}}$ Investor's Schedule of Exhibits **C-210** Green Energy Investment Agreement January 21, 2010 (article 7.3a).

- Skyway project and as a result, the guideline companies' earlier stage projects would be at greater risk than the Skyway project; and
- The price per MWh of the Project is set at the terms outlined in the FIT Contract and therefore is stable and predictable whereas the comparable industry participants do not have all of their revenue under contracts or under contracts with similar terms.

Table 7.3.54

- 7.3.56 We note that the selected after-tax cost of equity range of 8.5% to 11.0% for the Project is at the high-end of the range equal to the after-tax return on equity of 11.0% included in the Proposed FIT price schedule presentation, dated April 2009 and prepared by the OPA. This reflects both the market conditions for renewable projects as at the Valuation Date relative to the date of the aforementioned publication, as well as the non-operational status of the Project as at the Valuation and Notification Date (although the Project is assumed to have reached COD in advance of the Valuation Date for the purposes of valuation).
- 7.3.57 The forecast reflects cash flow after debt service (principal and interest) and therefore the cash flows as estimated represent the after tax return available to equity investors. Due to the nature of the amortizing project financing available, the Project is not financed at a fixed level of leverage over its full operating life. Therefore, the COE calculation considers the capital structure implied over the entirety of project life on a present value weighted basis.

Contingency Factor

- 7.3.58 A contingency factor is applied to the Pre-Valuation Date Cash Flows to reflect the risk associated with the realization of such cash flows. Given that such cash flows would technically have been realized as at the Valuation Date, they would not be subject to discounting as at the Valuation Date. The inclusion of a contingency factor is intended to reflect the additional uncertainty that exists.
- 7.3.59 We consider that, while such cash flows are assumed to have occurred prior to the Valuation Date, the fact that the Project was not

⁹¹ Investor's Schedule of Exhibits C-061 (000234) – Proposed Feed-in Tariff Price Schedule, Stakeholder Engagement – Session 4, April 7, 2009

- constructed prior to the Valuation Date results in additional estimation uncertainty than would be the case for a completed project.
- 7.3.60 We identified that the primary component of the Pre-Valuation Date Cash Flows is the development and construction costs for the Project. Such costs primarily relate to the cost of physical turbines for which agreements were in place with GE. Such development and construction costs also include a contingency of 2.0%. 92 We have considered an additional contingency of +/-5.0% to reflect incremental estimation uncertainty associated with such costs that in fact have not been realized as at the Valuation Date. In establishing the magnitude of this contingency, we considered the following factors:
 - Pursuant to the GEIA, the Government of Ontario was required to facilitate the necessary regulatory approvals and permits;93 and
 - There was a very high probability that all necessary regulatory approvals and permits would be received. The limited risk is based on the requirement for the Government of Ontario to treat all applicants equally and the experience that virtually all of the applicants who received a FIT contract on July 4, 2011 achieved COD (and therefore received all necessary regulatory approvals and permits).
- 7.3.61 This contingency factor is applied to all Pre-Valuation Date Cash Flows.

7.4 Market Approach

7.4.1 As earlier discussed, we have used the DCF approach as our primary calculation methodology to estimate Economic Losses. In addition, we have also considered and analyzed the Market Approach to support and test our Economic Loss conclusions.

Guideline Transactions

- 7.4.2 In doing so, we considered value relationships implied by selected market transactions involving the sale of somewhat similar projects.
- 7.4.3 We recognize the limitations in directly applying transaction references in the context of the Project due to the different geographic areas served, Domestic Content Requirements, terms of power pricing agreements, wind and project size. This approach represents solely a reasonability test.

 $^{^{92}}$ Investor's Schedule of Exhibits **C-035** (000163) – Skyway 127 - GEE Budget Model - 70% to 100% Equity - April 26, 2012

⁹³ Investor's Schedule of Exhibits **C-210** Green Energy Investment Agreement January 21, 2010 (article 7.3a).

- 7.4.4 Notwithstanding the above, we believe it is relevant to consider implied transaction references in assessing the overall conclusions as to the Economic Losses related to the Project.
- 7.4.5 In order to identify guideline projects we focused our search to wind farms that were:
 - a. In Canada;
 - b. On-shore; and,
 - c. Are in late-stage development, construction, or operation (i.e. installed), given the Valuation Date reflects a date at which the Project would be in operation, while the Pre-Valuation Date Cash Flows reflect a period over which the Project would be in development and under construction. We have also considered projects in other stages where they were in a similar geography to Skyway 127.
- 7.4.6 We classified guideline projects as early-stage, late-stage, under construction or installed based on the following framework:

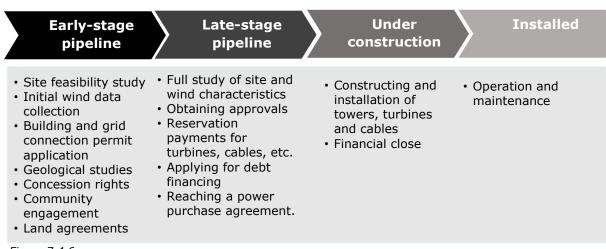


Figure 7.4.6

- 7.4.7 Given the assumption that the Project would have received a FIT contract and would have benefited from equitable treatment by the government in terms of assistance with achieving the required regulatory and connection point approval, the Project would be more comparable to late-stage projects as at the Notification Date.
- 7.4.8 Further, given the Valuation Date reflects a date at which the Project would have already achieved COD, the Project would have excluded significant construction and development costs as at the Valuation Date and would therefore be somewhat more comparable to installed projections (i.e. those in operation).

7.4.9 Based on the above noted criteria, we have considered three guideline projects. Based on information related to the guideline transactions we have calculated value metrics implied in the transactions that can be compared to the same value metric implied by our conclusion as to value for the Project, as detailed below:

Project(s)	Location	Date	Stage	Capacity	Implied multiple (\$million/MW)
NextEra - Jericho Wind	Ontario	Oct-15	Installed (COD 2014)	149 MW	4.7x
Suncor – Kent Breeze and Wintering Hills	Alberta / Ontario	Aug-15	Installed (COD 2011)	65 MW	2.1x
Greengate – Blackspring Ridge	Ontario	Apr-13	Late-stage (COD 2014)	300 MW	2.0x
Minimum Average Median Maximum			, , ,		2.0x 2.9x 2.1x 4.7x
Skyway 127					2.9x

Table 7.4.9

- 7.4.10 We note that based on the above analysis, the intrinsic value of the Project is consistent with the range of values observed for the above-selected guideline projects. We consider this to be driven by a series of factors that influence the relative value of the Project to the identified guideline transaction targets.
- 7.4.11 Based on our scope of review and analysis, it is our view that the Project should have a implied value that is consistent with the identified the guideline projects because:
 - a. The power prices offered in the FIT contracts in Ontario are expected to be higher than other regions in North America and therefore the profitability per MW of the Project is higher resulting in an investor paying more for the same level of production. This reflects projects in Ontario in many cases receiving a premium to projects in other jurisdictions, and also reflects such projects being most easily compared to other Ontario projects;
 - b. The observed multiples for installed projects in a similar jurisdiction with similar CODs reflect a range of multiples of 2.1x to 4.7x, with an average of 3.4x. We consider that the implied multiple of 3.0x for Skyway 127 is consistent with the value indications for such projects. We consider that, as at the Valuation Date, Skyway 127 would merit a multiple below that for a fully operational project in Ontario given the existence of development and construction risk for the Project given it has not been developed and constructed. We also consider that the multiple would be higher than that for projects where the PPA term is less than 20 years (i.e. Kent Breeze; and Wintering Hills).

- c. Further, the multiple for Skyway 127 of 2.9x reflects a premium to the multiple of 2.0x observed for a late-stage development asset identified in Ontario. We consider this to be a directionally consistent indication of value, given that as at the Valuation Date the construction and development costs for the Project would have already been incurred and would therefore drive a premium to projects with significant outstanding development and capital expenditures.
- 7.4.12 In summary, relative to guideline transaction targets, the Project was exposed to similar risk due to their similar geographies and FIT regimes, and therefore a multiple that is in line with guideline projects is consistent with our expectations.
- 7.4.13 As a result of the above and on an overall basis, the Project would command a multiple within the range of the identified guideline transactions, and would reflect a premium to projects in development.

Reasonability Conclusions

7.4.14 Based on the above, we consider market indications of value to be consistent with the calculated Economic Losses as represented by the Project NPV.

8 Major Assumptions

In preparing our quantification of Economic Losses, we have relied on the following major assumptions:

- 8.1.1 The date of loss is August 15, 2015;
- 8.1.2 The FIT application requirements have been met and a FIT contract would have been received but for the alleged actions of the Government of Ontario;
- 8.1.3 All environmental and other associated approvals are received under the REA process, and the risk of the Project not receiving REA approval is not significant;
- 8.1.4 The cost required to restore the land to its initial use would approximate the value related to the continued use or salvage value of the turbines;
- 8.1.5 In relation to the financing of the Project, GE Corporate Family had offered to fully finance the project, and GE Corporate Family had the capacity to provide that funding;
- 8.1.6 The remaining development period is 23 months and the construction timeline is 10 months;
- 8.1.7 The terminal value is nominal, as we assumed the continued use or salvage value is offset by reclamation costs;
- 8.1.8 All capital and operating expenditures related to the Project, including contingency and reserves, with the exception of insurance expense, are as indicated within the GEE Budget Model. The capital and operating expenditures as reflected in the GEE Budget Model dated April 2012, with the exception of the insurance costs, are indicative of the capital and operating expenditures as at August 15, 2015;
- 8.1.9 The proposed development and construction costs would have included sufficient domestic content to meet domestic content requirements;
- 8.1.10 The development fee available for distribution of \$10.0 million in the GEE Budget Model does not reflect a required capital cost for the Project;
- 8.1.11 The turbine pricing as set out in the GE Quote Letter dated January 17, 2012 is indicative of the pricing that would have been available as at the date of construction for the Project; and
- 8.1.12 Financing would be obtained through an amortizing term loan at an interest rate of 6.0%, with a term of 15 years.

9 Restrictions and Qualifications

- 9.1.1 Our analysis is solely for use in connection with the stated purpose above. It is not intended for general circulation or publication, nor is it to be reproduced or used for any purpose other than that outlined above without our written permission in each specific instance. For greater clarity, we hereby acknowledge that this Report may be used in the arbitration proceedings for which it was commissioned. We do not assume any responsibility or liability for losses incurred by any parties as a result of the circulation, publication, reproduction or use of our analysis contrary to the provisions of this paragraph.
- 9.1.2 We reserve the right, but will be under no obligation, to review our report and, if we consider it necessary, to revise our report in the light of any information existing at the date of our report which becomes known to us after that date.
- 9.1.3 We have relied upon the completeness, accuracy, and fair presentation of all the financial and other information, data, advice, opinions or representations provided by you. Our report is conditional upon the completeness, accuracy, and fair presentation of such information. Except as expressly described herein, we have not attempted to verify independently the completeness, accuracy or fair presentation of the information.
- 9.1.4 This report is based upon the information supplied to us as outlined in Appendix A, and is subject to the "Restrictions and Qualifications" outlined in Appendix B.

Yours truly,

Deloitte LLP

Larry Andrade, CPA, CA, CBV, CFF, CFE, MBA

Partner – Litigation and Valuation Services Deloitte LLP

Richard Taylor, CPA, CA, FCBV

Executive Advisor

10 Schedules

Tennant Energy, LLC v. Government of Canada Quantification of Economic Losses Summary

As at August 15, 2015 Schedule 1

Amounts in 000s of \$CAD unless otherwise noted.

Total Economic Losses as at the Valuation Date Moral damages		Eco		
Gross pre-tax adjusted net present value of cash flow (rounded) Pre-Judgement Interest Total Economic Losses as at the Valuation Date Moral damages	Reference	Low	Mid	High
Gross pre-tax adjusted net present value of cash flow (rounded)	Schedule 2	152,000	172,000	192,000
Pre-Judgement Interest	Schedule 2	10,615	12,012	13,408
Total Economic Losses as at the Valuation Date	Schedule 2	162,615	184,012	205,408
Moral damages	[1]	35,000	35,000	35,000
Total claim		197,615	219,012	240,408

Notes:

^[1] We understand that the Plaintiffs have filed a claim for moral damages in the amount of \$35.0 million. We do not provide our opinion as to the nature or quantum of the moral damages as filed but have included that amount in our determination of total claim for completeness purposes.

Tennant Energy, LLC v. Government of Canada Quantification of Economic Losses Discounted Cash Flows As at August 15, 2015

Schedule 2

Amounts in 000s of \$CAD unless otherwise noted.

		Eco	nomic Losses	
Rounded	Reference	Low	Mid	High
Total pre-Valuation Date cash flows Total net present value of post-Valuation Date cash flows	Schedule 2a Schedule 2b	(34,300) 146,112	(32,624) 158,961	(30,949) 171,810
Total net present value of Project cash flows as at the Valuation Date		111,813	126,337	140,861
Gross pre-tax adjusted net present value of cash flow Gross pre-tax adjusted net present value of cash flow (rounded)	[1] [1]	152,126 152,000	171,887 172,000	191,647 192,000
Pre-Judgement Interest	[2]	10,615	12,012	13,408
Total Economic Losses at the Valuation Date		162,615	184,012	205,408

Notes:

- [1] In calculating the gross pre-tax adjusted net present value of cash flows, we assumed that the award of damages would be treated as income rather than capital.
- [2] See below for the pre-judgement interest calculations:

\$CAD '000s					
Total loss before pre-judgment interest as at August 15, 2015		\$ 152,000 \$	172,000	\$ 192,000	
Pre-judgment interest	[3]	10,615	12,012	13,408	

[3] Pre-judgment interest calculated as prescribed by s. 127 and s. 128 of the Courts of Justice Act.

Valuation Date	8/15/2015
Current date	8/7/2022
Number of years for which interest accrues	6.98
Prescribed rate	1.00%

As at August 15, 2015
Amounts in 000s of \$CAD unless otherwise noted.

Schedule 2a

			Pre-Valua	ation Date cash flo	ws		
Year	Notes	2011	2012	2013	2014	2015	
Period start date Period end date		1-Jan-11 31-Dec-11	1-Jan-12 31-Dec-12	1-Jan-13 31-Dec-13	1-Jan-14 31-Dec-14	1-Jan-15 31-Dec-15	
Revenue							
Price (\$/MWh)	[1]	=	_	-	144.4	144.8	
Production (000s of MWh)	[2]	-	-	-	209.9	294.1	
Total revenue	_	-	-	-	30,309	42,594	
Operating expenses	[3]						
Land lease payments	[4]	-	-	-	1,112.3	1,563.2	
Service and maintenance		-	-	-	3,164.3	4,283.4	
Balance of plants (BoP) service and maintenance		-	-	=	143.8	194.7	
Property tax		-	-	-	1,321.4	1,788.8	
Insurance	[5]	-	-	-	311.0	421.0	
Retrofit and decommissioning reserve		-	-	-	155.5	210.5	
Administration		-	-	-	67.1	90.8	
Miscellaneous		-	=	-	536.5	753.9	
Total operating expenses		-	-	-	6,812	9,306	
EBITDA		-	-	-	23,497	33,288	
EBITDA margin					77.5%	78.2%	
Capital expenditures		(1,304)	(2,608)	(141,515)	(55,107)	_	
Debt financed portion of capital expenditures	Schedule 4	-	-	99,647	43,009	-	
Equity financed capital expenditures		(1,304)	(2,608)	(41,868)	(12,098)	-	
Interest payments	[7]	-	-	-	(6,352)	(8,148)	
Net cash flows after interest		(1,304)	(2,608)	(41,868)	5,046	25,141	
Income tax expense	Schedule 6	=	-	=	=	-	
Working capital and debt reserve release	[6]	-	-	-	-	=	
After-tax cash flow		(1,304)	(2,608)	(41,868)	5,046	25,141	
Debt principal repayments	[7]	-	-	-	(4,515)	(6,343)	
Levered free cash flows		(1,304)	(2,608)	(41,868)	531	18,798	
% of period outstanding		100%	100%	100%	100%	62%	
Adjusted levered free cash flow		(1,304)	(2,608)	(41,868)	531	11,742	
CAD 000's		Low	Mid	High			
Total pre-Valuation Date cash flows	[9]	(35,182)	(33,506)	(31,831)			
Add: Costs incurred prior to December 31, 2010	[10]	882	882	882			

Total pre-Valuation Date cash flows

- Notes:
 [1] Power price based on FIT application terms.
 [2] Annual energy production based on wind resource analysis conducted by the subject company.
 [3] Total operating expenses are based on the operating model provided by management (C-036).
 [4] Land lease payments are projected a based on operating model provided by management (C-036).
 [5] We expect these expenses to increase annually by 1.53% using the historical CPI CAGR for the years available and 2.0% forecast, based on inflation forecasts from Economic Intelligence Unit and Bank of Canada inflation target.

(34,300) (32,624) (30,949)

- [6] The capital cost assumes a working capital investment and debt reserve, which will be released at the end of the cash flow and debt term, respectively.
 [7] Debt servicing costs are calculated as follows:

Year			2011	2012	2013	2014	2015
Principal repayment		Schedule 5	=	=	-	4,515	6,343
Interest expense		Schedule 5	-	-	-	6,352	8,148
Total annual debt service costs		Schedule 5	-	-	-	10,868	14,490
Opening debt balance		Schedule 5	-	=	=	99,647	138,141
Principal repayment		Schedule 5	-	-	-	(4,515)	(6,343)
Debt drawdowns	[8]	Schedule 4	-	-	99,647	43,009	
Ending debt balance		Schedule 5	-	-	99,647	138,141	131,798

- [8] Interest during the construction period is assumed to be capitalized and paid in kind at an interest rate equal to that assumed for term debt of 6.0%.
 [9] A contingency range of +/- 5.0% is applied to the pre-Valuation Date cash flow to reflect the potential variability in outcomes.
 [10] As the full amount of development expenditures is included in the discrete period forecast, expenditures incurred prior to the Notification Date are added back. This is based on the Skyway 127 Wind Energy Inc. total wind turbine development costs as at December 31, 2010 (C-029).

Tennant Energy, LLC v. Government of Canada Quantification of Economic Losses Post-Valuation Date cash flow

As at August 15, 2015
Amounts in 000s of \$CAD unless otherwise noted.

										Pos	st-Valuation Da	ate cash flows									
Year Period start date	Notes	2015 1-Jan-15	2016 1-Jan-16	2017 1-Jan-17	2018 1-Jan-18	2019 1-Jan-19	2020 1-Jan-20	2021 1-Jan-21	2022 1-Jan-22	2023 1-Jan-23	2024 1-Jan-24	2025 1-Jan-25	2026 1-Jan-26	2027 1-Jan-27	2028 1-Jan-28	2029 1-Jan-29	2030 1-Jan-30	2031 1-Jan-31	2032 1-Jan-32	2033 1-Jan-33	2034 1-Jan- <u>34</u>
Period end date		31-Dec-15	31-Dec-16	31-Dec-17	31-Dec-18	31-Dec-19	31-Dec-20	31-Dec-21	31-Dec-22	31-Dec-23	31-Dec-24	31-Dec-25	31-Dec-26	31-Dec-27	31-Dec-28	31-Dec-29	31-Dec-30	31-Dec-31	31-Dec-32	31-Dec-33	31-Mar-34
Revenue																					
Price (\$/MWh) Production (000s of MWh)	[1] [2]	144.8 294.1	145.3 294.1	145.7 294.1	146.1 294.1	146.6 294.1	147.0 294.1	147.6 294.1	148.2 294.1	148.8 294.1	149.4 294.1	150.0 294.1	150.6 294.1	151.2 294.1	151.8 294.1	152.4 294.1	153.0 294.1	153.6 294.1	154.2 294.1	154.9 294.1	155.5 84.2
Total revenue	_	42,594	42,724	42,855	42,985	43,116	43,248	43,421	43,595	43,769	43,944	44,120	44,296	44,474	44,651	44,830	45,009	45,189	45,370	45,552	13,092
Operating expenses	[3]																				
Land lease nayments Service and maintenance Balance of plants (BoP) service and maintenance Property tax Insurance Retrofit and decommissioning reserve Administration Miscellaneous	[4]	1,563.2 4,283.4 194.7 1,788.8 421.0 210.5 90.8 753.9	1,568.0 4,348.8 197.7 1,816.0 427.4 213.7 92.2 756.2	1,572.8 4,415.1 200.7 1,843.7 433.9 217.0 93.6 758.5	1,577.6 4,482.4 203.7 1,871.9 440.5 220.3 95.0 760.8	1,582.4 4,550.8 206.9 1,900.4 447.3 223.6 96.4 763.2	1,587.2 4,620.2 210.0 1,929.4 454.1 227.0 97.9 765.5	1,593.6 4,846.4 220.3 2,023.9 461.0 238.2 102.7 768.6	1,599.9 4,943.3 224.7 2,064.3 468.0 242.9 104.8 771.6	1,606.3 5,042.2 229.2 2,105.6 475.2 247.8 106.9 774.7	1,612.7 3,039.1 233.8 2,147.7 482.4 252.7 109.0 777.8	1,619.2 2,384.5 238.5 2,190.7 489.8 257.8 111.2 780.9	1,625.7 2,432.2 243.2 2,234.5 497.2 262.9 113.4 784.0	1,632.2 2,480.8 248.1 2,279.2 504.8 268.2 115.7 787.2	1,638.7 2,530.5 253.0 2,324.8 512.5 273.6 118.0 790.3	1,645.3 2,581.1 258.1 2,371.3 520.3 279.0 120.3 793.5	1,651.8 2,632.7 263.3 2,418.7 528.3 284.6 122.7 796.7	1,658.5 2,685.3 268.5 2,467.1 536.3 290.3 125.2 799.9	1,665.1 2,739.0 273.9 2,516.4 544.5 296.1 127.7 803.1	1,671.7 2,793.8 279.4 2,566.7 552.8 302.0 130.3 806.3	480.5 712.4 71.2 654.5 140.3 77.0 33.2 231.7
Total operating expenses	=	9,306	9,420	9,535	9,652	9,771	9,891	10,255	10,420	10,588	8,655	8,072	8,193	8,316	8,441	8,569	8,699	8,831	8,966	9,103	2,401
EBITDA EBITDA margin	_	33,288 78.2%	33,304 78.0%	33,319 77.7%	33,333 77.5%	33,346 77.3%	33,357 77.1%	33,166 76.4%	33,175 76.1%	33,181 75.8%	35,289 80.3%	36,047 81.7%	36,103 81.5%	36,157 81.3%	36,210 81.1%	36,261 80.9%	36,311 80.7%	36,358 80.5%	36,404 80.2%	36,449 80.0%	10,691 81.7%
Capital expenditures Debt financed portion of capital expenditures	Schedule 4	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Equity financed capital expenditures	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest payments	[7]	(8,148)	(7,758)	(7,345)	(6,907)	(6,441)	(5,948)	(5,423)	(4,867)	(4,276)	(3,650)	(2,985)	(2,279)	(1,529)	(734)	(54)	-	-	-	-	-
Net cash flows after interest	_	25,141	25,546	25,974	26,426	26,904	27,409	27,743	28,308	28,905	31,639	33,063	33,825	34,628	35,476	36,208	36,311	36,358	36,404	36,449	10,691
Income tax expense Working capital and debt reserve release	Schedule 6 [6]	:	:	:	:	:	(188)	(3,814)	(5,733)	(6,775)	(7,942)	(8,541)	(8,853)	(9,121)	(9,374)	(9,581) 8,847	(9,615)	(9,632)	(9,645)	(9,658)	(2,833) 1,769
After-tax cash flow	_	25,141	25,546	25,974	26,426	26,904	27,221	23,929	22,575	22,129	23,697	24,522	24,972	25,507	26,103	35,473	26,695	26,727	26,759	26,791	9,628
Debt principal repayments	[7]	(6,343)	(6,732)	(7,145)	(7,583)	(8,049)	(8,543)	(9,067)	(9,623)	(10,214)	(10,840)	(11,506)	(12,212)	(12,961)	(13,756)	(3,569)	-	-	-	-	-
Levered free cash flows	_	18,798	18,814	18,829	18,843	18,855	18,678	14,862	12,952	11,916	12,857	13,017	12,760	12,546	12,346	31,904	26,695	26,727	26,759	26,791	9,628
Low																					
Percent of year remaining Discountring period Discount rate Present value factor	Schedule 7_	38% 0.19 11.0% 0.98	100% 0.88 11.0% 0.91	100% 1.88 11.0% 0.82	100% 2.88 11.0% 0.74	100% 3.88 11.0% 0.67	100% 4.88 11.0% 0.60	100% 5.88 11.0% 0.54	100% 6.88 11.0% 0.49	100% 7.88 11.0% 0.44	100% 8.88 11.0% 0.40	100% 9.88 11.0% 0.36	100% 10.88 11.0% 0.32	100% 11.88 11.0% 0.29	100% 12.88 11.0% 0.26	100% 13.88 11.0% 0.24	100% 14.88 11.0% 0.21	100% 15.88 11.0% 0.19	100% 16.88 11.0% 0.17	100% 17.88 11.0% 0.15	100% 18.00 11.0% 0.15
Discounted levered cash flows - Low	_	6,919	17,172	15,482	13,958	12,583	11,230	8,050	6,320	5,238	5,092	4,644	4,102	3,633	3,221	7,499	5,652	5,098	4,599	4,148	1,472
High																					
Percent of year remaining Discounting period Discount rate Present value factor	Schedule 7_	38% 0.19 8.5% 0.98	100% 0.88 8.5% 0.93	100% 1.88 8.5% 0.86	100% 2.88 8.5% 0.79	100% 3.88 8.5% 0.73	100% 4.88 8.5% 0.67	100% 5.88 8.5% 0.62	100% 6.88 8.5% 0.57	100% 7.88 8.5% 0.53	100% 8.88 8.5% 0.48	100% 9.88 8.5% 0.45	100% 10.88 8.5% 0.41	100% 11.88 8.5% 0.38	100% 12.88 8.5% 0.35	100% 13.88 8.5% 0.32	100% 14.88 8.5% 0.30	100% 15.88 8.5% 0.27	100% 16.88 8.5% 0.25	100% 17.88 8.5% 0.23	100% 18.00 8.5%
Discounted levered cash flows - High	_	6,949	17,518	16,158	14,903	13,745	12,549	9,203	7,392	6,268	6,233	5,816	5,255	4,762	4,319	10,286	7,932	7,320	6,754	6,233	2,218
Discourced revered cash nows - mgn		0,545	17,310	10,130	14,503	13,743	12,349	9,203	7,332	0,200	0,233	3,010	3,233	4,702	4,519	10,200	7,552	7,320	0,734	0,233	2,210
CAD 000's		Low	Mid	High																	

Total net present value of post-Valuation Date cash flows 146,112 158,961 171,810

Notes:																	
[1] Power price based on FIT application terms.																	
[2] Annual energy production based on wind resource a	nalysis conducted	by the subject compa	ny														
[3] Total operating expenses are based on the operating	model provided I	by management (C-03	16)														
[4] Land lease payments are projected a based on open	ating model provid	led by management (C-036)														
[5] We expect these expenses to increase annually by 1	.53% using the hi	storical CPI CAGR for	the years availa	ble, and 2.0% fo	recast, based or	inflation foreca	sts from Economi	ic Intelligence Un	it and Bank of C	anada inflation t	arget						
[6] The capital cost assumes a working capital investme	nt and debt reser	ve, which will be relea	sed at the end of	of the cash flow a	and debt term, re	espectively											
[7] Debt servicing costs are calculated as follows:																	
Year			2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Principal repayment		Schedule 5	6,343	6.732	7.145	7,583	8.049	8,543	9.067	9,623	10.214	10.840	11,506	12.212	12.961	13,756	3,569
Interest expense		Schedule 5	8,148	7,758	7,345	6,907	6,441	5,948	5,423	4,867	4,276	3,650	2,985	2,279	1,529	734	54
Total annual debt service costs		Schedule 5	14,490	14,490	14,490	14,490	14,490	14,490	14,490	14,490	14,490	14,490	14,490	14,490	14,490	14,490	3,623
Opening debt balance		Schedule 5	138.141	131,798	125.066	117.922	110,338	102,290	93,747	84.680	75.057	64.844	54,003	42,498	30,286	17.325	3,569
Principal repayment		Schedule 5	(6,343)	(6,732)	(7,145)	(7,583)	(8,049)	(8,543)	(9,067)	(9,623)	(10,214)	(10,840)	(11,506)	(12,212)	(12,961)	(13,756)	(3,569)
Debt drawdowns	[8]	Schedule 4	-	.,,,,,		. , ,			-		-	,,	-		. , ,	, ,	
Ending debt balance		Schedule 5	131,798	125,066	117,922	110,338	102,290	93,747	84,680	75,057	64,844	54,003	42,498	30,286	17,325	3,569	0

[8] Interest during the construction period is assumed to be capitalized and paid in kind at an interest rate equal to that assumed for term debt of 6.0%

Schedule 2b

Tennant Energy, LLC v. Government of Canada **Quantification of Economic Losses Development and Construction Costs** As at August 15, 2015

Amounts in 000s of \$CAD unless otherwise noted.

				Capital Costs	
	Notes	CCA Class	USD	CAD	% of total
Development costs	[1]	CRCE	5,000	4,998	3%
Wind turbine generator (WTG) costs	[1]	43.2	132,276	132,221	69%
Balance of plants (BoP) service and maintenance costs	[1]	43.2	41,632	41,615	22%
Other capital costs	[1]	43.2	10,621	10,616	6%
Contingency	[2]	Expense	3,478	3,477	2%
Total capital costs		=	193,007	192,926	100%
Equity financed Debt financed		30.0% 70.0%	57,902 135,105	57,878 135,048	

Notes:

Schedule 3

^[1] Development costs, WTG costs, BoP costs, and other capital costs are based on the operating model provided by management (C-036) indexed for inflation to the expected construction date.

^[2] Contingency cost of 2% on WTG and BoP costs based on operating model provided by management (C-036)

Tennant Energy, LLC v. Government of Canada **Quantification of Economic Losses** Financing Schedule

As at August 15, 2015

Schedule 4 Amounts in 000s of \$CAD unless otherwise noted.

Year	Month	Capital costs	Equity	Debt	Financing fees	Cumulative debt and financing fees	Capitalized interest
	Jul-11	217	217	_	_	_	_
	Aug-11	217	217	_			_
	Sep-11	217	217	_	_	_	_
2011	Oct-11	217	217	_	_	_	_
	Nov-11	217	217	_	_	_	_
	Dec-11	217	217	_	_	-	-
	Jan-12	217	217	_	_	-	_
	Feb-12	217	217	-	-	-	-
	Mar-12	217	217	-	-	-	-
	Apr-12	217	217	-	-	-	-
	May-12	217	217	-	-	-	-
2012	Jun-12	217	217	-	-	-	-
2012	Jul-12	217	217	-	-	-	-
	Aug-12	217	217	-	-	-	-
	Sep-12	217	217	-	-	-	-
	Oct-12	217	217	-	-	-	-
	Nov-12	217	217	-	-	-	-
	Dec-12	217	217	-	-	-	-
	Jan-13	217	217	-	-	-	-
	Feb-13	217	217	-	-	-	-
	Mar-13	217	217	-	-	-	-
	Apr-13	217	217	-	-	-	-
	May-13	217	217	-	-	-	-
2013	Jun-13	8,866	2,660	6,206	186	6,424	32
	Jul-13	8,866	2,660	6,206	186	12,881	64
	Aug-13	8,866	2,660	6,206	186	19,370	97
	Sep-13	31,030	9,309	21,721	652	41,952	210
	Oct-13	31,030	9,309	21,721	652	64,647	323
	Nov-13	23,642	7,092	16,549	496	82,103	411
	Dec-13	23,642	7,092	16,549	496	99,647	498
2014	Jan-14	23,642	7,092	16,549	496	117,279	586
2014	Feb-14	8,866	2,660	6,206	186	124,293	621
	Mar-14	19,482	2,346	17,136	514	142,656	713

135,048

4,051

	CCA Class	Total
Debt	Schedule 3	135,048
Capitalized interest	43.2	3,556
Financing fees	43.2	4,051
Total debt at COD		142,656

192,926

Notes:

Total

57,878

3,556

Capitalized interest is assumed to be paid through additional principal until project operations commence. [1]

^[2] Total capital costs are as per Schedule 3.

Schedule 5 As at August 15, 2015 Amounts in 000s of \$CAD unless otherwise noted.

142,656 Total term debt Schedule 4 [1] [2] Interest rate (annual) 6.0% 15 Amortization period (years) Amortization frequency (payments per year) Blended payment (quarterly) 3,623

Year	Quarter	Opening principal	Drawdown	Repayment	Closing principal	Interest	Total debt service
2014	Jun-14	142,656	-	1,483	141,173	2,140	3,623
2014 2014	Sep-14 Dec-14	141,173 139,668	-	1,505	139,668	2,118	3,623
2014	Mar-15	138,141	-	1,527 1,550	138,141	2,095 2,072	3,623 3,623
2015	Jun-15	136,590		1,574	136,590 135,017	2,049	3,623
2015	Sep-15	135,017	_	1,597	133,419	2,049	3,623
2015	Dec-15	133,419	_	1,621	131,798	2,023	3,623
2015	Mar-16	131,798	_	1,646	130,153	1,977	3,623
2016	Jun-16	130,153	<u> </u>	1,670	128,482	1,952	3,623
2016	Sep-16	128,482	_	1,695	126,787	1,927	3,623
2016	Dec-16	126,787	_	1,721	125,066	1,902	3,623
2017	Mar-17	125,066	_	1,747	123,320	1,876	3,623
2017	Jun-17	123,320	_	1,773	121,547	1,850	3,623
2017	Sep-17	121,547	-	1,799	119,748	1,823	3,623
2017	Dec-17	119,748	_	1,826	117,922	1,796	3,623
2018	Mar-18	117,922	-	1,854	116,068	1,769	3,623
2018	Jun-18	116,068	-	1,882	114,186	1,741	3,623
2018	Sep-18	114,186	-	1,910	112,277	1,713	3,623
2018	Dec-18	112,277	-	1,938	110,338	1,684	3,623
2019	Mar-19	110,338	-	1,967	108,371	1,655	3,623
2019	Jun-19	108,371	-	1,997	106,374	1,626	3,623
2019	Sep-19	106,374	-	2,027	104,347	1,596	3,623
2019	Dec-19	104,347	-	2,057	102,290	1,565	3,623
2020	Mar-20	102,290	-	2,088	100,201	1,534	3,623
2020	Jun-20	100,201	-	2,120	98,082	1,503	3,623
2020	Sep-20	98,082	-	2,151	95,931	1,471	3,623
2020	Dec-20	95,931	-	2,184	93,747	1,439	3,623
2021	Mar-21	93,747	-	2,216	91,531	1,406	3,623
2021	Jun-21	91,531	-	2,250	89,281	1,373	3,623
2021	Sep-21	89,281	-	2,283	86,998	1,339	3,623
2021	Dec-21	86,998	-	2,318	84,680	1,305	3,623
2022	Mar-22	84,680	-	2,352	82,328	1,270	3,623
2022	Jun-22	82,328	-	2,388	79,940	1,235	3,623
2022	Sep-22	79,940	-	2,423	77,517	1,199	3,623
2022	Dec-22	77,517	-	2,460	75,057	1,163	3,623
2023	Mar-23	75,057	-	2,497	72,561	1,126	3,623
2023	Jun-23	72,561	-	2,534	70,027	1,088	3,623
2023	Sep-23	70,027	-	2,572	67,454	1,050	3,623
2023	Dec-23	67,454	-	2,611	64,844	1,012	3,623
2024	Mar-24	64,844	-	2,650	62,194	973	3,623
2024	Jun-24	62,194	-	2,690	59,504	933	3,623
2024	Sep-24	59,504	-	2,730	56,774	893	3,623
2024	Dec-24	56,774	-	2,771	54,003	852	3,623
2025	Mar-25	54,003	-	2,812	51,191	810	3,623
2025 2025	Jun-25	51,191	-	2,855	48,336	768 735	3,623
	Sep-25	48,336	-	2,897	45,439	725	3,623
2025 2026	Dec-25 Mar-26	45,439 42,498	-	2,941 2,985	42,498 39,513	682 637	3,623 3,623
2026	Mar-26 Jun-26	42,498 39,513	-	2,985 3,030	39,513 36,483	593	3,623
2026	Sep-26	36,483		3,075	33,408	547	3,623
2026	Dec-26	33,408	<u>-</u>	3,121	30,286	501	3,623
2026	Mar-27	30,286	-	3,168	27,118	454	3,623
2027	Jun-27	27,118	<u>-</u>	3,216	23,902	407	3,623
2027	Sep-27	23,902	- -	3,210	20,638	359	3,623
2027	Dec-27	20,638	_	3,313	17,325	310	3,623
2028	Mar-28	17,325	-	3,363	13,963	260	3,623
2028	Jun-28	13,963	_	3,413	10,550	209	3,623
2028	Sep-28	10,550	_	3,464	7,085	158	3,623
2028	Dec-28	7,085	_	3,516	3,569	106	3,623
2029	Mar-29	3,569	-	3,569	(0)	54	3,623
		-,5		-,-55	(3)	3.	-,-25

Notes:

^[1] Interest rate is assumed based on our analysis of industry benchmarks at or around the Valuation Date. The interest calcuation is based on drawdown and repayment at the end of the year.

[2] Debt amortization period (years) based on operating model provided by management (C-036).

Tennant Energy, LLC v. Government of Canada Quantification of Economic Losses Tax Schedule

As at August 15, 2015
Amounts in 000s of \$CAD unless otherwise noted.

Year	Notes	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
EBITDA Interest	Schedule 2 Schedule 2	- -	-	-	23,497 (6,352)	33,288 (8,148)	33,304 (7,758)	33,319 (7,345)	33,333 (6,907)	33,346 (6,441)	33,357 (5,948)	33,166 (5,423)	33,175 (4,867)	33,181 (4,276)	35,289 (3,650)	36,047 (2,985)	36,103 (2,279)	36,157 (1,529)	36,210 (734)	36,261 (54)	36,311	36,358	36,404	36,449	10,691
Taxable income before loss carry forwa	rds	-	-	-	17,144	25,141	25,546	25,974	26,426	26,904	27,409	27,743	28,308	28,905	31,639	33,063	33,825	34,628	35,476	36,208	36,311	36,358	36,404	36,449	10,691
Operating loss carry forwards																									
Opening balance Additions Deduction to taxable income Ending balance	[1]	- - -	- - -	2,665 - 2,665	2,665 811 (2,665) 811	811 - (811)	- - -	-	- - -	-	- - -	- - -	- - -	- - -	-	- - -	- - -	-	- - -	-	- - -	- - -	- - -	- - -	
Taxable income after deductions above		-	-	-	14,479	24,329	25,546	25,974	26,426	26,904	27,409	27,743	28,308	28,905	31,639	33,063	33,825	34,628	35,476	36,208	36,311	36,358	36,404	36,449	10,691
CRCE																									
Opening balance Additions Deduction to taxable income Ending balance	[1]	1,304 - 1,304	1,304 2,608 - 3,911	3,911 1,087 - 4,998	4,998 - (4,998)	- - -	- - -	-	-	-	- - -	- - -	-	- - -	-	-	- - -	-	- - -	-	- - -	- - -	- - -	- - -	
Taxable income after deductions above		-	-	-	9,481	24,329	25,546	25,974	26,426	26,904	27,409	27,743	28,308	28,905	31,639	33,063	33,825	34,628	35,476	36,208	36,311	36,358	36,404	36,449	10,691
Class 43.2																									
Opening balance Additions Deduction to taxable income Ending balance	[1]	- - -	-	137,764 - 137,764	137,764 54,296 (9,481) 182,578	182,578 - (24,329) 158,249	158,249 - (25,546) 132,703	132,703 - (25,974) 106,729	106,729 - (26,426) 80,302	80,302 - (26,904) 53,398	53,398 - (26,699) 26,699	26,699 - (13,350) 13,350	13,350 - (6,675) 6,675	6,675 - (3,337) 3,337	3,337 - (1,669) 1,669	1,669 - (834) 834	834 - (417) 417	417 - (209) 209	209 - (104) 104	104 - (52) 52	52 - (26) 26	26 - (13) 13	13 - (7) 7	7 - (3)	(2)
Taxable income after deductions above Tax rate		- 26.5%	- 26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	710 26.5%	14,394 26.5%	21,633 26.5%	25,567 26.5%	29,970 26.5%	32,229 26.5%	33,407 26.5%	34,420 26.5%	35,372 26.5%	36,155 26.5%	36,285 26.5%	36,345 26.5%	36,398 26.5%	36,445 26.5%	10,690 26.5%
Income tax expense		-	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	188	3,814	5,733	6,775	7,942	8,541	8,853	9,121	9,374	9,581	9,615	9,632	9,645	9,658	2,833

Notes:

[1] Expenditure is classified based on the tax pool classication outlined as per Schedule 3, and following the spending profile outlined as per Schedule 4

Schedule 6

As at August 15, 2015

Amounts in millions of \$USD unless otherwise stated

Ticker	Guideline public companies	tal Book alue of Debt [1]	•	otal Book Value of Preferred [1]	٧	al Market Value of Equity [2]	Т	otal Market Value of Capital	Debt to Capital	Equity to Capital	Historical Effective Tax Rate	Levered Equity Beta [3]	Historical Debt to Capital [4]	Unlevered Equity Beta [5]
TSX:INE	Innergex Renewable Energy Inc.	\$ 1,686	\$	105	\$	832	\$	2,623	64.29%	35.71%	40.97%	0.41	57.73%	0.23
XTRA:PNE3	PNE AG	\$ 271	\$	-	\$	200	\$	471	57.56%	42.44%	27.77%	0.78	52.52%	0.43
DB: EKT	Energiekontor AG	\$ 338	\$	-	\$	213	\$	551	61.34%	38.66%	36.82%	0.49	66.97%	0.22
OM: ARISE	Arise AB (publ)	\$ 178	\$	-	\$	76	\$	254	70.12%	29.88%	55.40%	0.82	63.64%	0.46
ASX: IFN	Infigen Energy Limited	\$ 682	\$	-	\$	144	\$	826	82.53%	17.47%	0.00%	0.73	85.39%	0.11
TSX:TA	TransAlta Corporation	\$ 3,377	\$	755	\$	1,523	\$	5,655	59.71%	40.29%	50.34%	0.55	50.45%	0.36
NYSE:NEE	NextEra Energy, Inc.	\$ 30,001	\$	-	\$	49,297	\$	79,298	37.83%	62.17%	27.10%	0.70	43.76%	0.45
TSX:BLX	Boralex Inc.	\$ 1,212	\$	-	\$	504	\$	1,716	70.64%	29.36%	0.00%	0.59	69.16%	0.18
TSX:BEP.UN	Brookfield Renewable Partners L.P.	\$ 8,039	\$	-	\$	7,281	\$	15,320	52.47%	47.53%	8.44%	0.60	47.11%	0.33
Average									61.8%	38.2%				0.31
Median									61.3%	38.7%				0.33
Selected									35.0%	65.0%				0.33

	Notes	Low	High
Unlevered Equity Beta	[5]	0.31	0.34
Debt-to-Equity	[6]	42.9%	66.7%
Selected Subject Tax Rate	[7]	26.5%	26.5%
Relevered Equity Beta	[8]	0.41	0.51
Risk Free Rate	[9]	2.5%	2.5%
Equity Risk Premium	[10]	6.5%	6.5%
Levered Equity Beta		0.41	0.51
Cost of Equity Capital	[11]	5.2%	5.9%
Unsystematic Risk Factors:			
Company-Specific Risk	[13]	3.5%	5.0%
Country Adjustment Factor	[14]	0.0%	0.0%
Subject's Cost of Equity Capital	-	8.7%	10.9%
Subject's Cost of Equity Capital (Rounded)		8.5%	11.0%

- [1] Book value of debt used as an approximation of market value. For purposes of calculating capital structure preferred equity, if any, was added to equity at book value.
- [2] Represents current stock price times common shares outstanding.
- [3] Bloomberg beta based on 5-Year historical Weekly data.
- [4] Based on 5-Year Avg. debt to market value of invested capital as at Valuation Date.
- [5] Unlevered Equity Beta = Levered Equity Beta / [1 + (1 Tax Rate) x Debt-to-Equity]
- [6] Based on the forward looking capital structure of the subject company and the debt-to-capital structure of guideline companies.
- [7] The tax rate represents the enacted combined federal and provincial tax rate for a company operating in Ontario
- [8] Levered Equity Beta = Unlevered Equity Beta x [1 + (1 Tax Rate) x Debt-to-Equity]
- [9] 20 year U.S. Treasury Constant Maturity Yields as of the Valuation Date. Source: U.S. Federal Reserve
- [10] Source: Deloitte Financial Advisory research and 2015 Duff & Phelps Valuation Handbook Guide to Cost of Capital.
- [11] Cost of Equity Capital = Risk Free Rate + [Equity Beta x Equity Risk Premium].
- [13] Risk premium based on qualitative factors that reflect company specific risks.
- [14] 2015 Updated Damodaran Country Risk Premium

Source: Capital IQ, Bloomberg

Schedule 7

Tennant Energy, LLC v. Government of Canada Quantification of Economic Losses Precedent Transactions

As at August 15, 2015
Amounts in 000s of \$CAD unless otherwise noted.

Wind Farm Details Project	Location	Project Capacity (MW)	Transaction Date	Details Implied enterprise value (\$M)	Transaction Multiple (CAD per MW)	Stage of Completion
NextEra Energy Resources, LLC, Jericho Wind Energy Center Suncor Energy Inc., 20 MW Kent Breeze Ontario and 51% of 88 MW Wintering Hills Facility Alberta Greengate Power Corporation, 300 Megawatt Blackspring Ridge Wind Project	Ontario Alberta / Ontario Alberta	149.0 65.0 300.0	5-Oct-15 31-Aug-15 5-Apr-13	698 138 588	4.7x 2.1x 2.0x	Installed Installed Late-stage
Minimum Average Median Maximum					2.0x 2.9x 2.1x 4.7x	
Skyway 127	Ontario	101.8			2.9x	

Appendices

11 Appendix A: Scope of Review

In preparing our quantification of economic losses, we have reviewed, considered and relied upon the following:

General

- 11.1.1 Notice of Arbitration dated June 1, 2017;
- 11.1.2 **C-026** (000080) COPA FIT Program Application Skyway 127 dated November 26, 2009;
- 11.1.3 **C-040** (000196) Skyway 127 100MW Development Partners Dated May 21, 2009;
- 11.1.4 **C-041** (000197) Stamped K-Tech Skyway 127 Project Description dated June 19, 2009;
- 11.1.5 **C-042** (000198) Stamped K-Tech Skyway 127 Project Location dated June 19, 2008;
- 11.1.6 **C-043** (000199) Stamped K-Tech Skyway 127 SLD dated June 19, 2009;
- 11.1.7 **C-106** (000294) MAP Bruce County Skyway 127, Arran, Pattern Wind Projects dated April 10, 2012;
- 11.1.8 **C-028** (000147) Skyway 127 EBC REA Workplan and Budget May 2010
- 11.1.9 **C-245** (000380) A letter of representation obtained by Counsel setting out Tennant's representation to certain major assumptions contained herein
- 11.1.10 Discussions with management regarding the Skyway 127 Project, and the outlook therefore and various financial, operational and industry related issues;

Financing Agreements and Budget Proposals

- 11.1.11 **C-035** (000163) Skyway 127 GEE Budget Live Model 70% to 100% Equity dated April 26, 2012;
- 11.1.12 **C-039** (000169) Skyway 127 ORTECH REA Budget Proposal P90809 dated May 20, 2010;

Land Lease Agreements

11.1.13 **C-038** (000166) - Skyway 127 Leaseholders Data (address, roll#, phone#..) (Sep 2011).pdf

Projections

11.1.14 **C-037** (000164) - Skyway 127 - IRR Forecast 100MW - FIT Pricing - 40 GE 2.5xl 100m - April 10, 2012.pdf

Project Financial Model Assessment

- 11.1.15 **C-027** (000146) Skyway 127 Project History ATTACHMENTS ONLY-Sept 1, 2011
- 11.1.16 **C-029**(000149) SKYWAY 127 STATEMENT for the year ended Dec 31, 2010
- 11.1.17 **C-032** (000163) Skyway 127 REA Status Report Nov 12, 2009
- 11.1.18 **C-030** (000153) FIT-F020180 Skyway 127 GE Corporate Guarantee Nov 24, 2009
- 11.1.19 **C-031** (000154) FIT-F020180 Skyway 127 GE MOU 711926 FIT Turbines SIGNED (271109) Nov 27, 2009
- 11.1.20 **C-033** (000155) GE Contract Ontario FIT Skyway 127 Jan 17, 2012
- 11.1.21 **C-034** (000156) Quote Letter GE Energy Skyway 127 Jan 17, 2012
- 11.1.22 **C-039** (000169) Skyway 127 ORTECH REA Budget Proposal P90809 May 20, 2010

We have conducted additional research using Deloitte's internal industry information and external research. The following documents are not provided by Counsel. However, we have reviewed, considered but have relied upon:

Research Documents

- 11.1.23 **C-044** (000216) Ontario Power Authority Feed-In Tariff Program, FIT Rules Version 1.5, June 3, 2011
- 11.1.24 **C-104** (000279) Bruce Transmission Project Rankings Dec 21, 2010
- 11.1.25 **C-210** Green Energy Investment Agreement January 21, 2010
- 11.1.26 **C-221** Green Energy Investment Agreement July 29, 2011
- 11.1.27 **C-045** (000217) FIT Program, Program overview
- 11.1.28 **C-046** (000218) Letter to Mr. Colin Andersen REL Administrative matters
- 11.1.29 **C-047** (000219) Proposed Feed-in Tariff Price Schedule, Stakeholder Engagement Session 4, April 7, 2009
- 11.1.30 **C-048** (000220) Ontario's Feed-in Tariff Program, Two-Year Review Report, March 2012
- 11.1.31 **C-049** (000221) Ontario Power Authority, Pricing Schedule, August 2010.

- 11.1.32 **C-050** (000222) Ontario Power Authority Pricing Schedule, April 2012
- 11.1.33 **C-051** (000223) 2013 FIT Price Review Stakeholder Feedback, March 2013
- 11.1.34 **C-052** (000224) Ontario Power Association, Development of a New Large Renewable Procurement Process, August 30, 2013.
- 11.1.35 **C-053** (000225) Ontario Power Association, FIT Rules Version 3.0-Draft, September 4, 2013
- 11.1.36 **C-054** (000226) Ontario Power Association, FIT 3.0 Final Program Documents October 9, 2013
- 11.1.37 **C-055** (000227) FIT 2 Final August 10, 2012
- 11.1.38 **C-056** (000228) FIT 1 Program news room December 16, 2009
- 11.1.39 **C-031** (000154) Draft FIT 3 September 27, 2013
- 11.1.40 **C-032** (000071) Bruce-Milton Contract List July 4 2011
- 11.1.41 **C-057** (000230) FIT Contract Version 1.5.1 July 15, 2011, Indexation (Exhibit B, Article 1.3)
- 11.1.42 **C-058** (000231) Economist Intelligence Unit Canada Country Report, August 2015
- 11.1.43 **C-059** (000232) Duff & Phelps Valuation Handbook 2015 Guide to Cost of Capital
- 11.1.44 **C-060** (000233) Country Risk Damodaran July 2016
- 11.1.45 **C-244** (000379)- 2015 Ontario Economic and Fiscal Review Ministry of Finance
- 11.1.46 **C-061** (000234) Proposed Feed-in Tariff Price Schedule, Stakeholder Engagement Session 4, April 7, 2009
- 11.1.47 **C-062** (000235) MarketLine Industry Profile, Renewable Energy in North America, June 2013.
- 11.1.48 **C-063** (000236) MarketLine Industry Profile, Renewable Energy in Canada, June 2013.
- 11.1.49 **C-064** (000237) MarketLine Industry Profile, Global Wind Energy, May 2013
- 11.1.50 **C-065** (000238) The Guardian, Wind Power Capacity Grew by 20% Globally in 2012, February 12, 2013.
- 11.1.51 **C-066** (000239) CanWEA, Wind Facts, January 2013.
- 11.1.52 **C-067** (000240) CanWEA, The Secret is Out, Wind is in.
- 11.1.53 **C-068** (000241) KPMG, Wind Energy in Canada: Realizing the Opportunity, July 2013

- 11.1.54 **C-069** (000242) Renewal of the Inflation-Control Target Background Information October 2016
- 11.1.55 **C-105** (000280) Meikle Pattern transaction Details

Market research - COD

- 11.1.56 **C-070** (000243) Bluewater wind Energy centre
- 11.1.57 **C-103** (000278) Jericho wind Energy centre
- 11.1.58 **C-071** (000244) Bornish Wind Energy Centre
- 11.1.59 **C-072** (000245) Goshen Wind Energy Centre
- 11.1.60 **C-076** (000246) Cedar Point II Wind Energy Centre
- 11.1.61 **C-074** (000247) Adelaide Wind Energy Centre
- 11.1.62 **C-075** (000248) East Durham Wind Energy Centre
- 11.1.63 **C-076** (000249) Grand Bend Wind Farm
- 11.1.64 **C-077** (000250) Grand Valley III Wind Farm
- 11.1.65 **C-078** (000251) St Columban Wind Facility 1 and 2
- 11.1.66 **C-079** (000252) Majestic Wind Farm

Market research - Turbine size

- 11.1.67 **C-080** (000253) Des Moulins 135.7MW Wind Farm
- 11.1.68 **C-081** (000254) C2C Power Portfolio Financing (2012)
- 11.1.69 **C-082** (000255) L'erable 100MW Wind Farm
- 11.1.70 **C-083** (000256) Monteregie 100 MW Wind Farm
- 11.1.71 **C-084** (000257) Seigneurie de Beaupre 272MW Wind Farm
- 11.1.72 **C-085** (000258) Le Plateau 138MW Wind Farm
- 11.1.73 **C-086** (000259) Pointe Aux Roches 48.6MW Wind Farm
- 11.1.74 **C-087** (000260) Glen Dhu 62MW Wind Farm
- 11.1.75 **C-088** (000261) Comber 165MW Wind Farm
- 11.1.76 **C-089** (000262) Amherst 31.5MW Wind Farm
- 11.1.77 **C-090** (000263) Gosfield Wind Farm
- 11.1.78 **C-091** (000264) St Joseph Wind Farm
- 11.1.79 **C-092** (000265) Halkirk I Wind Farm
- 11.1.80 **C-093** (000266) Mount Louis
- 11.1.81 **C-094** (000267) Lac Alfred Wind Farm
- 11.1.82 **C-095** (000268) Kruger Energy Chatham Wind Project

- 11.1.83 **C-096** (000269) McLean's Mountain
- 11.1.84 **C-097** (000270) Montange Seche

Market research - cost of debt

- 11.1.1 **C-098** (000271) Boralex 2011 Annual Report
- 11.1.2 **C-099** (000272) Brookfield Renewable Power Fund 2010 Financial Statements
- 11.1.3 **C-100** (000273) Sprott Power Corp 2011 Financial Statements
- 11.1.4 **C-101** (000274) Brookfield Renewable Power Fund 2010 Financial Statements
- 11.1.5 **C-102** (000275) Northland Power 2010 Annual Report
- 11.1.6 **C-108** (000276) Northland Power 2013 Annual Report
- 11.1.7 **C-109** (000277) Innergex 2011 Financial Review

12 Appendix B: Industry and Economic Overview⁹⁴

12.1 Industry Overview – Renewable Energy

North America⁹⁵

12.1.1 The renewable energy market includes electricity generated by geothermal, biomass and waste, solar, wind and hydroelectric methods. The North American renewable energy market has shown strong growth, with a revenue compound annual growth rate ("CAGR") of 8.4% from 2008 to 2012. Market value growth is expected to decline over the forecast with a CAGR of 6.5% from 2012 to 2017. Historical annual market value growth rates increased significantly in 2011 reaching 17.3% and then dropped to 4.4% in 2012. The United States accounts for 64% of the total North American renewable energy market value, with Canada and Mexico contributing 31% and 5%, respectively. The following charts illustrate the market segmentation in the Canada and US renewable energy markets.

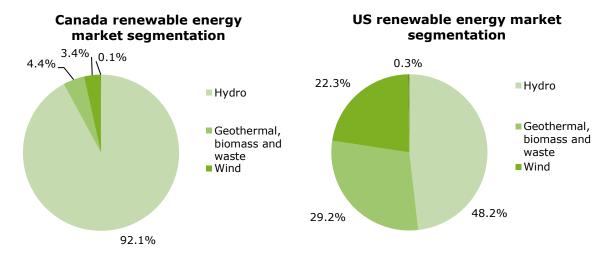


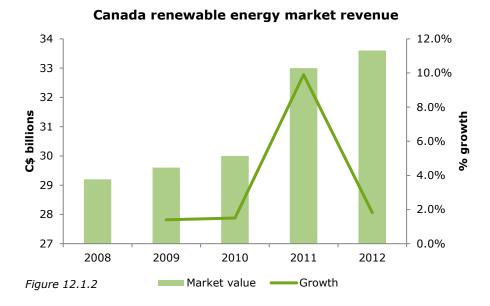
Figure 12.1.1

⁹⁴ We note that the Marketline report was prepared in June 2013 and includes information from 2012 which is subsequent to the July 4, 2011 date of loss in addition to information related to 2011 and prior. We have relied on this industry data to gain holistic view of the market. We have considered all data used in this section for reference purposes only in the industry and economic overview.

⁹⁵ Investor's Schedule of Exhibits **C-062** (000235) MarketLine Industry Profile, Renewable Energy in North America, June 2013.

Canada⁹⁶

12.1.2 The Canadian renewable energy market experienced a CAGR in revenue of 3.6% from 2008 to 2012 and anticipates a 2.8% CAGR from 2012 to 2017 which is lower than the expected overall North American growth. According to historical results, in 2011, growth increased to approximately 10% before slowing to approximately 2% in 2012. The following chart shows historical total Canadian renewable energy revenue growth:



12.1.3 The majority of the market, approximately 92%, is focused on hydroelectric means of electricity generation. Although hydroelectric means makes up the majority of the renewable energy market, wind power is growing quickly. Further, there is interest from politicians to increase the percentage of Canada's total electricity generated by renewable energy methods.

12.2 Wind Energy

Global⁹⁷

12.2.1 Wind energy accounts for 2% of overall global electricity and is the global leading renewable technology due to its rapid development. The global wind energy market revenue had a compound annual growth rate of 23.8% from 2008 to 2012 and an industry volume (megawatts) compound annual growth rate of 24.2% for the same historical period. Both revenue and volume growth are forecast to decelerate over the forecast period from 2012 to 2017 with an estimated compound annual

⁹⁶ Investor's Schedule of Exhibits **C-063** (000236) MarketLine Industry Profile, Renewable Energy in Canada, June 2013.

⁹⁷ Investor's Schedule of Exhibits **C-064** (000237) MarketLine Industry Profile, Global Wind Energy, May 2013.

growth rate of 15.2% and 14.1% for revenue and volume, respectively. Asia-Pacific, Europe and the Americas make up 24.6%, 51.7% and 23.6% of the global wind energy industry, respectively in 2012. Middle East and Africa only make up 0.1% of the total industry.

12.2.2 China is the global leader in wind power with 77 gigawatts installed, followed by the US with 60 gigawatts. The UK is the leader in offshore wind deployment followed by Denmark and Belgium. 98

Canada

- 12.2.3 Canada is the ninth largest wind producer in the world and wind power represents 3% of total Canadian electricity demand. Wind power is forecast to supply 20% of Canadian electricity demand by 2025 with benefits including 52,000 jobs and a reduction of 17 megatonnes of greenhouse gas emission. Wind power grew 20% in 2012 and is expected to continue expanding in 2013 based on projects contracted across Canada. Total volume (megawatts) is expected to increase by 86% from 6,500 MW in 2012 to 12,000 MW in 2016 representing a compound annual growth rate of approximately 17%. 99 As of March 2013, there were 164 wind farms with a total of 3,762 turbines producing enough electricity to power over 2 million Canadian homes. 100
- 12.2.4 Canada's leading wind energy market is Ontario with 2,043 MW of installed capacity in as of May 2013, followed by Quebec and then Alberta. Ontario grid capacity constraints and the uncertainty regarding the new competitive wind procurement process will result in a wind procurement slowdown over the next three years. Other provinces including Alberta, British Columbia and Quebec are expected to have wind investment opportunities going forward. 101

12.3 Economic Overview

Canada¹⁰²

12.3.1 The following is a review of the economic outlook for Canada, the geographic region in which the Project planned to operate. This summary is based on our review of the Economist Intelligence Unit ("EIU") Country Forecast publications as at August 2015. The following

⁹⁸ Investor's Schedule of Exhibits **C-065** (000238) Guardian, Wind Power Capacity Grew by 20% Globally in 2012, February 12, 2013.

⁹⁹ Investor's Schedule of Exhibits **C-066** (000239) CanWEA, Wind Facts, January 2013.

¹⁰⁰ Investor's Schedule of Exhibits **C-067** (000240) CanWEA, The Secret is Out, Wind is in.

¹⁰¹ Investor's Schedule of Exhibits **C-068** (000241) KPMG, Wind Energy in Canada: Realizing the Opportunity, July 2013.

 $^{^{102}}$ Investor's Schedule of Exhibits $\textbf{C-058}\ (000231)$ - Economist Intelligence Unit Canada Country Report, August 2015

- contains excerpts and summaries of views expressed by the economists in this publication.
- 12.3.2 The EIU has revised its real GDP growth forecast for 2015 to 1.2% from 1.7% previously estimated in the year. The EIU expects Canada's economic growth to decrease to 1.2% in 2015 from 2.4% in 2014. This is mainly attributed to a decline in the global oil prices. However, the EIU expects GDP growth to average 2.3% from 2016 to 2019. This is due to the export benefits that may arise from the weak Canadian dollar, strong demand from the US and an increase in business investment.
- 12.3.3 The EIU expects inflation to decline in the near future due to lower commodity prices, particularly oil. The decline in the oil prices reduces heating and travel costs. The EIU estimates inflation to average 1.0% in 2015. According to the EIU, a rise in wages due to an expected improvement in employment and higher fuel costs from 2016 to 2019 is projected to push average inflation to 2.0% or above during this period.
- 12.3.4 The Canadian dollar has also been affected by the recent decline in oil prices and is expected to decrease to an average of C\$1.27: US\$1 in 2015. This is also attributed to the weaker economic performance of Canada compared to the US and the divergent monetary policies of the US and Canada; with the US Federal Reserve expected to increase its key rate in the third quarter of 2015. However, the EIU forecasts the Canadian dollar to strengthen, from second half of 2016, as the Canadian Central Bank is expected to tighten its monetary policy. The tightening of the monetary policy is predicted to strengthen the Canadian dollar to C\$1.13: US\$1 by 2019.
- 12.3.5 The table 12.3.5 below provides a summary of key economic indicators for Canada from 2014 to 2019:

Key Economic Indicators	2014ª	2015 ^b	2016 ^b	2017 ^b	2018 ^b	2019 ^b
Real GDP growth (%)	2.4	1.2	2.3	2.4	2.3	2.2
Consumer price inflation (av; %)	1.9	1.0	2.2	2.2	2.1	2.0
Unemployment rate (%)	6.9	6.9	6.7	6.8	6.6	6.8
Exchange rate (av; C\$:US\$)	1.10	1.27	1.32	1.22	1.18	1.13

a Economist Intelligence Actual

Table 12.3.5

b Economist Intelligence Unit Forecasts.

Ontario¹⁰³

- 12.3.6 The following is a review of the economic outlook for Ontario, the geographic region in Canada in which the Project planned to operate. This is based on our review of the 2015 Ontario Economic and Fiscal outlook by the Ministry of Finance. The following contains excerpts and summaries of views expressed by the economists in this publication.
- 12.3.7 Ontario's real GDP growth is expected to reach 1.9% in 2015 as global economic factors improve. Beyond that, the real GDP growth rate is expected to average 2.2% between 2016 and 2018.
- 12.3.8 The improvement in global economic environment along with the strengthening of U.S. economy are expected to be the primary drivers of improvement in real GDP as well as other economic factors over the forecast period. Further, a competitive Canadian dollar is expected to aid in the continued growth in Ontario.
- 12.3.9 Improvement in Ontario's exports and investments have been slow owing to stronger US growth and a weakening Canadian dollar, but are expected to rise due to the improving global economic environment. Further, while lower oil prices may affect the overall economy, those low prices are expected to reduce the cost of businesses and households.
- 12.3.10 Ontario's unemployment rate has reduced from 9.6% in 2009 to 6.8% in 2015, as the province has created additional 559,600 jobs over these years. This has also driven Ontario's unemployment rate below the national average. Ontario's employment rate is expected to grow by 0.7% in 2015, and thereafter increasing on an average of 1.2% between 2016 and 2018.
- 12.3.11 Investments are expected to increase owing to the rising sales in some of Ontario's export-oriented industries and a rebound in interprovincial exports, driving economic growth over the forecast period. Household spending is expected to rise moderately, in line with income gains.
- 12.3.12 The table 12.3.12 below provides a summary of key economic indicators for Ontario from 2014 to 2018:

Key Economic Indicators	2014ª	2015 ^b	2016 b	2017 b	2018 b
Real GDP growth (%)	2.7	1.9	2.2	2.3	2.1
Unemployment (%)	7.3	6.7	6.6	6.3	6.3
Consumer price index (%)	2.4	1.3	2.0	2.0	902.0
Exchange rate (C\$:US\$)1	1.10	1.27	1.32	1.28	1.22

a – Actuals

Table 12.3.12

b - Forecasts

¹ - The report provides values in US\$:C\$, which have been converted to C\$:US\$ for convenience.

¹⁰³ Investor's Schedule of Exhibits **C-244** (000379) 2015 Ontario Economic and Fiscal Review

Ministry of Finance

13 Appendix C: Restrictions and Qualifications

- 13.1.1 Our work does not constitute an audit as defined by the Chartered Professional Accountants of Canada. Consequently, said work, and the resulting Report, does not constitute an auditor's opinion. Further, our work cannot be used to provide assurance that it revealed all errors, omissions, or irregularities.
- 13.1.2 This Report must be considered as a whole and selecting portions of the Report or the factors noted by us, without considering all factors and analyses together could create a misleading view of the process underlying this Report. The preparation of this Report was a complex process, considers various scenarios, and is not necessarily susceptible to partial analysis or summary description. Any attempt to do so could lead to undue emphasis on any particular factor, calculation, or analysis.
- 13.1.3 This Report has been based on information, documents and explanations that have been provided to us and therefore the validity of our conclusions rely on the integrity of such information. Our Scope of Review is listed in Appendix A. We were not under any obligation or agreement to investigate the accuracy of any third-party information, nor have we performed any investigative procedures to independently verify the accuracy of any third-party information.
- 13.1.4 Should any of the information provided to us not be factual or correct, or should we be asked to consider different information or assumptions, our conclusions could differ from that expressed herein, and the differences could be significant.
- 13.1.5 In preparing this Report, we have made certain assumptions as set out in Section 7 Major Assumptions and as described throughout this Report. Should any of these assumptions prove inappropriate, our calculations and analyses, as expressed in this Report could change, perhaps materially. We caution the reader in this regard.

14 Appendix D: Qualifications of Financial Advisory Partners



Larry Andrade, CPA, CA, CBV, CFF, CFE, MBA

Partner, Valuation & Litigation/Financial Advisory Services Deloitte LLP Toronto, Ontario

Office phone: 416-643-8989 Email: laandrade@deloitte.ca

Profile & Experience

Larry is a Partner in our Financial Advisory group and is the leader of Deloitte's National Disputes practice.

Larry has approximately 20 years of experience in the areas of damages economic loss quantification, litigation support, business valuation and forensic accounting investigations, involving large multi-national organizations and the public sector in North America and internationally.

Larry has completed and signed numerous expert reports and submitted evidence that have been accepted by various Canadian courts and tribunals on a variety of matters, including the quantification of economic losses, business valuation and forensic accounting and fraud investigations. Larry has been qualified as an expert in the Ontario Superior Court, the Patented Medicine Pricing Review Board, private arbitrations and various other tribunals.

Larry is and has been an instructor in both the undergraduate and graduate business administration programs at the Schulich School of Business at York University and at the University of Toronto, where he lectures on financial, management and forensic accounting as well as valuations and the quantification of economic losses. He has also given, and regularly provides, numerous presentations to various law firms, industry groups and conferences.

Larry obtained his Masters of Business Administration (MBA) degree from the Schulich School of Business in 2002. He is a member of various professional organizations including the Institute of Chartered Accountants of Ontario, the Canadian Institute of Chartered Business Valuators, the Associates of Certified Fraud Examiners, and the Association of Certified Forensic Investigators of Canada.

Larry is the Treasurer and sits on the Board of various not-forprofit organizations, including a large organization that with the assistance of the Ontario Ministry of Community and Social Services, develops and operates a number of group homes and day programs in Ontario for adults with autism and other mental disabilities.

Education and Professional certifications / affiliations.

- Chartered Professional Accountant (2012)
- Chartered Accountant, Institute of Chartered Accountants of Ontario, (1999)
- Chartered Business Valuator, Canadian Institute of Chartered Business Valuators (2002)
- Masters of Business Administration, Schulich School of Business (2002)
- Certified Fraud Examiner, Association of Certified Fraud Examiners (2004)
- Certified Specialist in Investigative and Forensic Accounting, CICA (2010)
- Certified in Financial Forensics (2015)
- Part-time Instructor in the areas of Financial and Management Accounting, Schulich School of Business (both undergraduate and graduate programs), York University (1999 to Present)
- Associate Professor in the areas of Financial and Management Accounting, University of Toronto (2002 to 2005)
- Treasurer and Board Member of VITA Community Living Services & Mens Sana Families for Mental Health (part of Villa Charities Group)
- Financial Representative on Allocations Panel at the United Way (Toronto)

Presentations

- Financial Statement Analysis and Improving Overall Financial Acumen, Presented to National Sales Team of Weston Foods (2019)
- Economic Loss Quantification & Business Valuation, Lerners LLP (2019)
- Valuation and Pricing in the Context of M&A Transactions, Cassels Brock (2019)
- Valuation and Pricing in the Context of M&A Transactions, Miller Thomson LLP (2018)
- Damages Issues in Class Action Litigations; Canadian Institute of Chartered Business Valuators Conference in Ottawa (2018)
- Big Data Litigation Relevant Issues; Canadian Institute of Chartered Business Valuators Conference in Ottawa (2018)
- MBA in a Day; Financial Statement Analysis, Ontario Bar Association (2018)
- Complex Accounting Matters; Cassels Brock (2018)
- Financial Statement Analysis and Intro to Valuations; Blaney McMurtry (2018)
- Financial Statement Analysis; Norton Rose (2017)
- Financial Due Diligence and Investigations of Gaming Suppliers; AGCO (2015)
- Economic Loss Quantification; Goodmans LLP (2015)

- Identifying Fraud and Financial Statement Manipulation; British Columbia Institute of Chartered Accountants (2015)
- Issues in the Assessment of Economic Damages; Davis LLP (2014)
- Identifying Fraud and Financial Statement Manipulation, Quebec Institute of Chartered Accountants (2013)
- The Role of the CBV in Resolving Damages Disputes, CICBV National Conference (2013)
- Issues in the Assessment of Economic Damages; McMillan LLP (2013)
- Issues in the Assessment of Economic Damages; Lenczner Slaght Royce Smith Griffin LLP (2012)
- Issues in the Assessment of Economic Damages; Davis & Company (2012)
- Identifying Fraud and Financial Statement Manipulation; Caribbean Institute of Chartered Accountants (2011)
- Financial Statement Fraud & Risk Factors; Manitoba & Saskatchewan Institute of Chartered Accountants (2011)
- Financial Statement Fraud & Risk Factors; BC Institute of Chartered Accountants (2010)
- Damages and Accounting for Profits in Intellectual Property Disputes; Gowlings LLP litigation Group (2010)
- Damages and Accounting for Profits in Intellectual Property Disputes; MacMillian Binch LLP litigation group (2009)
- Risk Management Seminar; British Columbia Institute of Chartered Accountants (2009, 2007, and 2005)
- Quantification of damages and Business Valuation, Borden Ladner LLP litigation group (2009)
- Intellectual Property Litigation and Damages; Gowlings LLP litigation group (2008)
- Risk Management Seminar; AICA Services Inc. for Ontario Chartered Accountants (2005)
- Understanding Financial Statements & Financial Statement Analysis; various law firms (2003 to present)

Language skills

- English
- Portuguese

Industry focus

- Valuation & Litigation Services
- Dispute Resolution Services
- Forensic & Investigative Accounting Service



Richard Taylor, CPA, CA, FCBV

Partner, Financial Advisory Services Deloitte LLP Toronto, Ontario Office phone: 416-775-7499

Office phone: 416-775-7499 Email: ritaylor@deloitte.ca

Profile

Richard Taylor was a Partner in our Financial Advisory group from 2007 to his retirement in May 2020. Richard is currently an Executive Advisor to Deloitte.

He has been involved in business valuation, financial litigation and related matters since 1985, acting on behalf of shareholders in connection with companies engaged in diverse industries in Canada and the United States. Richard has industry experience as the Vice President, Finance of a commercial real estate development and consulting firm. Richard continues to lecture across Canada on the topic of business valuation and is a past member of the Board of Directors of the Canadian Institute of Chartered Business Valuators.

Richard also has experience in litigation advisory services and has given testimony in federal and provincial courts and before arbitration panels.

Richard is a member of Deloitte's IFRS steering committee and an IFRS technical expert for Deloitte's financial advisory practice. Richard has authored articles on IFRS and is delivering IFRS training to Deloitte's financial advisory professionals across Canada.

Experience

Real Estate: Direct experience as the Vice President Finance for a real estate development company. Provided valuation and fairness opinions for a number of public and private real estate development, real estate services and real estate holding companies.

Infrastructure: valuation of a number of infrastructure projects for transaction, taxation, dispute and financial reporting purposes.

Power / Utilities: Valuation of a number of LDCs and

generation facilities for both transaction and financial reporting purposes.

Primary resource / mining: Valuation of a major mining and primary metals company for transaction purposes. Determination and review of fair value determinations of mining companies and mining assets for financial statement purposes.

Retail: Valuation of major retail companies including food, pharmacy and general retail for financial reporting purposes. Engagements included valuation of brand names, trademarks, other intangible assets and lease interests for tax and financial reporting purposes.

Private Equity: Valuation experience related to private equity investments in a number of private equity and labour sponsored investment funds. Experience in the determination of the fair market value of the shares of venture capital and private equity portfolio companies.

Seniors Housing: Direct experience through board participation for a not-for-profit long term care facility and seniors residence in Toronto. Provided valuation and fairness opinions for a number of public and private seniors housing entities for financial reporting, transaction, regulatory and litigation purposes.

Financial Instrument: Valuation of numerous financial instruments for transaction, tax and financial reporting purposes.

Manufacturing/Processing: Valuation of numerous manufacturing and processing entities for transaction, tax, financial reporting and regulatory purposes (Rule 61-501).

Transportation: Valuation of transportation companies (trucking, airlines, logistics) for transaction, tax and arbitration purposes.

Primary resource / forestry: Valuation of timberlands for tax and arbitration purposes and forest services companies for corporate and transaction purposes.

Asset management: Valuation of numerous financial and real estate asset management companies for transaction, tax and regulatory purposes (Rule 61-501)

International arbitration: Valuation of a number of entities for international arbitration purposes.

Various: Managed and provided business valuations services

for companies engaged in a variety of industries throughout North American such as: pharmaceuticals, telecommunications, technology, power generation, senior's housing, agriculture, and various service companies.

Education/Professional Designations

- Chartered Business Valuator, 1988
- Chartered Accountant, 1984
- Bachelor of Commerce (Honours), Queens University, 1981

Professional and Community Affairs

- Canadian Institute of Chartered Accountants
- Canadian Institute of Chartered Business Valuators (past Member of Board of Directors)
- Institute of Chartered Accountants of Ontario
- Provincial Institutes of Chartered Accountants (1992-2004 inclusive)
- Lectured at professional development seminars for the Ontario, British Columbia and Alberta Institutes
- St. Demetrius Development Corporation Member Board of Directors (past)
- International Limited Partners Association Conference Valuation Issues (2002)
- North American Valuation Summit on Financial Reporting Conference (2004)
- 2010 Private Equity Symposium, "Mark to Market: Private Equity Valuations in the Current Environment", Panel Moderator and Speaker (March 2010)
- Private Equity CFO Conference Valuation of Portfolio Companies (2010)
- Financial Reporting and Accounting Conference Fair Value Issues (2011)
- OSC / IFRS Update Current issues in Impairment Accounting (2012)

Publications

- Journal Articles: Co-Author, "Goodwill Impairment Testing" Discussion Paper, Canadian Institute of Chartered Business Valuators
- Other: Co-Author, Industry Canada Website, "Steps to Capital Growth"
- Contribution Author, Business Acquisition Agreements

Languages

English