

*Hearing Transcript*

**REFERENCE TO THE BOARD  
RATE MITIGATION OPTIONS AND IMPACTS  
MUSKRAT FALLS PROJECT**

**October 3, 2019**

**PRESENT:**

**The Board:**

Darlene Whalen, Chair and CEO  
Dwanda Newman, Vice-Chair  
John O'Brien, Commissioner

**Board Counsel/ Staff:**

Jacqueline Glynn, Board Counsel  
Maureen Greene, Q.C.  
Cheryl Blundon, Board Secretary

**Parties**

**Nalcor Energy/**

**Newfoundland and Labrador Hydro**  
Geoff Young, Q.C., Counsel - NL Hydro  
David Eaton, Q.C., Counsel – Nalcor Energy

**Newfoundland Power**

Kelly Hopkins, Counsel  
Liam O'Brien, Counsel

**Consumer Advocate**

Dennis Browne, Q.C. – Consumer Advocate  
Stephen Fitzgerald, Counsel – Consumer Advocate

**Island Industrial Consumer Group**

Paul Coxworthy, Counsel  
Dean Porter, Counsel  
Denis Fleming, Counsel

**Witnesses**

**The Liberty Consulting Group – Panel**

John Antonuk  
Brian Daschbach  
Kevin Cellars  
Dr. James Letzelter  
Randall Vickroy

<p style="text-align: right;">Page 1</p> <p>1 CHAIR:                  2 Q. Good morning everybody. I'd like to welcome                  3 everyone to the public hearing phase of the                  4 Board's ongoing Review of Rate Mitigation,                  5 options and impacts arising from the Muskrat                  6 Falls Project. My name is Darlene Whalen.                  7 I'm the Chair and CEO of the Board and for                  8 this public hearing, I will serve as Chair                  9 of the Panel of three commissioners who have                  10 responsibility for this matter. My                  11 colleagues joining me on the Panel are                  12 Commissioner Dwanda Newman, Vice-Chair of                  13 the Board; and Commissioner John O'Brien.                  14 Assisting the Board at this hearing and                  15 seated at the table to my right are Maureen                  16 Greene hearing counsel; Jacqui Glynn, Board                  17 counsel; and Cheryl Blundon, director of                  18 Corporate Services and Board secretary. We                  19 also have Glenda Gibbons from Discoveries                  20 Unlimited who will be doing our                  21 transcription and Bobbi Sheppard from Nalcor                  22 who will be assisting with electronic                  23 document retrieval. Hi Bobbi, nice to see                  24 you again. By way of background, excuse me,                  25 I've got a bot if a cold this morning. By</p>	<p style="text-align: right;">Page 3</p> <p>1 Fall Project cost estimates." An interim                  2 report of the Board's preliminary findings                  3 with respect to the first two of these                  4 questions was required to be filed on                  5 February 15th, 2019, and the Board's final                  6 report must be completed by January 31st,                  7 2020. The Board understands the importance                  8 of the work to be done in this reference and                  9 the significance of the issues to the                  10 province and to electricity consumers on the                  11 Island. As noted in the Board's interim                  12 report to government, the expected rate                  13 impacts of the Muskrat Falls Project are                  14 extraordinary by any measure. The average                  15 rates paid by customers of Newfoundland                  16 Power and certain customers of Newfoundland                  17 and Labrador Hydro are projected to                  18 increase—or are projected to be in the range                  19 of nine to ten cents per kilowatt hour                  20 higher following commissioning of the                  21 project. In the reference, government                  22 stated that these increases are not                  23 acceptable and noted that it would likely                  24 cause financial hardships for consumers on                  25 the Island. The Board also acknowledges the</p>
<p style="text-align: right;">Page 2</p> <p>1 way of background, on September 5th, 2018                  2 government issued a reference directing the                  3 Board to review and report on options to                  4 reduce the impact of the Muskrat Falls                  5 Project costs on electricity rates up to the                  6 year 2030. The reference set out three                  7 specific questions to be addressed by the                  8 Board. Question 1: "Options to reduce the                  9 impact of the Muskrat Falls Project costs on                  10 electricity rates up to the year of 2030 or                  11 such shorter period as the Board see fit                  12 including cost savings and revenue                  13 opportunities with respect to electricity,                  14 including generation, transmission,                  15 distribution, sales and market assets and                  16 activities of Nalcor Energy and its                  17 Subsidiaries." Question 2: "The amount of                  18 energy and capacity from the Muskrat Falls                  19 Project required to meet the Island                  20 interconnected load and the remaining                  21 surplus energy and capacity available for                  22 other uses such as export and load growth."                  23 And Question 3: "The potential electricity                  24 rate impacts of the options identified in                  25 Question 1, based on the most recent Muskrat</p>	<p style="text-align: right;">Page 4</p> <p>1 significant rate increases which came into                  2 effect this week for customers of                  3 Newfoundland Power and certain customers of                  4 Hydro which will only add to the impact of                  5 these projected rate increases. It is hoped                  6 that the work completed as part of this                  7 reference with the contribution of the                  8 parties and other interested persons will                  9 result in the identification and full                  10 assessment of reasonable rate mitigation                  11 opportunities related to electricity so that                  12 government has the best information                  13 available to assist in addressing this                  14 challenge. I'd like to take a few minutes                  15 to describe the work that's been completed                  16 to this point. To assist in answering the                  17 reference questions, the Board engaged the                  18 services of two expert consultants, the                  19 Liberty Consulting Group and Synapse Energy                  20 Economics Inc. In December 2018, both                  21 Liberty and Synapse filed interim reports                  22 setting out preliminary findings. Following                  23 review of these reports and submissions, and                  24 the submissions filed in relation to them,                  25 the Board submitted its interim report to</p>

<p style="text-align: right;">Page 5</p> <p>1 government as required on February 15th. On                  2 February 22nd, 2019, the Board published an                  3 invitation to request standing in the review                  4 which would provide the opportunity to                  5 present evidence and ask questions at the                  6 public hearing. As the primary responding                  7 parties to the information requests required                  8 answers to the referenced questions, Nalcor                  9 and Hydro have standing. Mr. Dennis Browne,                  10 Q.C. was appointed as the consumer advocate                  11 by government for this reference and as such                  12 also has full standing. Newfoundland Power                  13 and a group of Island industrial customers                  14 specifically Corner Brook Pulp and Paper                  15 Limited and NARL Refining Limited                  16 partnership and Vale Newfoundland and                  17 Labrador Limited were also granted full                  18 standing for the review. A group of                  19 customers on the Labrador interconnected                  20 system, Sheshatshiu Innu First Nation, Happy                  21 Valley-Goose Bay, Wabush and the Town of                  22 Labrador City were also granted limited                  23 standing to represent the interest of the                  24 Labrador interconnected system customers                  25 where those interests diverge from the</p>	<p style="text-align: right;">Page 7</p> <p>1 MR. O'BRIEN:                  2 Q. Good morning, Madam Chair, Commissioners.                  3 Liam O'Brien and Kelly Hopkins on behalf of                  4 Newfoundland Power.                  5 CHAIR:                  6 Q. Welcome. And the Industrial Customer Group?                  7 MR. FLEMING:                  8 Q. Good morning. Dennis Fleming, Dean Porter                  9 and Paul Coxworthy on behalf of the Island                  10 Industrial Customers.                  11 CHAIR:                  12 Q. Thank you. Over the past six months, the                  13 Board, its consultants and the parties                  14 before you have worked collaboratively to                  15 gather the necessary information required                  16 for the Board to respond to the reference                  17 questions. The Board has facilitated three                  18 technical conferences at its offices at                  19 which its experts were made available to the                  20 parties to answer questions, provide                  21 clarification on issues and seek input.                  22 Nalcor has responded to 287 information                  23 requests from the Board and Newfoundland                  24 Power has responded to 104 information                  25 requests. The Board's consultants have also</p>
<p style="text-align: right;">Page 6</p> <p>1 general interest of all ratepayers as                  2 represented by the consumer advocate. I                  3 think this would be a good point to ask the                  4 parties present and seated at the tables                  5 before us to introduce themselves for the                  6 purposes of the record and for those who are                  7 present in the room. We'll start with                  8 Nalcor and Hydro.                  9 EATON, Q.C.:                  10 Q. Good morning, Madam Chair. David Eaton for                  11 Nalcor.                  12 CHAIR:                  13 Q. Thank you.                  14 YOUNG, Q.C.:                  15 Q. Geoff Young for Newfoundland and Labrador                  16 Hydro.                  17 CHAIR:                  18 Q. Welcome. Consumer advocate?                  19 MR. FITZGERALD:                  20 Q. Good morning, Madam Chair, Board. Steve                  21 Fitzgerald, counsel for Mr. Dennis Browne.                  22 Also, we have with us Mr. Doug Bowman and                  23 James Feehan.                  24 CHAIR:                  25 Q. Welcome. Newfoundland Power?</p>	<p style="text-align: right;">Page 8</p> <p>1 met with the parties and have exchanged                  2 additional information on a variety of                  3 issues related to the reference questions.                  4 Liberty and Synapse filed their reports on                  5 September 3rd, setting out their findings                  6 based on the information gathered since                  7 their interim reports. Additional reports                  8 and information were filed by the parties on                  9 September 20th. The Board acknowledges the                  10 efforts of Nalcor, Hydro and Newfoundland                  11 Power in responding to the extensive                  12 requests for information and in making the                  13 necessary staff and executive available as                  14 required. We also thank the other parties                  15 for their cooperation and active                  16 participation in the review to date.                  17 Appreciation is also extended to the Board's                  18 staff and advisors for their efforts and                  19 particularly Maureen Greene who has taken                  20 the lead counsel role on this matter and on                  21 behalf of the Board. I know it's taken a                  22 considerable amount of work on the part of                  23 all involved to ensure that the schedule was                  24 maintained to get us to this public hearing                  25 phase and we thank you for efforts. The</p>

<p style="text-align: right;">Page 9</p> <p>1 purpose of this public hearing is to provide                  2 a forum for the Board to hear information                  3 and perspectives on issues so that it can                  4 fully and fairly respond to the reference                  5 questions and file its report as required in                  6 January of 2020. Notice of this hearing was                  7 published in papers across the province                  8 beginning on September 4th and a schedule of                  9 hearing dates and presentations was released                  10 yesterday. The hearing will begin today                  11 with the presentation from Liberty who will                  12 present their findings and answer questions                  13 from the parties and commissioners. Synapse                  14 is scheduled to begin their presentation on                  15 Monday to be followed by presentations from                  16 Nalcor, Newfoundland Power and the                  17 Industrial Customer Group. Presentations                  18 from other interested persons who requested                  19 the opportunity to do so will be heard on                  20 Friday, October 18th. For those who did not                  21 request the opportunity make a presentation,                  22 comments and submissions may be filed                  23 anytime up to October 25th, 2019 and it is                  24 expected that the parties will file their                  25 submissions on November 1st. The schedule</p>	<p style="text-align: right;">Page 11</p> <p>1 recording of each day’s proceedings will                  2 also be available on the website by the same                  3 evening. I just ask that you each take a                  4 moment just to make sure your cell phones                  5 are all silenced just so as to not disrupt                  6 the recording of the proceeding. Parties,                  7 any parties who have concerns or anyone in                  8 the room who has concerns or issues with the                  9 creature comforts, layout, supplies or any                  10 accommodation required, you should bring                  11 these matters to the attention of the                  12 Board’s secretary, Cheryl Blundon, and we’ll                  13 make every effort to assist you. And with                  14 the exception of today, the normal daily                  15 sitting time will be 9:00 to 1:30 with a                  16 half-hour break from 11:00 to 11:30. And                  17 with that said, I’d like to turn things over                  18 to Ms. Greene to ensure I haven’t missed                  19 anything and to introduce our first                  20 presentation.                  21 GREENE, Q.C.:                  22 Q. Thank you, Chair. To my knowledge, there’s                  23 no other issues that need to be raised at                  24 this time.                  25 CHAIR:</p>
<p style="text-align: right;">Page 10</p> <p>1 for the hearing is available on the Board’s                  2 website and will be updated as required.                  3 The Board will endeavour to maintain the                  4 schedule and ask that the parties do their                  5 utmost to do the same. The timely                  6 conclusion of the hearing will ensure that                  7 the Board is able to begin the task of                  8 completing its report on the reference                  9 questions to be filed with government by the                  10 end of January 2020. And before we get                  11 started with the business of the day, there                  12 are a number of other, mostly housekeeping                  13 matters I’d like to quickly review. All                  14 information filed to date in relation to the                  15 reference with the exception of confidential                  16 information is posted on the Board’s website                  17 and all documentation presented during the                  18 public hearing will be posted on the website                  19 as it is received. These proceedings are                  20 being recorded by Discoveries Unlimited                  21 under the supervision of the Board                  22 secretary. Transcripts of each day’s                  23 proceedings will be available by the same                  24 evening on the Board’s website and will be                  25 sent directly to the parties. The audio</p>	<p style="text-align: right;">Page 12</p> <p>1 Q. I’ll turn it over to you, thank you.                  2 GREENE, Q.C.:                  3 Q. Thank you. I’d like to begin by introducing                  4 the panel that is seated across from me.                  5 These are the representatives of the Liberty                  6 Consulting Group and I will begin with the                  7 president of Liberty, John Antonuk. And                  8 John, I’d ask, or Mr. Antonuk, I would ask                  9 that after you introduce yourself, you give                  10 a very brief overview of your personal                  11 background and experience as it relates to                  12 the work that you did for the Board. And                  13 then if you could introduce each member of                  14 your team, and as well, I ask each member to                  15 give a very high-level brief overview of                  16 your background.                  17 MR. ANTONUK:                  18 A. Okay. Let me start by saying it’s a                  19 pleasure to be among friends again and it’s                  20 a privilege to be asked to contribute to a                  21 matter that we know is of first importance                  22 to the residents, the businesses and the                  23 institutions of the province. My name is                  24 John Antonuk and I’m, I guess, the last-                  25 standing founder of Liberty which has been</p>

<p style="text-align: right;">Page 13</p> <p>1 around now for a little more than 30 years.                  2 I began my career with the Pennsylvania                  3 Public Utility Commission and then served in                  4 a regulatory management capacity at                  5 Pennsylvania Power and Light Company which                  6 as most US utilities, has just initials and                  7 no longer a real name. Following that, I've                  8 been engaged for most of that with Liberty                  9 and my focus, well my overall focus, has                  10 been management of our work and I've                  11 probably managed somewhere in the order of                  12 500 engagements over those 30 years. We've                  13 now worked in every US state, but one and                  14 we've been engaged in four provinces in                  15 Canada, principally Nova Scotia and                  16 Newfoundland and Labrador. Apart from                  17 managing projects, my principal focus has                  18 been executive organization, management,                  19 corporate structure, but I have also been                  20 engaged very deeply in several dozen fuel                  21 and energy and marketing examinations and                  22 probably something on the order of two dozen                  23 management audits which focus widely on                  24 utility management and operations.                  25 MR. LETZELTER:</p>	<p style="text-align: right;">Page 15</p> <p>1 He served as a senior partner in the energy                  2 practices of both Theodore Barry and                  3 Associates and PA Consulting. And his                  4 specialties include operational improvement,                  5 competitive analysis, asset evaluation,                  6 environmental compliance and restructuring.                  7 MR. DASCHBACH:                  8 Q. Good morning. I'm Brian Daschbach. I'm a                  9 member of the Liberty team. I've been a                  10 consultant for about five years to the                  11 electric gas utility industry sector. My                  12 expertise and experience stem from 35 years                  13 at Baltimore Gas and Electric, the last 20                  14 years at the senior executive level, either                  15 chief engineer, vice-president or senior                  16 vice-president. My last role was the                  17 responsibility for the field operations                  18 across all the lines of business. I was                  19 responsible for, besides those field                  20 operations, the management of about 1400                  21 organic utility employees and more than                  22 2,000 contractors.                  23 MR. VICKROY:                  24 Q. Yes, I'm Randall Vickroy. I spent my entire                  25 career in utility corporate finance,</p>
<p style="text-align: right;">Page 14</p> <p>1 Q. Good morning. My name is Jim Letzelter.                  2 I'm a management consultant with 29 years of                  3 experience in the electric power industry.                  4 I have a Bachelor's Degree in Electrical                  5 Engineering, an MBA with a concentration in                  6 Finance and a Doctorate in Law and Policy.                  7 My areas of expertise include power market                  8 assessment, financial analysis, generation                  9 asset evaluation, risk analysis and computer                  10 modelling. I've been involved in power                  11 plant development, acquisition and                  12 disposition throughout the US for decades,                  13 typically providing the evaluations used in                  14 these transactions. I've also served as the                  15 auction monitor in three US states                  16 overseeing the standard offer of service                  17 auctions by those states' regulated                  18 utilities. I've also been asked to provide                  19 some background on one of our key team                  20 members who could not make it to the meeting                  21 today, and that's Michael Beck. Mr. Beck is                  22 a management consultant with 35 years of                  23 experience in the industry. He holds a                  24 Bachelor's Degree in Engineering and an MBA                  25 and is a registered professional engineer.</p>	<p style="text-align: right;">Page 16</p> <p>1 originally started with a gas and electric                  2 utility in Colorado and worked on the                  3 finance staff. And we were responsible for                  4 raising money, stocks, bonds, medium-term                  5 notes, things like that.                  6 (9:45 a.m.)                  7 We also did financial analysis and we worked                  8 on capital structures and other financial                  9 issues. The last 25 years, I've worked in                  10 the utility corporate finance for the                  11 Liberty Consulting Group primarily and we                  12 have done a lot as John said. Management                  13 audits, and I would handle the finance                  14 portion of that, and we also have done work                  15 for a number of companies, both large and                  16 small, such as Duke, Exelon, et cetera, as                  17 well as some smaller companies. We've also                  18 worked for federally-supported generation in                  19 transmission companies like East Kentucky                  20 Power, Flat River Power, et cetera. So, we                  21 have a very wide range of experience                  22 regarding utility corporate finance.                  23 MR. CELLARS:                  24 Q. Good morning. My name is Kevin Cellars. I                  25 have greater than 30 years of experience in</p>

Page 17	<p>1 generation with power plants. I started my                  2 career as a nuclear submarine officer for                  3 the United States Navy. I subsequently                  4 worked at three large utilities, Exelon,                  5 PSEG and Baltimore Gas Electric where my                  6 experience has been in both fossil and                  7 nuclear-generating stations. I have a                  8 varying level of experience starting from                  9 field and design engineer, all the way to                  10 executive management in construction and                  11 engineering. I have experience in                  12 procurement, construction, outage                  13 management, engineering project manager and                  14 plant acquisitions. I have a Bachelor's                  15 Degree in Mathematics and Economics and I                  16 have a Master's in Sciences with John                  17 Hopkins University in Engineering Management                  18 concentrating in Organization and Project                  19 Management.                  20 GREENE, Q.C.:                  21 Q. Thank you very much. For the information of                  22 the commissioners, Mr. Beck is not here                  23 because his son is being married. So, we                  24 excused him from attending today, but if                  25 there are—and I'm sure the rest of the panel</p>	Page 19	<p>1 in phase 2, what were those issues you did                  2 not address?                  3 MR. ANTONUK:                  4 A. We address in phase 1 certain financing                  5 issues that we undertook a base analysis of                  6 those. They basically related to financing                  7 changes relative to LCP that could alter                  8 either the amounts or the timing of the                  9 availability of certain sources of                  10 mitigation. It was decided to leave those                  11 aside because they were under discussion                  12 between provincial and federal                  13 representatives. As I said, we did a base                  14 analysis and we think that analysis                  15 continues to have merit in identifying                  16 finance related options, but obviously, with                  17 there being a discussion between federal and                  18 provincial officials, they became above our                  19 pay-grade.                  20 GREENE, Q.C.:                  21 Q. And can you briefly explain how you went                  22 about doing your work?                  23 MR. ANTONUK:                  24 A. Yes, I think the Chair listed in good form                  25 and detail the principal steps. So, I'll</p>
Page 18	<p>1 will be able to address his areas. Turning                  2 now to the rate mitigation to the work that                  3 you did, the reference questions that were                  4 received from the government for the Board's                  5 consideration and the report did address                  6 certain areas. Mr. Antonuk, could you                  7 please advise what were the questions that                  8 Liberty's work addressed as required by the                  9 reference questions?                  10 MR. ANTONUK:                  11 A. I should be live. Am I not –                  12 GREENE, Q.C.:                  13 Q. It's the presentation. Okay. Is there a                  14 problem? You're not able to –                  15 MR. ANTONUK:                  16 A. Yes.                  17 GREENE, Q.C.:                  18 Q. There you go.                  19 MR. ANTONUK:                  20 A. Okay. We're driving now? Okay, thank you.                  21 We focused on questions 1 and 3 which are                  22 identified there and did not address aspects                  23 of question 2.                  24 GREENE, Q.C.:                  25 Q. And what were those aspects of question 1 or</p>	Page 20	<p>1 focus instead on indicating that extensive                  2 data development and analysis was the key                  3 feature of our work, followed by work                  4 sessions both individually and jointly with                  5 Nalcor, Hydro and Newfoundland Power                  6 personnel. We also undertook a number of                  7 meetings with the consumer advocate, Island                  8 Industrial Customers and we met with                  9 bargaining unit representatives as well. As                  10 most of you know, there were all party                  11 conferences in March, June and August. And                  12 I think the thing I want to do is, I believe                  13 we did in phase 1, is again commend the                  14 cooperation that we received from Nalcor,                  15 Hydro and Newfoundland Power, and that                  16 cooperation was necessary, it was timely,                  17 and as we saw, it very freely given despite                  18 the fact that we were asking them to deal                  19 with issues that were pretty tough issues.                  20 GREENE, Q.C.:                  21 Q. Okay. The reference questions also ask the                  22 Board to look at opportunities that there                  23 might be to reduce the Lower Churchill                  24 Project operating and maintenance costs as                  25 well as best industry practices for export</p>

Page 21

1 market sales. Did Liberty undertake work in  
 2 those areas as well?  
 3 MR. ANTONUK:  
 4 A. We did. We reported on work we did in those  
 5 areas in phase 1 and we continued that work  
 6 through phase 2.  
 7 GREENE, Q.C.:  
 8 Q. Okay, the next topic I wanted to talk to you  
 9 about was Liberty’s qualifications. You  
 10 each have addressed your own individual  
 11 background. Is there anything you would  
 12 like to add about your company’s experience  
 13 and qualifications to do the work you  
 14 undertook for the Board?  
 15 MR. ANTONUK:  
 16 A. There’s a great deal of information on the  
 17 next couple of slides. I’ll just address it  
 18 at the high level and the details are there  
 19 for those who are interested. Across a  
 20 period of two decades, we’ve done two dozen  
 21 comprehensive management audits which means  
 22 we’re basically doing one pretty much all  
 23 the time and have been. And those focus on  
 24 everything it takes to plan, manage and  
 25 execute utility responsibilities, and

Page 22

1 typically including relationships with  
 2 affiliates for those utilities that operate  
 3 in both markets. We have also undertaken  
 4 some 30 engagements which have focused on an  
 5 examination of affiliate relationships and  
 6 transactions. And they focus specifically  
 7 on organizational design, resource  
 8 alignment, transactions that exist between  
 9 utilities that are operating in both  
 10 regulated and unregulated environments. And  
 11 it also very commonly or often includes  
 12 utilities that are operating in multiple  
 13 stages and even if they’re only in regulated  
 14 operations, but use a service company to  
 15 provide service to common or a number of  
 16 operating companies which requires of course  
 17 a logical organization, a well-defined list  
 18 of services and then proper charging for  
 19 those services. We’ve also done extensive  
 20 work in energy markets. We helped several  
 21 states figure out how to do, what we call in  
 22 the US, restructuring which is the  
 23 deregulation of generation while  
 24 transmission and distribution remain under  
 25 monopoly service providers. We’ve also

Page 23

1 looked at optimizing portfolio value and the  
 2 effectiveness of market participation in a  
 3 number of states. And as Jim mentioned a  
 4 little earlier, we oversee the competitive  
 5 supply solicitations in a number of states.  
 6 Those are restructured states where a  
 7 provider of last resort responsibilities are  
 8 fulfilled through a market-wide solicitation  
 9 by all utilities in the state. So, that  
 10 requires us to assure that the processes are  
 11 designed correctly and that they’re  
 12 administered fairly and that the prices that  
 13 are achieved are within an appropriate  
 14 market range. Randy talked a little bit  
 15 about financial opportunities. Oh, I’m  
 16 sorry, I went to—I think I went right  
 17 through.  
 18 GREENE, Q.C.:  
 19 Q. Okay.  
 20 MR. ANTONUK:  
 21 A. Fuel and energy management audits, I  
 22 mentioned. Those look at how fuel and  
 23 energy acquired, including market trading  
 24 done to sell excess power or acquire power  
 25 that isn’t owned on site. We have done

Page 24

1 quite a number of staffing studies. We’re,  
 2 in fact, engaged in two of them at the same  
 3 time we were looking at the staffing  
 4 elements of the study here. We’ve done many  
 5 more, many broader than what we’ve done  
 6 here, some of utilities that are much bigger  
 7 and some of the utilities that are much  
 8 smaller. And then with respect to finance  
 9 and debt ratings, that’s a common issue in  
 10 our management audits. And we’ve also  
 11 participated on behalf of commission staffs  
 12 and in some cases private parties if  
 13 acquisition proceedings were key issues are  
 14 what are the current financial circumstances  
 15 of the entities involved, and what will be  
 16 the risks, what will be the consequences for  
 17 equity and debt issuances post merger as  
 18 well?  
 19 GREENE, Q.C.:  
 20 Q. Thank you. I’d like now to turn to your  
 21 report that was filed on September 3rd, and I  
 22 wonder, Ms. Sheppard, if you could bring up  
 23 page 4 of Liberty’s report dated September  
 24 3rd? I understand there is one small editing  
 25 or typo correction you would like to make on

Page 25	<p>1 page 4, is that correct?</p> <p>2 MR. ANTONUK:</p> <p>3 A. Yes, there's a reference.</p> <p>4 GREENE, Q.C.:</p> <p>5 Q. Page 4.</p> <p>6 MR. ANTONUK:</p> <p>7 A. I believe it was near the bottom.</p> <p>8 GREENE, Q.C.:</p> <p>9 Q. Yes, when we get to it. It'll come up on</p> <p>10 the screen there in a moment.</p> <p>11 MS. SHEPPARD:</p> <p>12 Q. Just coming up on the screen there.</p> <p>13 GREENE, Q.C.:</p> <p>14 Q. Okay. It's in the last full paragraph about</p> <p>15 halfway down.</p> <p>16 MR. ANTONUK:</p> <p>17 A. Okay.</p> <p>18 GREENE, Q.C.:</p> <p>19 Q. The sentence begins "doing so would make</p> <p>20 another roughly 110 million dollars</p> <p>21 available annually between 2021 and 2025".</p> <p>22 MR. ANTONUK:</p> <p>23 A. Yes. The word "annually" should be</p> <p>24 stricken. This refers to passages later in</p> <p>25 the report which correctly interpret or</p>	Page 27	<p>1 particularly, we began to incorporate those</p> <p>2 opportunities into the revenue requirements</p> <p>3 model, which would allow us to match up the</p> <p>4 opportunities they presented along with</p> <p>5 opportunities from others.</p> <p>6 On the operational side, we continued</p> <p>7 examining the organizational structures,</p> <p>8 resources and operations of the three main</p> <p>9 sources of utility service provision in the</p> <p>10 Province, Nalcor, Hydro and Newfoundland</p> <p>11 Power. We looked at integrating Nalcor</p> <p>12 Power Supply and Hydro under a common</p> <p>13 structure. We also looked at the potential</p> <p>14 for transferring operational responsibility</p> <p>15 between Hydro and Newfoundland Power. As</p> <p>16 you all know, they share functions depending</p> <p>17 on the areas and the customers served and</p> <p>18 the functions provided. We also looked at</p> <p>19 LCP operations and maintenance costs from</p> <p>20 two perspectives, their level and</p> <p>21 reasonableness and opportunities to reduce</p> <p>22 them.</p> <p>23 As Maureen noted in a question earlier,</p> <p>24 we looked at the utility regulatory</p> <p>25 framework in the Province as it concerns the</p>
Page 26	<p>1 express the 110 million as being a number</p> <p>2 for the whole period and in this case, we</p> <p>3 mistakenly inserted the word "annually". So</p> <p>4 here the reference should be the same – or</p> <p>5 the statement should be the same as it is</p> <p>6 later in the report referring to 110 million</p> <p>7 dollars over the full period identified</p> <p>8 there.</p> <p>9 GREENE, Q.C.:</p> <p>10 Q. And the other pages with the references, for</p> <p>11 the record, are pages 24 and 93 where it is</p> <p>12 stated correctly that the 110 million is</p> <p>13 over the period 2021 to 2025 and not</p> <p>14 annually.</p> <p>15 Okay. If we could now talk about your</p> <p>16 report and what were the main areas of focus</p> <p>17 that you reported on in your report?</p> <p>18 MR. ANTONUK:</p> <p>19 A. If we could go back to – I can't – I think</p> <p>20 we're – we both want to be in the driver's</p> <p>21 seat. Okay, there it is. Financial</p> <p>22 opportunities, we basically continued with</p> <p>23 the work we were doing in Phase 1, continued</p> <p>24 to refine our information, look for anything</p> <p>25 that would be new or different and more</p>	Page 28	<p>1 areas we were responsible for. We looked at</p> <p>2 utility industry practices and approaches</p> <p>3 for marketing energy, which in the US is</p> <p>4 commonly referred to as off-system sales,</p> <p>5 meaning sales made to other than native</p> <p>6 customers, and we also then, as I noted,</p> <p>7 were incorporating as we went our results as</p> <p>8 they developed into a real-time revenue</p> <p>9 requirements mitigation model which allows</p> <p>10 our assumptions about changes in either</p> <p>11 revenues or expenses and those of others to</p> <p>12 be incorporated into a model that will</p> <p>13 translate that into total dollars mitigated</p> <p>14 and the effect on retail rates.</p> <p>15 There's a brief discussion here of the</p> <p>16 revenue requirements model. I think the –</p> <p>17 as I said, we operate the model in two ways.</p> <p>18 One is to show total revenue requirements</p> <p>19 dollars and cents per kilowatt hour. We did</p> <p>20 not do segregation by customer class. We</p> <p>21 did total revenue requirement. Certainly as</p> <p>22 you have read and will hear from Synapse,</p> <p>23 they did more looking at effects of things</p> <p>24 on individual classes than we did. Our</p> <p>25 model has the ability to change inputs,</p>

Page 29

1 whether from us or from anyone else, with  
 2 respect to revenues, expenses, off-system  
 3 sales and margins and any other factors  
 4 identified as affecting revenue  
 5 requirements.  
 6 GREENE, Q.C.:  
 7 Q. I'd like now to talk about those specific  
 8 areas and look first to the financial  
 9 opportunities as you describe them in your  
 10 report. Can you explain for the  
 11 Commissioners what were the financial  
 12 opportunities you reviewed and what the  
 13 potential is from them for rate mitigation?  
 14 MR. ANTONUK:  
 15 A. Well, we observed that they were very large  
 16 in magnitude in Phase 1. That was confirmed  
 17 in Phase 2 and as our knowledge of the other  
 18 opportunities matured and developed in Phase  
 19 2, it became clear that the two sources  
 20 account for somewhat more than two-thirds of  
 21 the total amounts that we identified as  
 22 available for rate mitigation, and I want to  
 23 say available because as we're going to  
 24 discuss, a lot of these depend on provincial  
 25 matters that we did not attempt to address.

Page 30

1 So, we tried to establish a pool, but  
 2 certainly recognizing that it's up to the  
 3 Province to decide what portions of that  
 4 pool it finds appropriate to make available.  
 5 The two sources are LCP dividends and  
 6 off-system sales from Muskrat Falls and the  
 7 opportunity begins at a level in the range  
 8 of about 130 million dollars in 2021 and as  
 9 you see from the next two points there, it  
 10 grows very substantially by 2039. That is a  
 11 20-year period, not the 10-year period  
 12 called by the reference. As I'll explain,  
 13 we extended that period out because it  
 14 became – particularly because it became –  
 15 well, let me say it differently. We  
 16 suspected that changes over ten years might  
 17 look very different than changes over 20  
 18 years and we confirmed, in fact, that that  
 19 was the case in Phase 2. So, we thought it  
 20 was appropriate to run the period out for 20  
 21 years to show first a continuation of  
 22 benefits which will grow substantially in  
 23 that second ten years compared to the first  
 24 ten, and also which subject themselves to  
 25 possible financial rearrangements that might

Page 31

1 be able to advance that second year pot of  
 2 benefits somewhat to the first part. That's  
 3 providing a levelling of rate increases.  
 4 And those are the financial options that I  
 5 said were suspended at the end of Phase 1  
 6 and potentially more that might exist that  
 7 we never looked at.  
 8 It's one thing to talk about dollars.  
 9 It's a little hard to relate them to rates.  
 10 You can do it, and we did. Those  
 11 opportunities alone have the potential to  
 12 reduce rates by 60 cents – six cents per  
 13 kilowatt hour by 2030 and then because of  
 14 their continuing growth that that amount  
 15 will increase to somewhat in the order of  
 16 nine cents by 2039, which makes them the  
 17 dominant, but as we're going to discuss not  
 18 the only source of potential rate  
 19 reductions.  
 20 (10:00 a.m.)  
 21 As I said, there are implications for  
 22 the Provincial Government. The financial  
 23 opportunities consist of really two sources  
 24 of what I'll call Provincial funds flow,  
 25 some that will become available after LCP

Page 32

1 operation and secondarily, some that are  
 2 already available for Government use.  
 3 And they have two – there are two  
 4 principal implications with respect to the  
 5 financial opportunities. One, of course, is  
 6 the Government's ability to operate without  
 7 funds that are moved from whatever purpose  
 8 they're applied to today or planned to be  
 9 applied to in the future to rate mitigation.  
 10 These are not net new dollars. They're  
 11 dollars moved from another source to  
 12 mitigation.  
 13 And second, some of those sources have  
 14 natural limits beyond which you can begin to  
 15 negatively affect the Government's credit  
 16 ratings and therefore the amount it pays to  
 17 acquire financing, and obviously only the  
 18 Province is in a position to make those  
 19 judgments and we'll talk a little bit about  
 20 how those limits are set and what their  
 21 implications are.  
 22 Ultimately though, I think the key  
 23 thing to keep in mind is the implications  
 24 depend on the amount of dollars that  
 25 Government ultimately determines ought to be

<p style="text-align: right;">Page 33</p> <p>1 applied to rate mitigation versus other                  2 purposes. Those are significant in central                  3 policy issues for the Government to resolve                  4 and we did not attempt to wade into those                  5 waters. I would say, you know, as tough as                  6 our work was, we did the easy part when it                  7 comes to making those kind of judgments.                  8 Talking a little more about LCP                  9 dividends, they arise from two sources.                  10 Those are purchase power agreement and                  11 transmission funding agreement under which                  12 Hydro will make payments associated with the                  13 LCP assets. The contributions from those                  14 dividends grow pretty significantly. They                  15 start at 90 million in 2021 and they                  16 increase to over 550 million by 2039.                  17 You'll see the numbers are a little more                  18 precise on the charts. I think the right                  19 way to look at them from an analytical                  20 purpose is to try to be precise, but                  21 recognizing where we are and how much things                  22 can change, you'll see I tend to round                  23 numbers like that.                  24 What is the source of those dividends?                  25 The source of those dividends is the 3.7</p>	<p style="text-align: right;">Page 35</p> <p>1 associated with the LCP assets. Off-system                  2 sales is the second biggest component and it                  3 makes up that three-quarters portion along                  4 with the LCP dividends.                  5 There has been some question about how                  6 our numbers match with those that Synapse                  7 has used. We considered only the allocated                  8 to MF or Muskrat Falls portion and they                  9 considered the allocated to New Hampshire –                  10 or New Hampshire – Newfoundland Hydro                  11 portion. We did not consider the                  12 Newfoundland Hydro portion and that accounts                  13 for the difference between the export sales                  14 data between their work and ours. It's                  15 important to note that for our purposes                  16 Hydro's rate forecast already account for                  17 the allocated to NH portion or the Hydro                  18 portion. So there's not really a mitigation                  19 opportunity with respect to those. It was                  20 certainly proper for Synapse to consider                  21 them in looking at total export sales and                  22 what factors might or should change those.                  23 But for us, there was not a mitigation                  24 opportunity there, so they did not form a                  25 part of our work.</p>
<p style="text-align: right;">Page 34</p> <p>1 billion investment that the Government has                  2 made in LCP, which entitle it to an 8.4                  3 percent return on equity for Muskrat Falls                  4 and the Labrador Transmission assets, and I                  5 put the note there backloaded. That means                  6 that the way those returns will come to the                  7 Province causes them to increase                  8 significantly in later years and that's one                  9 of the reasons why we see, when we look at                  10 the second ten years, a significantly                  11 greater source of mitigation.                  12 The return on the LIL is similar. It's                  13 8.5 percent. That's more on kind of a                  14 straight-line basis, a traditional rate of                  15 return basis. So those are, I would argue,                  16 not a front nor backloaded. They kind of                  17 flow in the way returns ordinarily do for                  18 utility investments.                  19 The costs under the two agreements are                  20 very substantial. They begin, as you can                  21 see there, at 726 million dollars a year.                  22 So, while the dividends are substantial,                  23 they obviously don't – they don't account                  24 for all of the costs that are required to be                  25 paid by Hydro under the agreements</p>	<p style="text-align: right;">Page 36</p> <p>1 And as I'm going to explain later, you                  2 know, it's very clear to us, and frankly I                  3 don't think there's much disagreement about                  4 that, is that accepted regulatory principles                  5 ordinarily apply those margins to offset                  6 Hydro's revenue requirements. If there's a                  7 difference between us, it – between us and                  8 those who've filed in response to our                  9 report, it's really that, you know, it is a                  10 policy decision for the Province to make and                  11 while I don't disagree with that, I think we                  12 should all recognize that to the extent that                  13 continues to be the Province's decision, it                  14 is a – it would be contrary to what is                  15 essentially universal practice in the                  16 utility industry.                  17 Other financial mitigation sources                  18 exist, but they're not nearly as                  19 substantial. But they are nevertheless                  20 substantial in their own right. One of them                  21 are the returns are built into Hydro's                  22 rates. As is typically true in the                  23 industry, Hydro earns a return on the equity                  24 investment that it makes in its operations.                  25 The target that Hydro has used, which is a</p>

<p style="text-align: right;">Page 37</p> <p>1 common target, is 25 percent equity as a                  2 percent of its total capital structure,                  3 basically 25 percent equity, 75 percent                  4 debt.                  5 We began using that target as a                  6 baseline, not because we endorse it, but it                  7 was a starting point. At that level,                  8 Hydro's equity will need to build to reach                  9 25 percent, which it will do '25, 2025 or                  10 2026. Once it does so, there is the                  11 potential for an average of 43 million                  12 dollars a year in returns that can be used                  13 for mitigation while maintaining that 25                  14 percent equity level. The returns remain                  15 substantial from this source thereafter, but                  16 become much more variable. They vary                  17 between six and 83 million, if you continue                  18 out for the next period that ends in 2039.                  19 As you'll see, for the full period, they                  20 still average about the same amount, 46                  21 million versus 43. But I think the thing to                  22 keep in mind is to note that if you're going                  23 to use them as a source of mitigation,                  24 you're going to have a year-to-year jump up                  25 and down in those last years that you don't</p>	<p style="text-align: right;">Page 39</p> <p>1 Newfoundland Power's return, not Hydro's                  2 cost or the Province's cost per se. That's                  3 at 8.5 percent. That's a fairly typical                  4 rate for electric Crown corporations in                  5 Canada. There's some movement around that                  6 probably, but I don't think you can look at                  7 that rate and say that it's outside of a                  8 fairly narrow band that would constitute the                  9 norm.                  10 The key thing is that – is for Hydro to                  11 retain sufficient – or to continue earning                  12 sufficient funds from operations to support                  13 what's called self-sustaining status, the                  14 principal contribution to that is return on                  15 equity. So, the lower the level of equity,                  16 the lower those funds are. The higher the                  17 level of equity, the higher those funds are.                  18 So, the key determination is really funds                  19 from operation, but the key driver of that                  20 key factor obviously is equity level, and of                  21 course, the equity return. So, what you do                  22 when you do these kind of analyses is look                  23 for – you look at both the level of equity                  24 and the return it's earning. 25 percent is                  25 a typical target. Eight and a half percent</p>
<p style="text-align: right;">Page 38</p> <p>1 see as dramatically in the earlier years.                  2 There are also dividends – or not                  3 dividends, but payments made by both                  4 Churchill Falls now and Muskrat Falls when                  5 in operation related to water use. These                  6 are payments to the Province. And you'll                  7 see the numbers there. They average, you                  8 know, in a range close to 20 million dollars                  9 a year over the period for Muskrat Falls and                  10 about six million for Churchill Falls.                  11 In addition, there's a very large                  12 investment in Churchill Falls. It is                  13 producing preferred dividends in the range                  14 of about six million dollars a year. Those                  15 also are a potential source of mitigation.                  16 Returning back to that whole issue of                  17 where we – how we deal with Hydro's equity                  18 returns. In the industry generally, those                  19 returns are pegged at the cost that a                  20 utility needs to pay in the market to                  21 acquire equity. It's a little different                  22 with a Government entity. They're not                  23 issuing equity. It's not uncommon and it's                  24 the case here that a proxy rate is used to                  25 set that return. It's set here based on</p>	<p style="text-align: right;">Page 40</p> <p>1 is a fairly typical return level.                  2 All of that says that on the whole, all                  3 else equal, Hydro should be able to maintain                  4 self-sustaining financial status. Which                  5 means what? That means that the debt                  6 markets are not assuming that it has to rely                  7 on government financial support to meet its                  8 ongoing needs. It stands on its own two                  9 feet to make – to meet its obligations                  10 through its revenues.                  11 25 percent, not an uncommon target, but                  12 it is an uncommon achievement. Rates are                  13 often lower. Hydro's is at 19 percent.                  14 Some are even well below that. The issue                  15 becomes, I think from our perspective, not                  16 setting the rate so much because I think the                  17 Province needs to determine that because                  18 what will be required in the future for the                  19 financial markets to consider Hydro as self-                  20 sustaining, that's not necessary a static                  21 process. That number will change as                  22 circumstances in the industry change and as                  23 circumstances at Hydro change.                  24 So, rather than picking a number, which                  25 we think is certainly the Province's</p>

<p style="text-align: right;">Page 41</p> <p>1 business, and again the hard part of the job                  2 that it faces, we just looked at what a                  3 change would do. Would it make a difference                  4 if a change is possible? We looked at a                  5 level of 20 percent compared to the 25, and                  6 interestingly, it shows that you would get                  7 about 100 million more in the earlier years.                  8 And remember now, the earlier years is where                  9 we have fewer sources of mitigation. So                  10 it's kind of attractive to move that                  11 forward. But if you do so, it's important                  12 to remember that on the whole, across the 20                  13 years, the total amount available will go                  14 down. So, a change from 25 to 20 percent                  15 does not produce more mitigation in total.                  16 It produces a little bit less. However,                  17 what it does do is it has the potential to,                  18 in effect, in practice, to capture some of                  19 what will become available later out of a                  20 larger pot and move some of it forward to                  21 earlier years. And we're going to show some                  22 charts in a little bit that will give a                  23 sense of the advantage there in doing so.                  24 As I said, there are Provincial                  25 implications here. You know, Hydro does not</p>	<p style="text-align: right;">Page 43</p> <p>1 structures its financing and certainly the                  2 rates it may be facing to acquire financing                  3 in the future.                  4 (10:15 a.m.)                  5 GREENE, Q.C.:                  6 Q. In your report, you also address the issue                  7 of depreciation as a potential source for                  8 rate mitigation. Can you outline what you                  9 found with respect to depreciation?                  10 MR. ANTONUK:                  11 A. We understand that Hydro's methods and lines                  12 have recently been reviewed at the Board.                  13 We did not see substantial room for                  14 extending them consistent with maintaining a                  15 strong relationship between depreciation                  16 amounts recovered and the actual operating                  17 lines of assets. And moreover, in the event                  18 of the PPA and the TFA, those rates are                  19 fixed and they're a function of firm                  20 obligations that Hydro has for payments and                  21 they're also underlying the financing                  22 agreements that support the debt that is                  23 involved in financing the LCP. So they're                  24 not subject to change in any event.                  25 There has been an argument that well,</p>
<p style="text-align: right;">Page 42</p> <p>1 issue its own debt. The Province is                  2 standing behind Hydro's debt. So, if Hydro                  3 is not self-sustaining, then it will have                  4 implications for all debt that the Province                  5 issues that is not specially purposed and                  6 isolated somehow from the Province's overall                  7 credit standing.                  8 As I said, there's no single right                  9 answer. Today's right answer is tomorrow's                  10 wrong answer. So, it's a tough issue to                  11 decide and again, I think the Province is                  12 going to need to -- have to wrestle with                  13 that issue, taking into account what is its                  14 tolerance for risk, financial risk, based on                  15 Hydro's self-sustaining or not status. What                  16 are the Province's provincial goals and what                  17 are the Province's other financial needs and                  18 how will an adverse impact from a non-self-                  19 sustaining Hydro affect them?                  20 I think the broad -- there's a whole                  21 range of answers the Province can come up                  22 with there. It's going to depend on not                  23 just what we want to do with mitigation or                  24 what the Province wants to do with                  25 mitigation, but potentially how it</p>	<p style="text-align: right;">Page 44</p> <p>1 you know, you could sort of change them in a                  2 way off the books. We could attribute to                  3 mitigation an amount that would be produced                  4 by using different methods, non-straight-                  5 line methods, let's say, and the Province                  6 could pay per -- or Hydro could pay per the                  7 two agreements, the PPA and the TFA, but                  8 calculate the amount that the difference                  9 would -- in a non-deform of depreciation                  10 would produce and return that to mitigation.                  11 I guess we sort of -- here's the                  12 position we reached on that. That's just                  13 another way of the Province giving back a                  14 pot of money. We have already I think                  15 identified pretty much the maximum amount,                  16 subject to this Hydro return issue. So, if                  17 the Province is going to give more than                  18 that, I don't think it's needed to kind of                  19 tie that to a depreciation change. That's                  20 just a matter of what the Province can                  21 afford because either way, it's not coming                  22 from a change in the payments that Hydro is                  23 going to make or customers are going to                  24 make. So, it's coming out of the Province's                  25 pot somehow or another.</p>

Page 45	Page 47
<p>1 So, we decided that that really didn't</p> <p>2 change the question in front of the</p> <p>3 Province, which is ultimately how much can</p> <p>4 we afford to give. So, we did not pursue</p> <p>5 those alternate methods because we thought</p> <p>6 that calculation would really end up only</p> <p>7 having hypothetical and not practical value.</p> <p>8 That's where we came out on depreciation.</p> <p>9 GREENE, Q.C.:</p> <p>10 Q. And also with respect to depreciation, you</p> <p>11 were reasonably satisfied that the service</p> <p>12 lives and the methodology used were</p> <p>13 appropriate for an electric utility?</p> <p>14 MR. ANTONUK:</p> <p>15 A. We did, and you know, there's a range there</p> <p>16 too and when we looked at the ranges, we see</p> <p>17 them as far out within the reasonable ranges</p> <p>18 as we think it's reasonable to go and if</p> <p>19 there is any movement, it would not be</p> <p>20 substantial enough to make a difference.</p> <p>21 GREENE, Q.C.:</p> <p>22 Q. The last topic you addressed in your report</p> <p>23 under Financial Opportunities was a</p> <p>24 potential rebate of harmonized sales tax</p> <p>25 payments for domestic customers. Could you</p>	<p>1 rebate and divert funds from HST back for</p> <p>2 electricity rate mitigation?</p> <p>3 MR. ANTONUK:</p> <p>4 A. That's correct, and again I think it's</p> <p>5 subject to the same principle, which is</p> <p>6 we've created a large pot here. The larger</p> <p>7 the pot, the better it looks for rate</p> <p>8 mitigation. Well, the larger the pot, it's</p> <p>9 tougher for the province to figure out how</p> <p>10 to do without that money. So I think we are</p> <p>11 – if you look at everything we put together,</p> <p>12 you can add, you can subtract, but it's</p> <p>13 really going to come down to, again not at</p> <p>14 the risk of the sin of repeating myself,</p> <p>15 it's really going to come down to</p> <p>16 affordability from the province's</p> <p>17 perspective.</p> <p>18 GREENE, Q.C.:</p> <p>19 Q. Okay, now that we've talked about all the</p> <p>20 financial opportunities, what is the total</p> <p>21 amount that would be available to apply to</p> <p>22 rate mitigation if all of those funds are</p> <p>23 applied to reduce electricity rates?</p> <p>24 MR. ANTONUK:</p> <p>25 A. This chart shows the yearly amounts and it</p>
Page 46	Page 48
<p>1 just explain what that is?</p> <p>2 MR. ANTONUK:</p> <p>3 A. Yeah, I will. I'm going to first say that</p> <p>4 we really didn't want to get into the tax</p> <p>5 game because once you do that, there are a</p> <p>6 lot of options, like a brand new tax that</p> <p>7 doesn't exist. So we sort of tried not - we</p> <p>8 define that as pretty much outside the box</p> <p>9 we were looking at, but having done that it</p> <p>10 is the case that the province has made</p> <p>11 concessions with respect to those taxes in</p> <p>12 the past, so we wanted to observe just, in</p> <p>13 effect, for the record, that the provincial</p> <p>14 portion of payments of harmonized sales</p> <p>15 taxes by Hydro and Newfoundland Power will</p> <p>16 get to and above \$50,000,000.00 a year. So</p> <p>17 there are dollars there that are</p> <p>18 substantial, and those are dollars that – or</p> <p>19 that is a source in the past that has been</p> <p>20 used with the specific intent of changing</p> <p>21 net electric rates to customers in the</p> <p>22 province.</p> <p>23 GREENE, Q.C.:</p> <p>24 Q. And again that would be a policy decision of</p> <p>25 government if it wished to provide that</p>	<p>1 shows that – I think begins to show why</p> <p>2 twenty years gives you a very different</p> <p>3 picture than does ten years. These are</p> <p>4 annual amounts in millions, and as you can</p> <p>5 see, they start in the range of 200 and end</p> <p>6 up more than doubling if we look out through</p> <p>7 2039. We talked a little bit about</p> <p>8 contribution to them. I want to kind of</p> <p>9 show you how you build that contribution</p> <p>10 mountain. If you begin, this the LCP</p> <p>11 dividends and water. Those are combined in</p> <p>12 here, but, obviously, the dominant source of</p> <p>13 those are the LCP dividends. If you add</p> <p>14 Hydro dividends, you see they make a</p> <p>15 contribution, but they're not – this is</p> <p>16 still more the Appalachians where I come</p> <p>17 from, it's not the Rockies. There you see</p> <p>18 the Churchill Falls dividends. Every bit</p> <p>19 helps, but as this shows, it's just a bit.</p> <p>20 Muskrat Falls, a little bigger contribution,</p> <p>21 but still it's not fundamentally changing</p> <p>22 the path. I'm going to talk about the</p> <p>23 operational changes that we identified which</p> <p>24 largely consist of integrating Nalcor and</p> <p>25 Hydro operations. Those are not immaterial,</p>

Page 49	<p>1 but they're also not – they are not, I think                  2 it's fair to say, game changers. Then we                  3 had a final group that were some non-labour                  4 contributions for LCP and O &amp; M that we                  5 added in. So I think this pretty                  6 dramatically shows kind of where the large                  7 sources are, and it also shows that with                  8 respect to all of them, except for labour                  9 and the non-labour O &amp; M, they're                  10 substituting dollar purposes rather than                  11 producing new dollar savings. It's the last                  12 two categories that are really new dollars                  13 or new dollars avoided. The other way to                  14 look at it is rate reduction. I'm going to                  15 show you the mountain building now. I think                  16 this is kind of the icecap melting. This                  17 shows you total reduction in cents per                  18 kilowatt hour, and we picked out three areas                  19 there to show you where we start, where we                  20 are roughly at the end of the ten year                  21 period of the reference, and at the end of                  22 the twenty years that we studied. That                  23 shows you where we are if Hydro's current                  24 projections without mitigation were to                  25 apply, and these numbers are probably</p>	Page 51	<p>1 source of getting rates down with the                  2 dividends, and two, if there is a way to                  3 move some of the later benefits where we                  4 have the flat line forward, then we could                  5 produce a line that would look much more                  6 like a utility whose future costs are                  7 subject principally to inflation as opposed                  8 to other major factors that drive rates.                  9 GREENE, Q.C.:                  10 Q. Okay, turning now to the next area that you                  11 focused on, which was the potential of                  12 integrating the existing Hydro structure                  13 with the existing Nalcor power supply part                  14 of Nalcor, could you describe what your                  15 recommendation is and how you went about the                  16 work to come to that finding?                  17 MR.ANTONUK:                  18 A. Yes. We examined large sets of data about                  19 staffing and costs from management and we                  20 focused on organization, functions,                  21 activities, and resources. I think there                  22 was a suggestion, and maybe I'm being                  23 unfair, but not totally, that we were driven                  24 from a cost reduction only perspective                  25 without consideration of mission, and that's</p>
Page 50	<p>1 somewhat different now. I think Hydro, like                  2 everybody else, you know, is always doing                  3 annual budgets, they're making adjustments                  4 to budget, so these were the numbers when we                  5 did our work, but I would expect and hope                  6 that they're different now. That shows you                  7 where we get with LCP dividends and water,                  8 and as you can see, we still got a pretty                  9 big jump and then a flat. If you were to                  10 look at a normal rate path, you would expect                  11 to see a gradual rise. All else equal, you                  12 might see a rise from the current day going                  13 up at the rate of inflation. You see here,                  14 we sort of produce something – we produce a                  15 line that's flatter than that. It stays                  16 roughly the same across the whole twenty                  17 years, which means, in effect, you're not                  18 seeing what rates would ordinarily do in a                  19 utility that's in a situation normal kind of                  20 status. Again these are going to show the                  21 same thing as the mountain charts did.                  22 They're going to show you that after we take                  23 account of those dividends, we're not                  24 melting much more ice off that iceberg. So                  25 that shows two things. Again the major</p>	Page 52	<p>1 really quite unfair. We've been here for a                  2 fair amount of time now. I think we                  3 understand mission, we respect mission. We                  4 considered it – here's the difference, we                  5 didn't take it for granted. Nalcor's                  6 mission, if it changes, it's not up to us,                  7 but I don't think we were compelled to kind                  8 of accept the mission as is. I think we                  9 were compelled to look at different kinds of                  10 structures, different kinds of operations,                  11 and we did that. We did that respecting the                  12 current mission, but again as I said, we did                  13 not do it under the presumption that that                  14 mission will continue, or if it does, it's                  15 even possible to determine how to design an                  16 organization around aspects of that mission,                  17 either speculative or far off. So we gave                  18 mission due consideration in my view. What                  19 we did conclude effecting essentially total                  20 integration between power supply and hydro                  21 would produce a unified and more effective                  22 operating entity. It would create a                  23 structure much more typical of a small                  24 vertically integrated utility. It would                  25 eliminate duplication in technical,</p>

<p style="text-align: right;">Page 53</p> <p>1 operating, corporate, and support                  2 organizations. Most dramatically, on a                  3 percentage basis, affecting executive                  4 positions and least dramatically affecting                  5 bargaining unit positions. It also, and                  6 I'll get to that a little bit later, would                  7 leave Nalcor free to pursue other elements                  8 of its mission through other designs, other                  9 organizations, which we think is not only                  10 possible, but is also consistent with trying                  11 to make electric operations more streamlined                  12 and more cost effective, and I think                  13 operationally ultimately more effective as                  14 well. There was a major change in Nalcor                  15 structure in 2016 that produced a separate –                  16 it led to a separate Nalcor power supply                  17 organization responsible for completing LCP                  18 and operating Churchill Falls. We have no                  19 question about the historical reasons for                  20 the separation. We did not criticize it.                  21 We have understood that to be the case for                  22 most of the time we've been working here and                  23 have never criticized it as a way of                  24 providing focus on completing LCP, which we,                  25 like management, and I think most folks up</p>	<p style="text-align: right;">Page 55</p> <p>1 do think that the completion of LCP calls                  2 for a re-examination of whether that                  3 continues to make sense from an optimization                  4 of performance and cost perspective. We do                  5 recognize that LCP operational requires some                  6 special skills, but they're not outside the                  7 utility mainstream. You don't have to look                  8 at further than Nova Scotia to see them or a                  9 lot of the other provinces, and we don't see                  10 them as disruptive to or dominating of                  11 management attention. It adds a requirement                  12 to deal with things through different                  13 skillsets, and I think we took account of                  14 that when we did our work. Frankly, if you                  15 look at the assets that are now in                  16 operation, Nalcor really looks a lot like a                  17 vertically integrated – I mean, Nalcor and                  18 Hydro together looks a lot like a classic                  19 vertically integrated utility, and one                  20 that's comparatively small, quite small by                  21 US standards, and even very small by                  22 Canadian standards. Therefore, typical                  23 circumstances would suggest to us a single                  24 unified organization because that's what you                  25 see for utilities in that condition, and</p>
<p style="text-align: right;">Page 54</p> <p>1 here recognized was a major and existential                  2 challenge for Nalcor. I will say, though,                  3 that some of us lived through the nuclear                  4 phase in the United States which was                  5 similar. Those plants also posed                  6 existential financial threats, uncontrolled                  7 schedules and uncontrolled cost. So we're                  8 very familiar with creating organizations                  9 designed to address those kind of projects                  10 and support that. I think it's critical to                  11 say, though, that in our opinion, that's got                  12 nothing to do with calling something                  13 regulated versus unregulated. That's called                  14 "swallowing the monster" in the old days,                  15 and we've seen it done. Almost everybody                  16 ended up doing it in the nuclear business                  17 and almost everybody did it, and ultimately                  18 did it successfully within the context of an                  19 existing utility structure as a temporary                  20 solution to a major problem, after which                  21 there was an expectation and a plan to                  22 return to what I'll call more normal                  23 interruption. So I'm going to say we                  24 respect the challenges, we understand them,                  25 we don't question the response to them. We</p>	<p style="text-align: right;">Page 56</p> <p>1 also you would expect a correspondingly                  2 modest level of resources. You would expect                  3 their resources to be in proportion to the                  4 size of their operation.                  5 (10:30 a.m.)                  6 Nalcor has made a pretty strong case about                  7 its unregulated versus regulated operations.                  8 That, I think, we find a lot less                  9 understandable than the separation that was                  10 made for the purpose of completing LCP. The                  11 principal problem with regulated and                  12 unregulated are two. First, we have                  13 facilities whose costs Hydro initially and                  14 retail customers eventually must bear. They                  15 don't have a choice, they don't have                  16 competitive choice. They can't avoid those                  17 costs by saying I got a better alternative.                  18 Also they're losing what customers usually                  19 get always get. In fact, I don't think                  20 there's a case cited either by Nalcor or by                  21 us where it's not the case where such                  22 facilities that produce margins from off                  23 system sales. There's not a case where                  24 those margins are not returned to offset the                  25 cost of the facilities, cost that customers</p>

<p style="text-align: right;">Page 57</p> <p>1 are bearing. That’s quite anomalous and                  2 it’s problematic in our viewpoint too for                  3 reasons I’ll discuss a little bit later.                  4 It’s also had the effect of producing                  5 parallel organizations which has created                  6 redundancy, and redundancy was a principal,                  7 and I think it’s fair to say, the principal                  8 source of our finding that an integration of                  9 utility operations within Nalcor will                  10 produce substantial savings. We don’t think                  11 the terms regulated/unregulated are really                  12 the right way to look at things. In the US                  13 there is a pretty classic definition of                  14 unregulated. Here’s what it is, “If I take                  15 generation outside what customers must take,                  16 if I give customers choice in who they can                  17 have, who they can select to provide the                  18 generation portion of their business, they                  19 will pay what the market price is. They                  20 will make a choice what to pay. The people                  21 who provide that service who own the assets                  22 will take the risk of building or buying                  23 them, the risk of operating them, and the                  24 risk of making sales from them. So there                  25 will be market discipline over the prices”.</p>	<p style="text-align: right;">Page 59</p> <p>1 good as people get everywhere else. There                  2 is no regulatory review of those costs.                  3 Nalcor passes those costs through with no                  4 review by you, or by any other regulatory                  5 authority. That doesn’t happen in the                  6 industry. The only people who don’t have to                  7 have their costs looked at and reviewed are                  8 those who have the discipline of the market                  9 to make sure that those costs are effective.                  10 It’s not the case here, yet Nalcor is                  11 treated like its unregulated in that                  12 respect. It uses that distinction to argue                  13 that its status makes sense and it doesn’t.                  14 We have a problem not with what’s happened                  15 to date, what’s happened to date has                  16 happened. If there are any consequences or                  17 repercussions from that, there’s another                  18 proceeding going on that’s designed to                  19 address it. We’re not worried about                  20 history. What we’re worried about is going                  21 forward, what’s going to happen, and what’s                  22 going to happen is that if there is not a                  23 change, Nalcor will be empowered to make                  24 capital investments and expend operating                  25 costs without the discipline either of the</p>
<p style="text-align: right;">Page 58</p> <p>1 That isn’t really the case here. It is not                  2 correct to call Nalcor’s operation of the                  3 LCP assets unregulated in that sense. It’s                  4 only unregulated in the sense that there has                  5 to date been a decision to declare that the                  6 usual, the essentially universal principle                  7 of who pays cost and under what                  8 circumstances, won’t apply here. So I agree                  9 they’re unregulated because by fiat they’ve                  10 been declared as unregulated, but they are                  11 anomalous, they are anomalous in two                  12 critical senses; one, customers must pay                  13 them, it is not a competitive situation, and                  14 regulation exists in the first place as what                  15 – it’s not because we think utilities are                  16 dishonest, it’s not because we think they’re                  17 incompetent, it’s not because we think                  18 they’re conflicted, it’s because their                  19 regulations substitute for competition.                  20 Nalcor does not operate in a competition                  21 with respect to the assets it operates. It                  22 acts exactly like a monopoly vertically                  23 integrated utility does. It’s actual cost                  24 flow through rates, end of story. In fact,                  25 it’s not even that good, it’s not even as</p>	<p style="text-align: right;">Page 60</p> <p>1 market or of regulation. You don’t let                  2 Hydro do that. The province doesn’t let                  3 Hydro do that. In our view, it’s difficult                  4 to understand why that should be the case                  5 for Nalcor. There is nothing about them                  6 that makes them infallible. There’s nothing                  7 about them that makes them better than the                  8 industry, as a whole. There’s nothing about                  9 them from that perspective that says to us                  10 regulation is less important and less useful                  11 from a customer perspective. On top of                  12 that, as thing stand now, Nalcor’s financial                  13 success with respect to those assets has two                  14 important characteristics. If they make                  15 additional investment, they make additional                  16 return. If additional investment or                  17 additional operating expenses produces more                  18 off system sales, they get the margins from                  19 those sales. If I’m operating in the market                  20 and I want to make more money by making more                  21 sales, I have to decide whether the                  22 investment I make in assets or the changes I                  23 make in operating cost are worth it. Are                  24 the benefits going to be in excess of the                  25 cost. That doesn’t exist for Nalcor because</p>

<p style="text-align: right;">Page 61</p> <p>1 every dollar that Nalcor spends get passed  2 right through. So basically it has the  3 opportunity to capture increased margins  4 from off system sales, and an increased  5 return on the investment it may take to do  6 that without being responsible for paying  7 for that investment. That’s, I think,  8 illogical and I think it’s troubling. Again  9 you don’t let Hydro do that. If Hydro were  10 doing these very same things, you would have  11 the power, and if you don’t, you should, I  12 think you do, and virtually every other  13 utility jurisdiction that is dealing with  14 vertically integrated captive customers, has  15 the power to say if you’re going to make an  16 investment, if you’re going to change  17 operating costs, show me that on the whole  18 it’s going to produce reliability benefits,  19 and if off system sales are a part of that,  20 show me that the investments and the  21 operations costs and the increased margins  22 or decreased margins that result from that  23 all make sense from one unified perspective.  24 Where I’m at now is where is the discipline  25 and where is the oversight of the part that</p>	<p style="text-align: right;">Page 63</p> <p>1 competition, there is not the kind of  2 discipline it takes to keep those capital  3 costs down, to keep those operating costs  4 under control, and not to spend those costs  5 unless the total return from a customer  6 perspective makes sense. So that’s why we  7 have regulation. We don’t have it in 19  8 states. We have it in 31. Where don’t we  9 have it. We have it in the 19 where all  10 those investment decisions and the cost for  11 them and the returns from them are totally  12 at the risk and the benefit of generators.  13 In the 31 states where we pass things  14 through on a cost plus basis for vertically  15 integrated utilities, all of those controls,  16 all of that regulation exists. So you can  17 call Nalcor’s operation of LCP unregulated,  18 but it fits no definition that I think is  19 logical from the perspective of why we  20 regulate utility costs in the first place.  21 GREENE, Q.C.:  22 Q. Somebody might say to you, Mr. Antonuk, what  23 about the role of government. Government  24 can exempt Hydro under the legislation from  25 regulatory review, and they have a public</p>
<p style="text-align: right;">Page 62</p> <p>1 says “an investment of this that produces  2 that much of a change, is it worth it”.  3 Nalcor does not have the need to worry about  4 that, or the need, the compulsion to worry  5 about that because it’s totally up to them.  6 Do I think they’re going to be dishonest;  7 no, it’s not a matter of cheating. It  8 really isn’t. It’s just really saying if I  9 have the free use, if I have the decision of  10 how much to spend and I’m not responsible  11 for explaining that expenditure, and I’m  12 being measured by the margins I’m producing  13 in off system sales and the returns I’m  14 producing, is that the kind of thing that  15 you want done without oversight. If your  16 answer is yes, then here’s the next question  17 I’m asking, haven’t you just made a case for  18 deregulating Hydro as well. You don’t rely  19 on Hydro’s competence, nor does any other  20 regulator. You don’t rely on Hydro’s  21 integrity, nor does any other regulator.  22 Those almost can be presumed. Only in rare  23 cases do you see those burdens failed, but  24 regulation exists anyway. Why does it  25 exist; it exists because if there is not</p>	<p style="text-align: right;">Page 64</p> <p>1 policy interest in doing so. How do you  2 account for that in your framework?  3 MR. ANTONUK:  4 A. I’ve either been in government or working in  5 an industry regulated by government for  6 years. Government, as we all know, can do  7 whatever it wants, and if you’re from the  8 United States, you sure see that in spades  9 right now. So we don’t deny government the  10 ability to make that decision. What we’re  11 saying is that that decision is contrary to  12 essentially every state in the US, unless  13 the government also decides to open up the  14 market, in which case I’d say let Nalcor and  15 let Exelon and everybody go for it because  16 that’s what that’s all about. I’m just  17 saying I think that that distinction that’s  18 been made to the extent its founded on the  19 notion that Nalcor is different from  20 regulated operations, either in the rest of  21 Canada or the US, that’s not correct.  22 Nalcor is not different. So government may  23 decide it wants to be different. All I’m  24 saying is if it decides it wants to be  25 different, it shouldn’t be because they</p>

Page 65

1 think Nalcor is operating any differently  
 2 with respect to these assets than Hydro is,  
 3 or virtually any other utility in North  
 4 America, at least down to the Texas border.  
 5 GREENE, Q.C.:  
 6 Q. One thing Nalcor said in its filing on  
 7 September 20th was they have oversight either  
 8 through the Board of Directors, and I  
 9 suppose they didn't say it, but there could  
 10 be oversight by government. So why isn't  
 11 oversight enough in this situation?  
 12 MR. ANTONUK:  
 13 A. You know, every utility corporation,  
 14 investor and utility corporation in the US,  
 15 has a Board of Directors too and those  
 16 boards are often comprised by very, very  
 17 strong, very independent, and very  
 18 questioning business and social leaders and  
 19 other stakeholders. That's not enough to  
 20 mean we don't need regulation in the US. I  
 21 don't think that's the case in Canada either  
 22 for the most part. Base decisions about  
 23 making investments in vertically integrated  
 24 Canadian crown corporations are regulated.  
 25 Again I'm not going to argue with

Page 66

1 government's ability to go whichever way it  
 2 wants. That's between them and the voters.  
 3 It's not for me to say. Our contribution  
 4 here is to say that it just simply should be  
 5 understood that it's not correct to say that  
 6 the distinction is supported because  
 7 Nalcor's ownership and operation of the LCP  
 8 assets puts it in any different situation  
 9 from that of the classic vertically  
 10 integrated monopolistic utility. With  
 11 respect to its other operations, maybe so,  
 12 but that's not what we're talking about  
 13 here.  
 14 GREENE, Q.C.:  
 15 Q. Was there anything else you wanted to say?  
 16 We've covered a couple of your slides there  
 17 on the regulatory oversight. I think we  
 18 probably have covered that issue.  
 19 MR. ANTONUK:  
 20 A. Yes, I did.  
 21 GREENE, Q.C.:  
 22 Q. The next thing I wanted to ask you about  
 23 then was Nalcor in its filing on September  
 24 20th, as well as its consultant, Power  
 25 Advisory, both expressed the view that you

Page 67

1 hadn't appropriately taken into account its  
 2 broad mandate for future generation  
 3 development and its role in resource  
 4 development. What is your response to that?  
 5 MR. ANTONUK:  
 6 A. I got to get to the right slide so that you  
 7 all can see what I'm talking about. The  
 8 slide numbering has changed there.  
 9 GREENE, Q.C.:  
 10 Q. Yes, keep going.  
 11 MR. ANTONUK:  
 12 A. What number do you have?  
 13 GREENE, Q.C.:  
 14 Q. The numbers have changed from what I have.  
 15 (10:45 a.m.)  
 16 MR. ANTONUK:  
 17 A. Yes, what's your number? There it is. We  
 18 don't have any reason, nor was it our  
 19 mission to critique the energy development  
 20 aspect of Nalcor. I will observe, though,  
 21 that it creates a barrier to producing the  
 22 operation savings that we've identified. In  
 23 addition, I think it's important to  
 24 recognize that that development mission  
 25 needs to be looked at very carefully in

Page 68

1 terms of the degree to which it uses captive  
 2 utility customers as it was (unintelligible)  
 3 backstop for the risk of making investments.  
 4 If development would continue to look at  
 5 advancing energy projects by transferring  
 6 what we consider owner's risk to customers,  
 7 then we think that is troublesome and we  
 8 think it—Muskrat Falls is an example of  
 9 that, of the problem with that concept.  
 10 Doing so, makes risk less transparent when  
 11 investment decisions are made. So if that's  
 12 the notion, then we do have trouble with  
 13 executing that way. Frankly, I'm not sure I  
 14 see that as happening because unless energy  
 15 development can proceed through arrangements  
 16 with other than customers, it's very  
 17 difficult to see how you would ever justify  
 18 some massive new investment on that basis of  
 19 utility need. But to the extent there is a  
 20 continuing effort to mix responsibility for  
 21 payment between customers, captive customers  
 22 and others, that would be troubling, so we  
 23 think that it is important to keep energy  
 24 development on an independent footing so  
 25 that we don't get situations like the one

Page 69	<p>1 we've been talking about now. As I said, if</p> <p>2 that mission is to continue, continuing it</p> <p>3 under this structure imposes costs. Those</p> <p>4 costs, as we identified, are in the range of</p> <p>5 \$15,000,000.00 a year. It's not clear to us</p> <p>6 why there is any need for them to proceed</p> <p>7 under the same umbrella and with the same</p> <p>8 mixing of resources. They can, as we</p> <p>9 understand it and as we see it, and we don't</p> <p>10 know what those options or those</p> <p>11 possibilities are, but trying as best we can</p> <p>12 to gage what they might be, from afar</p> <p>13 because it wasn't our job to look at them, I</p> <p>14 can't see why it makes sense to continue to</p> <p>15 carry them now in a way that mixes core</p> <p>16 utility, captive customer issues with energy</p> <p>17 development which I can't really see the</p> <p>18 Province pursuing on any basis other than</p> <p>19 market competitiveness.</p> <p>20 GREENE, Q.C.:</p> <p>21 Q. So as I understand your answer, first Nalcor</p> <p>22 Power Supply does operate and maintain or</p> <p>23 will when Muskrat Falls is fully in service,</p> <p>24 the generation and transmission associated</p> <p>25 with the Muskrat Falls assets, is that</p>	Page 71	<p>1 A. As I said earlier, we didn't pursue savings</p> <p>2 at the expense of sacrificing structure or</p> <p>3 organizational considerations. The key</p> <p>4 point is that we did not take the current</p> <p>5 structure for promoting them as a given and</p> <p>6 as we just discussed, we think that you can</p> <p>7 create a unified Nalcor/Hydro structure,</p> <p>8 promote effectiveness and efficiency without</p> <p>9 in any way impairing the ability of the</p> <p>10 Province through different structures of</p> <p>11 resources and leadership in energy</p> <p>12 development.</p> <p>13 GREENE, Q.C.:</p> <p>14 Q. Can you describe then how you did go about</p> <p>15 looking at the potential integration of</p> <p>16 Nalcor's power supply and hydro?</p> <p>17 MR. ANTONUK:</p> <p>18 A. We used standard accepted and reasonable</p> <p>19 industry approaches, some of which members</p> <p>20 of the panel have executed as utility</p> <p>21 executives and many more of which we have</p> <p>22 over 30 years evaluated and seen. We've</p> <p>23 lived through engagements whereas as much as</p> <p>24 20 percent reductions were announced the CEO</p> <p>25 kind of without notice and overnight. We</p>
Page 70	<p>1 correct?</p> <p>2 MR. ANTONUK:</p> <p>3 A. That's correct.</p> <p>4 GREENE, Q.C.:</p> <p>5 Q. And as I understand what you just said, you</p> <p>6 believe that if there is to be future</p> <p>7 development, it should be in a separate</p> <p>8 entity, not mixed in with the utility that</p> <p>9 has responsibility for operating and</p> <p>10 maintaining critical assets that supply</p> <p>11 customers.</p> <p>12 MR. ANTONUK:</p> <p>13 A. That's correct.</p> <p>14 GREENE, Q.C.:</p> <p>15 Q. The next issue that I wanted to ask you</p> <p>16 about also comes from Nalcor's submission on</p> <p>17 September 20th and from Power Advisory.</p> <p>18 Power Advisory on page 7 believed that your</p> <p>19 approach, your mandate from the Board, which</p> <p>20 was to look at cost savings opportunities,</p> <p>21 was your underlying mandate which influenced</p> <p>22 your views about the organizational</p> <p>23 structure. How would you respond tot hat</p> <p>24 criticism?</p> <p>25 MR. ANTONUK:</p>	Page 72	<p>1 applied a broad range of techniques. We</p> <p>2 applied that understanding what others have</p> <p>3 done when they have faced a desire or in</p> <p>4 some cases a compelling need to make</p> <p>5 staffing changes. We did not produce overly</p> <p>6 prescriptive nor broadly subjective results.</p> <p>7 We analyzed carefully what we could based on</p> <p>8 extensive interaction, date from interaction</p> <p>9 with the parties, and we applied approaches</p> <p>10 that we applied before. We applied</p> <p>11 approaches that are consistent with the two</p> <p>12 companies for which we're looking at</p> <p>13 staffing right now, even as we did this job</p> <p>14 and most critically we applied them through</p> <p>15 seven perspectives. We've got seven people,</p> <p>16 all of whom have been at this business for</p> <p>17 30 or more years. There's another one who</p> <p>18 is not here, Christine Kozlosky, who has got</p> <p>19 a similar level of experience focussed very</p> <p>20 specifically on customer service. We use</p> <p>21 five overall approaches. We looked at</p> <p>22 positions that would appear to become</p> <p>23 redundant on integration and we talked with</p> <p>24 people holding those positions or managing</p> <p>25 people who have them. We looked at existing</p>

<p style="text-align: right;">Page 73</p> <p>1 spans of control, how many people, key  2 executives or key managers would be  3 responsible for and even middle and lower  4 level managers and supervisors and we looked  5 at what they are, as they exist now, and we  6 looked as best we could at what they would  7 look like in a new organization, would we be  8 creating spans that were too great, would we  9 be putting any individual in charge of an  10 organization too big to realistically  11 handle. We did comparative analysis of  12 positions and entities. We looked at work  13 requirements. We talked to personnel enough  14 to understand and know what they did and  15 what distinguished it. We talked about it  16 enough to figure out what distinguished some  17 of the special technical or technological  18 requirements associated with Power Supply's  19 work verses Hydro's work and we applied, as  20 I said, a pretty broad range of industry  21 experience.</p> <p>22 GREENE, Q.C.:  23 Q. Again, a criticism that has come from the  24 Nalcor filing is that they really didn't  25 properly assess workload requirements, spans</p>	<p style="text-align: right;">Page 75</p> <p>1 thinking to what needs to be done now to say  2 are the numbers that we're talking about  3 realistic and is the way we're talking about  4 proceeding through them logical? And it is,  5 we have a high degree of confidence that  6 this range of reduction is achievable. The  7 effort can begin now and in parallel that  8 the execution of that effort will show that  9 here or there somebody does have too many  10 people reporting to him or her. Some piece  11 of technical skills is at risk of being  12 lost. We only have one person who can do  13 "X". We don't want that person deciding  14 it's time to leave and we certainly don't  15 want to, out of uncertainty or fear and we  16 certainly don't want that person's position  17 to be eliminated. We thought of those  18 things and I think we thought about them at  19 a level that's consistent with what we've  20 seen other utilities do when they're making  21 these kind of changes. Could Nalcor engage  22 in a multi-year effort of study and detailed  23 analysis? Yeah, it could. Would it gain  24 additional information? Yes, it could. Do  25 we believe that the time that it takes to go</p>
<p style="text-align: right;">Page 74</p> <p>1 of control, the risks involved with doing a  2 restructuring at this point in time. How  3 would you respond to that?</p> <p>4 MR. ANTONUK:  5 A. I think one of the first lessons I learned  6 in utility management because I was a  7 detailed oriented person, was about what our  8 management called the myth of perfect  9 information. That myth has two aspects, a)  10 you can't get it; and b) if you had it, what  11 difference would it make? Organization  12 review and position definition will remain  13 to implement the changes that we talked  14 about, but really you have to think about  15 whether you do that before you even get  16 started, or do you do that as part of  17 execution. Do you begin with the old broad  18 changes that make sense, do you make some  19 decisions, do you take some actions and then  20 do you adjust as you go? What Nalcor is  21 really suggesting is what looks like a very  22 long, very detailed effort before  23 identifying what's doable or embarking even  24 on a path toward doing it. We thought about  25 all of that and we really gave serious</p>	<p style="text-align: right;">Page 76</p> <p>1 through that is really worth the effort?  2 Will it produce perfect information? Will  3 it really fundamentally change what needs to  4 be done or how? And the answer to us is no.</p> <p>5 GREENE, Q.C.:  6 Q. So from your perspective what you have found  7 in your analysis is realistic and achievable  8 and should be done, is that correct?</p> <p>9 MR. ANTONUK:  10 A. That's correct. We do think the reductions  11 are achievable. We have seen reductions of  12 resources at this level between five and ten  13 percent undertaken without as much analysis  14 as we have done ahead of time. Everybody  15 analyses the changes as they make them. So  16 what we propose and the basis on which we  17 propose it is certainly not out of line with  18 other similar sized reduction efforts that  19 we have seen at other places. And in  20 addition, when you look at Nalcor's  21 resources, there's nothing we did that's  22 even going to bring them into line with  23 comparative levels of resources at the other  24 Crown corporations. We didn't use that  25 comparison as a basis for making any</p>

Page 77	<p>1 conclusions, in fact, we didn't even make</p> <p>2 those comparisons until the work was done</p> <p>3 because I wanted to make sure that we</p> <p>4 weren't driving our answers to some</p> <p>5 comparison in New Brunswick or wherever, but</p> <p>6 when we were done and did the analyses, we</p> <p>7 certainly saw nothing there that suggests</p> <p>8 that we're leaving Hydro in a position that</p> <p>9 looks like it is uncomfortable compared to</p> <p>10 those comparative levels. Granted that's</p> <p>11 only a sanity check, but when we were all</p> <p>12 done, I think that was the fine thing that</p> <p>13 said to us what we're doing here is not</p> <p>14 dramatic, it's not disruptive, it's not</p> <p>15 major. It's a pretty minor reduction and it</p> <p>16 also affects primarily people for whom</p> <p>17 things like looking at work management</p> <p>18 requirements is not appropriate, that's a</p> <p>19 lot more, that makes a lot more sense when</p> <p>20 you're talking about reductions in people</p> <p>21 whose work is measured by units of work,</p> <p>22 number of calls and answered, number of</p> <p>23 service calls, you know, the reductions</p> <p>24 we're talking about affect that group of</p> <p>25 employees only at a fairly small level. Our</p>	Page 79	<p>1 or over the norm with respect to numbers of</p> <p>2 employees.</p> <p>3 GREENE, Q.C.:</p> <p>4 Q. Madam Chair, I notice it's 11:00, but if we</p> <p>5 could finish this one topic which is the</p> <p>6 Nalcor Hydro Integration and then take the</p> <p>7 break, would that be suitable?</p> <p>8 CHAIR:</p> <p>9 Q. Sure.</p> <p>10 GREENE, Q.C.:</p> <p>11 Q. If we go now then to how much savings would</p> <p>12 be produced by the integration of a Nalcor</p> <p>13 power supply and the Hydro functions that</p> <p>14 you looked at?</p> <p>15 MR. ANTONUK:</p> <p>16 A. Yes, well the numbers are 113 and certainly</p> <p>17 a) is it won't be 113 when it's done, we</p> <p>18 recognize that. We have a very high</p> <p>19 confidence level that that number is more</p> <p>20 likely to be somewhat higher, as opposed to</p> <p>21 be somewhat lower and many of those</p> <p>22 positions are at higher compensation levels</p> <p>23 within both Nalcor and Hydro, so they tend</p> <p>24 to have a more than average impact on salary</p> <p>25 reproductions given the level of people</p>
Page 78	<p>1 reductions are primarily at levels where</p> <p>2 people's work is not measured by those sorts</p> <p>3 of metrics. These are supervisory</p> <p>4 management and executive positions whose</p> <p>5 work is not really covered or coverable by</p> <p>6 those kind of measures in the first place.</p> <p>7 GREENE, Q.C.:</p> <p>8 Q. If you go to your next slide, Mr. Antonuk, I</p> <p>9 believe you've mentioned already that you,</p> <p>10 what you called your sanity check after you</p> <p>11 had done your analysis, you did compare</p> <p>12 Nalcor to other peers and you selected four</p> <p>13 Crown corporations. Was there anything you</p> <p>14 wanted to say about what that benchmarking</p> <p>15 did after you had done your own analysis?</p> <p>16 MR. ANTONUK:</p> <p>17 A. No, I think what this slide does, it just</p> <p>18 lays out a little bit of the detail and</p> <p>19 shows where Hydro stands, first of all right</p> <p>20 now relative to size. Hydro is small, even</p> <p>21 by the standard of Canadian Crown</p> <p>22 corporations; and secondly, the ratios that</p> <p>23 we calculated leave from an executive level,</p> <p>24 leave Hydro still substantially over the</p> <p>25 norm and leave them comfortably over the, at</p>	Page 80	<p>1 involved. It will take a short period, some</p> <p>2 changes can happen right away subject to,</p> <p>3 obviously the human issues that have to be</p> <p>4 addressed when you're making these kind of</p> <p>5 changes. Some of it can happen by</p> <p>6 attrition; maybe most of it can happen by</p> <p>7 attrition, that's a function of the period</p> <p>8 to put it into place. We also recognize and</p> <p>9 have stated explicitly that we need to be</p> <p>10 careful to assure a phase-in to steady-state</p> <p>11 and LCP operation. You will see that most,</p> <p>12 not only but most dramatically I think</p> <p>13 expressed in our report in this section</p> <p>14 deals with LCP O&amp;M expenses. We see initial</p> <p>15 savings of about 13 million and increasing</p> <p>16 to the range of 21 million beginning in</p> <p>17 2023, so that shows you that we sort of</p> <p>18 overall have assumed an implementation</p> <p>19 period that extends out into 2023 and there</p> <p>20 may be individual cases where—they should be</p> <p>21 few and far between where even a longer</p> <p>22 period might be necessary for particular</p> <p>23 skillsets. And as I said, even with those</p> <p>24 reductions, we're not looking at numbers</p> <p>25 remaining that or are troubling either by</p>

Page 81

1 reference to other Crown corporations or by  
 2 anything we saw in analyzing resource needs  
 3 here.  
 4 GREENE, Q.C.:  
 5 Q. The last question that I have for you on  
 6 this issue has to do with the executive  
 7 structure at Nalcor. Nalcor filed a  
 8 separate report by Power Advisory with  
 9 respect to your analysis of the executive  
 10 structure and how I wanted you to have the  
 11 opportunity to respond to that and to  
 12 express your view about how you did the  
 13 analysis of the executive structure.  
 14 MR. ANTONUK:  
 15 A. There are a lot of words to get through to  
 16 look at the filing that responded to us on  
 17 this issue, but I'm going to tell you this,  
 18 I think it was pretty clear we were  
 19 counting, as executives, vice presidents and  
 20 above. If I had seen a reason to change, I  
 21 would have. The definitions as I inferred  
 22 them to be from looking at the annual  
 23 reports of each of their comparators are  
 24 pretty classic and pretty simple really,  
 25 pretty straight forward. I think there

Page 82

1 seemed to be some fussing over whether we  
 2 use the term "officers" or "executives". I  
 3 hope nobody was confused into thinking that  
 4 our analysis was an intent to determine what  
 5 legal responsibilities people had as opposed  
 6 to their operational responsibilities. I'm  
 7 going to be surprised if anybody really  
 8 didn't understand that. Here's the bottom  
 9 line. Power Advisory put in some  
 10 organization charts. If you use those  
 11 organization charts and you count vice  
 12 presidents above and you count what we came  
 13 up with, well they match. There may be one  
 14 difference here or one difference there. I  
 15 only gave credit for one general account, so  
 16 I started out as a lawyer and frankly in  
 17 fairly small organizations there's really  
 18 only one lawyer who is a true executive, the  
 19 others are really specialists in a certain  
 20 area, even though they might have a general  
 21 counsel of this or of that title, but really  
 22 when you're all done, if you count their  
 23 organization charts and you count our  
 24 numbers, they match and we're not talking  
 25 about a variance of 1.2 over 1, we're

Page 83

1 talking about variances of 4 and 5 over 1.  
 2 So even if I went and started making fine  
 3 tuning adjustments, those ratios aren't  
 4 going to change, I mean, there's no way to  
 5 conclude anything, other than Nalcor/Hydro's  
 6 number of officers is far, far out of line  
 7 with what we've seen throughout the US and  
 8 because that's an area where you might  
 9 expect some differences, we've looked and  
 10 it's far out of line with Canadian Crown  
 11 corporations. They seem to have tried to  
 12 create different constructs for measurement.  
 13 I don't understand why or what the point is  
 14 of those. I can't really respond to those  
 15 other than they didn't make any sense to us.  
 16 In addition, they started talking about  
 17 things like location, span of control and  
 18 compensation as factors that need to be  
 19 considered. Well I don't understand why  
 20 that's true and I tell you in doing that,  
 21 I've looked at executive organization now  
 22 for 30 years at the largest US holding  
 23 companies down to cooperatives that served  
 24 one town in Colorado. I think I've seen the  
 25 whole range. Those factors are never things

Page 84

1 that anybody ever discussed to me as  
 2 relevant in deciding who is going to be an  
 3 executive in charge of this function, verses  
 4 this function, verses this function. Maybe  
 5 there's some pedantic reason for doing all  
 6 that was done. From an operational  
 7 perspective we counted them the right way,  
 8 we measured them the right way and we  
 9 compared them the right way and even if you  
 10 go to some other method, I just don't see  
 11 how you could ever come close to a  
 12 conclusion that the number of executives  
 13 that Nalcor and Hydro is in the ballpark.  
 14 GREENE, Q.C.:  
 15 Q. One thing just to make clear on the record,  
 16 the information you used for the charts in  
 17 your table were from the annual reports for  
 18 the pair of groups that you selected  
 19 generally?  
 20 MR. ANTONUK:  
 21 A. They were the most recent annual reports and  
 22 we also did Internet searches to make sure  
 23 that there was no indication that there were  
 24 executive positions that might not have been  
 25 listed in the annual reports, and in one

Page 85

1 case, I think we found that there were and  
 2 we added those. So I think if the one  
 3 material difference, I think, that existed  
 4 between counting from what they provided and  
 5 what we provided is we found four more vice  
 6 presidents in a chart that apparently  
 7 required one of the utilities to report  
 8 compensation of all the executives, so we  
 9 found, I can't remember the number, three or  
 10 four more vice president titles in that  
 11 listing and we added them to our count. So  
 12 we supplemented it by research, the point  
 13 being we only found once case where that  
 14 research indicated that there was reason to  
 15 mistrust the annual report as a complete and  
 16 authoritative source.  
 17 GREENE, Q.C.:  
 18 Q. And the last question that I have before the  
 19 break, I understood from your answer that  
 20 you used the term "officers" interchangeably  
 21 with executives in your report, that you  
 22 were talking about and considered those  
 23 called vice president and above, is that  
 24 correct?  
 25 MR. ANTONUK:

Page 86

1 A. I did in doing this and, again, I've always  
 2 done this from an operating perspective, not  
 3 a legal responsibility perspective which is  
 4 really what you get into when you're using  
 5 the word "officer" in a technical term. You  
 6 know, I've sat with the heads of most of the  
 7 major holding companies in the US and they  
 8 say "officers", they say "executives", I say  
 9 "officers", they say "executives". When  
 10 we're talking in an operational sense, I  
 11 don't think anybody would recognize that  
 12 distinction as meaningful. I respect the  
 13 fact that the term "officer" in a legal  
 14 sense has a different definition, but again,  
 15 I'm not sure how anybody could have thought  
 16 we were talking about legal responsibilities  
 17 here verses what they run.  
 18 GREENE, Q.C.:  
 19 Q. Okay, thank you. Sorry we went over a  
 20 little bit.  
 21 CHAIR:  
 22 Q. That's fine. We'll reconvene, we'll try to  
 23 make up a little—well 11:35 we'll be back.  
 24 (OFF RECORD - 11:05 A.M.)  
 25 (RESUME - 11:37 A.M.)

Page 87

1 CHAIR:  
 2 Q. Back to you, Ms. Greene.  
 3 GREENE, Q.C.:  
 4 Q. Thank you. Now Mr. Antonuk, I wanted to  
 5 move to the next area that Liberty did  
 6 review for the Board for the reference, and  
 7 that was the potential, whether there was  
 8 any potential cost savings and rate  
 9 mitigation opportunities arising if Hydro  
 10 assets, assets own by Hydro, were either  
 11 outright transferred to Newfoundland Power,  
 12 or whether there was a change in operating  
 13 responsibility for Newfoundland Power to  
 14 assume responsibility for certain of Hydro's  
 15 assets. Can you explain to the  
 16 Commissioners what the results of your  
 17 analysis showed?  
 18 MR. ANTONUK:  
 19 A. Yes, we early in Phase 2 looked at asset  
 20 transfers and the reason was if you make an  
 21 operational transfer the cleanest way from a  
 22 future operation's perspective is to move  
 23 both the assets and the other resources it  
 24 takes to accomplish that function. The  
 25 problem is that the way rates are structures

Page 88

1 would cause the assets transferred to have a  
 2 higher return and that would have a negative  
 3 effect. We actually even thought about  
 4 transfers the other way, you know,  
 5 intuitively might think if transferring to  
 6 Newfoundland Power is more expensive than  
 7 transferring from Newfoundland Power should  
 8 cause a break, but typically speaking when  
 9 an investor and utility is transferring  
 10 assets, they are transferred at a multiple  
 11 of book value because it is perceived in the  
 12 industry that they have a market value that  
 13 is higher than that. So if you attach any—I  
 14 don't want to say reasonable markup, if you  
 15 attach any typical markup for transfers, you  
 16 would produce an increase in rate base if  
 17 Hydro were paying 1.5 times the value, 1.7  
 18 times the value, which are not atypical  
 19 numbers, then Hydro's rate base would be in  
 20 effect increased enough to wipe out the  
 21 lower capital cost advantage you would get,  
 22 so it really didn't make sense transferring  
 23 in either direction from a cost reduction  
 24 perspective. Not a surprising result, but  
 25 Phase 2 we went actually through the math to

<p style="text-align: right;">Page 89</p> <p>1 demonstrate that. Therefore, we looked at                  2 transfers of operational responsibility                  3 which by definition have, they have inherent                  4 kind of value reducing characteristics. One                  5 is whoever picks up operational                  6 responsibility without assets has no way to                  7 make money for doing it, so they would, if                  8 it were Newfoundland Power, for example,                  9 pick up additional risk, additional                  10 responsibilities. In a typical way, those                  11 are handled just through a kind of a fee                  12 base structure for providing the services.                  13 Obviously that fee would eat into any                  14 savings you would achieve. In addition, you                  15 in effect have two entities who have to                  16 cooperate pretty closely and provide any                  17 planning and execution of the activities                  18 involved. In the best of circumstances                  19 that's not a perfect situation. So                  20 nevertheless we looked, we saw some, based                  21 on again very good cooperation from both                  22 Hydro and Newfoundland Power, and again, in                  23 an area that's kind of difficult to talk                  24 about, when you think about it, for them.                  25 It wasn't for us, we found it kind of</p>	<p style="text-align: right;">Page 91</p> <p>1 determined. Okay. We see two other areas                  2 that were not certainly possible for us to                  3 look at in the time we had, but based on                  4 discussions with Hydro about Newfoundland                  5 Power, with Newfoundland Power about Hydro,                  6 we saw two other areas that we think it                  7 would be appropriate for close attention to.                  8 I'll take them in reverse order first.                  9 There's a lot of money being planned for                  10 capital spending by the two entities                  11 together in the next five years. You all                  12 have a process for dealing with that and as                  13 I understand it, that process has either                  14 already begun or will soon be, so what we                  15 were trying to do there is just to highlight                  16 the importance of making sure that that                  17 process is carried out in a close and                  18 careful way and I think if we're really                  19 asserting anything different from what you'd                  20 do otherwise, I think it's the same                  21 conundrum we faced when we did the                  22 reliability report, we sort of looked at                  23 reliability first and economy second when we                  24 were doing work early here. You can see on                  25 our reliability report, we now have kind of</p>
<p style="text-align: right;">Page 90</p> <p>1 interesting but that's because it wasn't our                  2 operations and assets, I guess. We saw some                  3 potential savings, but there were a lot of                  4 uncertainties, a lot of barriers, and it                  5 just did not appear that when you really cut                  6 through the numbers and look at the                  7 requirements involved, that the kinds of                  8 numbers we could generate were sufficient to                  9 warrant taking the risks and dealing with                  10 the transition issues, which were many. So                  11 ultimately we did not find merit in doing                  12 that. In a way that was surprising with                  13 respect to retail. I think going in that                  14 looked like a very, very promising                  15 opportunity, less so on the other areas, but                  16 even those others were worth looking at, but                  17 even with respect to retail, we just didn't                  18 see the numbers that suggested that the                  19 folks should go through, you know, the                  20 detailed effort it would take to detail the                  21 transfer, work out an operating agreement,                  22 deal with differences in labour agreements                  23 and a whole host of issues. What we did                  24 determine was that that I still can't work                  25 these slides very well is what we</p>	<p style="text-align: right;">Page 92</p> <p>1 put them almost on an equal footing, you                  2 know, because we see the circumstances                  3 involved now economically and pricewise and                  4 we think that has a direct bearing from a                  5 reliability perspective what you should be                  6 spending money on or at least when should                  7 you be deferring, should you be reducing. I                  8 think those questions are a lot closer call                  9 now and I guess what I'm really commending                  10 to you all is that I think the same kind of                  11 review of the capital programs are                  12 appropriate, given where we are pricewise is                  13 really the point. And then the second is                  14 that you will see in Hydro's filing they                  15 talked about examining efficiency. They                  16 talked about things, I'm going to call it                  17 work management, their term may have been                  18 somewhat different. We saw those as                  19 potentials too and I thought it was                  20 encouraging that Hydro was saying the same                  21 thing. So we think looking very closely and                  22 carefully at efficiency, directly through                  23 reduction and resources and secondarily—not                  24 secondarily, also through looking at                  25 technological support too that would allow</p>

Page 93

1 staffing reductions. We commend that, we  
 2 think that's important, we think that should  
 3 be done. It should be highly visible, but I  
 4 want to say to you that we would not propose  
 5 those as alternatives to what we have  
 6 proposed, we would see those as supplemental  
 7 and additional ones and not mutually  
 8 inconsistent with what we're talking about,  
 9 and let me say additive is probably the  
 10 better word.  
 11 (11:45 a.m.)  
 12 GREENE, Q.C.:  
 13 Q. The last bullet you had there was common  
 14 purchasing. Can you please explain what you  
 15 meant by that?  
 16 MR. ANTONUK:  
 17 A. There is significant differences between the  
 18 processes that Hydro must employ to make  
 19 purchases verses those of Newfoundland  
 20 Power. I forget the name of the act that  
 21 Hydro has to operate under, but they  
 22 restrict Hydro's ability to do the kinds of  
 23 things that I believe Newfoundland Power  
 24 does and that we find typical in the  
 25 industry in terms of negotiating with

Page 94

1 potential vendors. The use of alliances  
 2 with contractors, a combination of volumes  
 3 of the two entities to produce discounts  
 4 based on volume we think have potential. I  
 5 don't think we saw 10 million as likely, but  
 6 I think we saw a number that's in the range  
 7 of four to five as fairly promising. It was  
 8 difficult to make a lot of progress on those  
 9 when you start from the premise that you  
 10 really can't do, you can't work that way  
 11 here now because it would not be smart to  
 12 make Newfoundland Power go to the Hydro  
 13 approach, nor is Hydro allowed to go to the  
 14 Newfoundland Power approach, so I think the  
 15 key issue there is can the two working  
 16 together objectively, candidly and without,  
 17 you know, kind of a natural defensiveness  
 18 that every utility has about the high  
 19 quality and beauty of its own practices, can  
 20 they work together to identify enough to  
 21 make it worthwhile, saying whether a change  
 22 in the restrictions on Hydro would produce  
 23 benefit.  
 24 GREENE, Q.C.:  
 25 Q. So at most you would recommend further

Page 95

1 analysis of that, is that correct?  
 2 MR. ANTONUK:  
 3 A. That's correct and I think that analysis  
 4 should proceed, it seems like the Purchasing  
 5 Act, whatever its proper title is, is a  
 6 pretty significant given, so I think our  
 7 view is that it's not even realistic to  
 8 start thinking about whether it's worth  
 9 considering that change until the  
 10 preliminary work shows that that change  
 11 really would have substantial value.  
 12 GREENE, Q.C.:  
 13 Q. The next area that you addressed and that I  
 14 would like to address with you is your  
 15 review of the Lower Churchill Project  
 16 operating a maintenance cost which was one  
 17 of the specific issues that the Government  
 18 had asked the Board to consider in the  
 19 reference questions.  
 20 MR. ANTONUK:  
 21 A. I think the base point I want to make there  
 22 is that the estimate that we used, which was  
 23 the October 2018 estimate, we found was a  
 24 pretty solid reference point. There were  
 25 earlier estimates. This estimate is

Page 96

1 different from those. We were happy  
 2 starting from that as a solid foundation. I  
 3 think the biggest difference was the level  
 4 of conservatism that was built into that  
 5 estimate for the early phase of LCP  
 6 operation. We made a number of adjustments  
 7 that I think are best described saying there  
 8 are certain things you can do earlier or  
 9 certain things you can reduce, like the  
 10 amount of contingency that's in the  
 11 estimate. It's pretty high. It's a new  
 12 asset, there are still some uncertainties,  
 13 but you know, frankly we thought it could be  
 14 lower, so I think we saw a number of  
 15 measures that could reduce the conservatism  
 16 in the estimate without really criticizing  
 17 the estimate, but certain elements of  
 18 conservatism that could be removed without,  
 19 in our view, increasing the risk to  
 20 operation of the facilities. So we found  
 21 some reductions there, they were about 12  
 22 million dollars a year and they ended up  
 23 affecting both internal staffing, use of  
 24 contractors and a variety of services and  
 25 also the reducing amount of contingency. I

Page 97

1 think the bottom line is there was a lot of  
 2 uncertainty and concern about that estimate.  
 3 I think we're pretty comfortable that it's  
 4 the best estimate that can be made now. As  
 5 I said, we believe these reductions to it  
 6 are appropriate as well, but I don't think  
 7 we would kind of say that the stakeholders  
 8 here should be considered about whether that  
 9 estimate is just fundamentally all for or  
 10 not good, so –  
 11 GREENE, Q.C.:  
 12 Q. Now that we have finished reviewing the  
 13 areas where you identified savings, if we  
 14 could just have a quick look at the next  
 15 slide which shows the summary again. This  
 16 is the same slide we saw earlier and again  
 17 it brings all of the cost savings or  
 18 potential revenue offsets together to show  
 19 the impact, is that correct?  
 20 MR. ANTONUK:  
 21 A. That's correct and it really, more than  
 22 anything else, was designed to set up the  
 23 next slide which does a little more  
 24 dramatically show the, we were calling it  
 25 the camel hump, looks a little more like a

Page 99

1 A. Yes.  
 2 GREENE, Q.C.:  
 3 Q. And can you explain very briefly why?  
 4 MR. ANTHONUK:  
 5 A. Yes, it's for the same reason you regular  
 6 Hydro's expenses and we're talking here  
 7 about just a huge asset from an economic  
 8 perspective. You should regulate it because  
 9 there is no competitive market for us that  
 10 will provide discipline over the amount that  
 11 can be charged for those assets and it's  
 12 that lack of market discipline that is the  
 13 very fundamental foundation of regulation in  
 14 the first place. It applies to these assets  
 15 we're talking about here, just as it does to  
 16 Hydro's assets.  
 17 GREENE, Q.C.:  
 18 Q. And customers have to pay for all of the  
 19 capital and operating expenses, is that  
 20 correct?  
 21 MR. ANTONUK:  
 22 A. That's correct. It's the inclusion of those  
 23 costs in rates for customers who do not have  
 24 competitive choice and therefore, cannot  
 25 avoid them.

Page 98

1 masa (phonetic) now, but the point is there  
 2 you see we have a, even with mitigation,  
 3 applying all the sources we identified,  
 4 there is still a sharp drop. Then, despite  
 5 inflation, there's no increase, and then we  
 6 have a drop, so is there a way to manage  
 7 that line to make it look a little more like  
 8 the kind of steadily slowly increasing line  
 9 you would typically see in utility rate  
 10 forecasts that are driven principally by  
 11 normal inflation, which is a point I think  
 12 we discussed before, but this chart just  
 13 shows it a little more dramatically.  
 14 GREENE, Q.C.:  
 15 Q. Moving on then to other areas that you have  
 16 been asked to review, the first is the  
 17 regulatory framework and you did address  
 18 that before the break with respect to your  
 19 view is that aspects of Nalcor Power's  
 20 supply should be regulated. First, as you  
 21 state here on this slide, it is your opinion  
 22 that future capital and operating expenses  
 23 of the Lower Churchill Project should be  
 24 regulated by the Board, is that correct?  
 25 MR. ANTONUK:

Page 100

1 GREENE, Q.C.:  
 2 Q. Similarly you recommend that the profit that  
 3 will go to Nalcor from its share of excess  
 4 sales, the sales to the export market, you  
 5 recommend that that also be applied to the  
 6 revenue requirement that customers pay and  
 7 that it be regulated, is that correct?  
 8 MR. ANTONUK:  
 9 A. Yes, and certainly Nalcor and Hydro can and  
 10 will speak for themselves, but I think that  
 11 they're in agreement that that's the  
 12 universal practice and they acknowledge, as  
 13 we would concede—or they state as we could  
 14 concede that it's up to the Province to  
 15 decide whether it wants to follow that  
 16 universal model or diverge from it for  
 17 whatever reason it sees fit.  
 18 GREENE, Q.C.:  
 19 Q. One of the points you make on slide 36 is  
 20 that the conflict between Nalcor Power  
 21 Supply and Hydro, which now exists and which  
 22 would not exist with regulation, would you  
 23 like to expand on that for a moment?  
 24 MR. ANTONUK:  
 25 A. Yeah, the conflict is that if Nalcor makes a

Page 101	<p>1 decision on capital investment or operating</p> <p>2 costs with respect to the LCP assets that is</p> <p>3 unsound from a customer rate perspective,</p> <p>4 they bear no consequence for that. In fact,</p> <p>5 they gain to potentially to benefits, one</p> <p>6 they will earn a return if the investment is</p> <p>7 included in rate base, and two, if it</p> <p>8 increases all system sales, they earn all</p> <p>9 the margins from that. So the essence of a</p> <p>10 competitive marketplace is that if I'm going</p> <p>11 to make a decision on any change in how I</p> <p>12 fund or use an asset, I'm doing it on the</p> <p>13 basis that the market will give me a reward</p> <p>14 for it, not on the basis that I don't have</p> <p>15 to worry about recovery of my costs, I can</p> <p>16 only gain by export sales or returns that</p> <p>17 become part of Hydro's and customer rates as</p> <p>18 a result of making that investment, so</p> <p>19 there's kind of a split between the</p> <p>20 responsibility for bearing the cost of the</p> <p>21 asset and where the benefits of it go, and I</p> <p>22 think for the very same reasons you look at</p> <p>23 whether Hydro's investment and operating</p> <p>24 decisions and costs are appropriate from a</p> <p>25 customer perspective, it's essential that</p>	Page 103	<p>1 Nalcor Energy Marketing does and whether</p> <p>2 this is typical or not typical in the</p> <p>3 industry?</p> <p>4 MR. ANTONUK:</p> <p>5 A. Well I think a lot of attention was focussed</p> <p>6 on creating--Nalcor Energy Marketing is a</p> <p>7 separate entity, I would argue that that has</p> <p>8 nothing to do with the real issues. The</p> <p>9 issues that has to deal with are primarily</p> <p>10 taxation, as I understand it, I'm going to</p> <p>11 talk a little bit about risk. I think maybe</p> <p>12 theoretically there's some issue there, but</p> <p>13 I think in practical purposes that it's not</p> <p>14 correct to conclude that's material. The</p> <p>15 real issue is who controls it. There are a</p> <p>16 number of cases where utilities have</p> <p>17 operating subsidiaries. I've managed</p> <p>18 regulatory regulations for, I think, seven</p> <p>19 or eight call (phonetic) subsidiaries when I</p> <p>20 was working at Pennsylvania Power Light</p> <p>21 Company, I had the regulatory side of</p> <p>22 managing those. They were also separate</p> <p>23 corporations. Every penny of their expenses</p> <p>24 was reviewed by the Commission. Every penny</p> <p>25 that they made, they changed the utility who</p>
Page 102	<p>1 you do the same thing for these assets. And</p> <p>2 I'm going to distinguish that from potential</p> <p>3 future development that the Province might</p> <p>4 pursue on what I will call a market basis</p> <p>5 where those investments will stand or fall</p> <p>6 based on arrangements made in the</p> <p>7 marketplace.</p> <p>8 GREENE, Q.C.:</p> <p>9 Q. If we go to slide 37, again I think you</p> <p>10 probably covered all of those points when</p> <p>11 you discussed regulated, the distinction</p> <p>12 between regulated and non-regulated that</p> <p>13 Nalcor has made. Is there anything you</p> <p>14 would like to add there?</p> <p>15 MR. ANTONUK:</p> <p>16 A. No, I think I covered all of those.</p> <p>17 GREENE, Q.C.:</p> <p>18 Q. So if we turn to the last issue that you</p> <p>19 were asked to review for the Board, which is</p> <p>20 to do with Nalcor Energy Marketing and what</p> <p>21 would be best utility practices that exist</p> <p>22 in the industry with respect to energy</p> <p>23 trading and export sales and purchases, so</p> <p>24 could you please outline for the</p> <p>25 Commissioners what your analysis showed</p>	Page 104	<p>1 was regulated and every penny that they made</p> <p>2 that was to a third party to offset costs</p> <p>3 was regulated. It didn't make any</p> <p>4 difference. The real issue is where the</p> <p>5 costs and the revenues for the assets that</p> <p>6 are used and the returns that are produced</p> <p>7 lie, so I don't really have an opinion so</p> <p>8 much on creating it as a separate entity, it</p> <p>9 just doesn't matter, that's not an issue</p> <p>10 that's relevant to what we do about</p> <p>11 regulating it or dealing with its margins.</p> <p>12 The analysis that Power Advisory presented</p> <p>13 about this whole issue is kind of upside</p> <p>14 down. They compare Nalcor a lot to the 17</p> <p>15 markets that are unregulated. The real</p> <p>16 issue is the 31 that operate on a vertically</p> <p>17 or integrated basis where the assets used</p> <p>18 for all system sales are paid for by</p> <p>19 customers, which is the case here. We have</p> <p>20 actually audited many of those over the</p> <p>21 years and by the way, this isn't just</p> <p>22 happening in the electric business in the</p> <p>23 US, it's even more prevalent in the gas</p> <p>24 business because gas companies have to</p> <p>25 design their systems to the coldest day of</p>

Page 105	Page 107
<p>1 the year and they tend to have a lot more                  2 excess because the consequences of cold                  3 weather for them are generally much more                  4 severe than they are for an electric                  5 company, so they have a lot of excess                  6 because they don't have that big data often.                  7 In all 51 jurisdictions, I have to keep                  8 remembering that the disenfranchise voters                  9 of DC have to be respected, in all 51 the                  10 same thing applies. The operations are                  11 subject to full regulation by the                  12 commissions, not before the fact, I think                  13 this whole argument of nimble and all that,                  14 I get it, but nimbleness exists wherever                  15 this function is located, it's not more                  16 nimble if it's unregulated. In fact, it                  17 tends to be a lot more risky sometimes, but                  18 anyway, the point is here that—and we know                  19 this because we have done these audits and                  20 we know what other states do because we have                  21 been asked by several states to help design                  22 their programs for regulating these sales.                  23 Commissions can look at the organization                  24 that conducts the activities, they can look                  25 at the staffing, they can look at the</p>	<p>1 primarily through private enterprise. We                  2 have extensive government supported rural                  3 electrification cooperatives, if you will,                  4 but the fundamental development of the                  5 industry in our country is private industry,                  6 which is a lot like Alberta, for example,                  7 which is a bit of an anomaly for Canada.                  8 Here utility operation kind of was a,                  9 electrification, if you will, was kind of a                  10 government responsibility and benefit, so                  11 you have a whole different starting point                  12 here. You have the utilities as in effect                  13 the government, so it doesn't surprise me                  14 that Canada is different and here's where I                  15 think it's most relevant about Canada, it's                  16 not where it was or is or even where it's                  17 going. I think if you look at every                  18 development that has been made in Canadian                  19 regulation in these areas, it is in the                  20 direction of more regulation. That's true                  21 in New Brunswick, it's certainly true other                  22 places as well, so I think it is true that                  23 there are some old well-established powerful                  24 government groups that have grown up as                  25 marketers and I think what you're seeing in</p>
<p>Page 106</p> <p>1 controls, they can look at the risk                  2 management policies, they can determine what                  3 kinds of hedging are appropriate. There is                  4 actually the same or greater level of                  5 regulation of conduct there than you see                  6 with respect to the base conduct of things.                  7 We've seen how TND is regulated, we've seen                  8 how customer service is regulated. The                  9 number of things that Commissions do to                  10 effect trading while it's off in a fairly                  11 small portion of the action are much more                  12 intrusive if you want and inappropriately                  13 so, in my opinion, so the notion that                  14 somehow the model for the US is not                  15 regulating trading, that's what off the                  16 mark. Trading is regulated as robustly, as                  17 completely and with as much force and                  18 authority, if not more, as any other aspect                  19 of utility regulation.                  20 (12:00 P.M.)                  21 It is the case that Canada does not, on the                  22 whole, regulate as much, but I'm going to                  23 tell you that I think that's, to me, largely                  24 a function of the development of the                  25 industry here. Our industry developed</p>	<p>Page 108</p> <p>1 Canada is occasionally they run into                  2 trouble. Sometimes it's the same kind of                  3 difficulty that we're experiencing here now,                  4 so while I acknowledge that the direction,                  5 that the status of regulation in Canada is                  6 different, I would urge you to consider its                  7 direction. I would urge you to consider                  8 what I've been talking about in terms of                  9 what we see with respect to how Muskrat                  10 Falls is structured, and I think the issue                  11 for you all is what do you think is the                  12 right direction to go. My view is that                  13 regulation of energy trading has had                  14 tremendous benefits. It has not reduced                  15 returns; those returns are substantial. It                  16 has had very beneficial effects on risk. I                  17 can think of no case where a utility trading                  18 with utility assets has experienced                  19 financial difficulty. I could name, without                  20 trouble, four or five free-market ones that                  21 have gone bankrupt, so we would give no                  22 comfort to any argument that says that there                  23 is less nimbleness, there is less                  24 capability, that there is less operating                  25 room to move in a regulated, verses an</p>

<p style="text-align: right;">Page 109</p> <p>1 unregulated trading operation. And even if  2 you don't want to go there, I think it's  3 pretty clear that bar none, there's no place  4 in Canada or US that fails to provide the  5 returns from off system sales to regulated  6 entities to those who are responsible for  7 bearing their costs. I think there might be  8 one or two cases where there's kind of a  9 formula rate process which doesn't do it  10 directly, but I haven't seen anything to  11 convince me that the returns from off-system  12 sales are in effect excluded conceptually  13 from the structures that are created in  14 establishing those reference point base  15 rates.</p> <p>16 GREENE, Q.C.:  17 Q. If you go to your next slide, Mr. Antonuk, I  18 think you've covered the points on that  19 slide. Is there anything you wanted to add  20 before we go to your last slide?</p> <p>21 MR. ANTONUK:  22 A. No.</p> <p>23 GREENE, Q.C.:  24 Q. The last issue with respect to Nalcor Energy  25 Marketing is your suggestion in your report</p>	<p style="text-align: right;">Page 111</p> <p>1 to describe them compared to that. For the  2 size that we're talking about now, it is not  3 unreasonable to expect that Nalcor may find  4 access to specialist economical. I will say  5 this, without criticizing Nalcor Energy  6 Marketing's capabilities, there were very  7 large sophisticated organizations in the US  8 and some of which operate in Canada as well,  9 that you can't make a reasonable contention  10 or not more sophisticated and more  11 knowledgeable about US markets, which are  12 important here to the Nalcor Energy  13 Marketing. I don't know if they're  14 interested in working in this market because  15 this market is different and it's developing  16 and it's not now where it may be some day.  17 I don't know what they would charge to work  18 here, but I will tell you this, Nalcor's own  19 analysis showed that for fairly small  20 trading operations that do not want to  21 engage in high-risk trading, outside  22 contract resources were a viable option.  23 All we're saying is it's reasonable to  24 expect Nalcor to test its own internal plans  25 and capabilities against what is available</p>
<p style="text-align: right;">Page 110</p> <p>1 that Nalcor should consider soliciting  2 whether there's interest, an expression of  3 interest as to whether this service should  4 be contracted out. Would you please expand  5 on that?</p> <p>6 MR. ANTHONUK:  7 A. Yes, I want to say two things first. We're  8 not saying that's what should be the result  9 and we're not making any criticism of the  10 development of the Nalcor Energy Marketing.  11 That would be a false construct for  12 analysing this point. What we're saying is  13 that Nalcor Energy Marketing's operations  14 reflect a fairly small function. I saw some  15 measurement, I forget what it was, it sort  16 of was relevant to revenues or relative to  17 size, none of that matters. An organization  18 needs to be designed to accomplish the  19 functions for which its responsible. It's  20 not designed based on the percentage of its  21 share of revenues or of sales to an entity.  22 For an organization like this, you design it  23 to do what it's there to do, which is to  24 make off system transactions. And Nalcor's  25 operations are small. There's not any way</p>	<p style="text-align: right;">Page 112</p> <p>1 in the marketplace. We are not even  2 suggesting an RFP; we're suggesting a  3 solicitation of the marketplace to determine  4 if there's enough interest to justify an  5 RFP, which would actually solicit fee  6 statements, benefit guarantees, all of those  7 things. I don't know what the decision is  8 that will result from that, but what I am  9 saying is that it's clearly, in our view,  10 worth the effort to do what Nalcor itself  11 has said is a logical option for a fairly  12 small trading operation, and that is to  13 consider an external source. It's really as  14 simple as that. And that market is changing  15 very fast. I'll tell you about what used to  16 be a little company called Tenaska that  17 nobody ever heard of. Tenaska is now a 12  18 billion dollar privately owned enterprise  19 that is managing assets that are in the  20 range of 10 to 15,000 megawatts and a lot of  21 that – some of that is their – are their  22 assets. A lot of that is assets they're  23 managing for others.  24 ACES is an organization set up by the  25 rural electric community in the United</p>

Page 113

1 States. These are the generation and  
 2 transmission cooperatives. That business in  
 3 the US is split between these what are  
 4 called G and T's and those that are  
 5 distributors. ACES was set up quite some  
 6 time ago to do these kind of functions for  
 7 that community. Some of those G and T's are  
 8 pretty large and the business of ACES is not  
 9 inconsiderable.  
 10 So, I think the notion that somehow  
 11 Nalcor energy market is either already too  
 12 good or too big to explore this alternative  
 13 just are not compelling to us.  
 14 GREENE, Q.C.:  
 15 Q. Thank you, Mr. Antonuk. That concludes my  
 16 questions for this panel, Chair.  
 17 CHAIR:  
 18 Q. Thank you. I understand we're going to go  
 19 to Nalcor Hydro for questioning.  
 20 EATON, Q.C.:  
 21 Q. Thank you, Madame Chair. Mr. Antonuk, since  
 22 you've been the one speaking, I will address  
 23 my questions to you, but if somebody else on  
 24 the panel is more appropriate to respond,  
 25 then I invite that.

Page 114

1 MR. ANTONUK:  
 2 A. Thank you.  
 3 EATON, Q.C.:  
 4 Q. So, you have indicated in your slides that  
 5 your company or your organization is  
 6 familiar with both Nalcor and Hydro through  
 7 various assignments that you've previously  
 8 undertaken for the Board. Is that correct?  
 9 MR. ANTONUK:  
 10 A. Yes.  
 11 EATON, Q.C.:  
 12 Q. And that would be primarily Hydro that you  
 13 would have looked at, rather than Nalcor?  
 14 MR. ANTONUK:  
 15 A. No, that's not true. I think we spent as  
 16 much time with what I'll call the Nalcor  
 17 side when we began. It was the Nalcor side  
 18 prior to the 2016 change, I'll say that.  
 19 But it's been a – even then, down to meeting  
 20 with board members and CEO. So, I will say  
 21 that the primary focus has been on Hydro,  
 22 absolutely, but the interaction that's  
 23 produced is what I'm referring to.  
 24 EATON, Q.C.:  
 25 Q. Okay. You haven't done work for Nalcor or

Page 115

1 Hydro?  
 2 MR. ANTONUK:  
 3 A. No.  
 4 EATON, Q.C.:  
 5 Q. As part of your previous work or your  
 6 current mandate that you're talking about  
 7 now, did you meet with or speak with Mr.  
 8 Stan Marshall, the CEO?  
 9 MR. ANTONUK:  
 10 A. Yes.  
 11 EATON, Q.C.:  
 12 Q. You did?  
 13 MR. ANTONUK:  
 14 A. Yes.  
 15 EATON, Q.C.:  
 16 Q. When was that?  
 17 MR. ANTONUK:  
 18 A. I can check. I don't remember. But it was  
 19 during the course of this engagement and it  
 20 was in relation to this engagement.  
 21 EATON, Q.C.:  
 22 Q. And did you discuss Nalcor's mandate with  
 23 him and how he structured the company as a  
 24 result of that?  
 25 MR. ANTONUK:

Page 116

1 A. Yes.  
 2 EATON, Q.C.:  
 3 Q. As I read your report and the slides that  
 4 you've presented, it seems that you have, in  
 5 effect, come to the conclusion that Nalcor  
 6 is really just a supporting entity for  
 7 Hydro.  
 8 MR. ANTONUK:  
 9 A. No, that's not correct. We believe that the  
 10 power supply portion of Nalcor is in effect  
 11 carrying out activities that are  
 12 functionally similar to those of Hydro. So,  
 13 it's a little narrower. So, I'm not – I'd  
 14 say I'm more tweaking, trying to tweak what  
 15 you said than disagree with it.  
 16 EATON, Q.C.:  
 17 Q. The mandate that you were given insofar as  
 18 it relates to the corporate structure was  
 19 one that was related to costs? So your view  
 20 of the corporate structure was with a view  
 21 of determining whether or not there were  
 22 cost savings?  
 23 MR. ANTONUK:  
 24 A. While not compromising operational  
 25 effectiveness, certainly. We were not – we

Page 117

1 were not retained to design an optimum  
 2 organization structure, but we were also not  
 3 foreclosed from considering alternate  
 4 organization structures that would meet  
 5 mission while accomplishing cost savings.  
 6 EATON, Q.C.:  
 7 Q. Okay, fair enough.  
 8 MR. ANTONUK:  
 9 A. We just – we didn’t take it as a given, I  
 10 guess is what I’m saying.  
 11 EATON, Q.C.:  
 12 Q. Okay. And throughout your report and your  
 13 presentation, it’s hard to determine what,  
 14 if any, weight you gave to Nalcor’s mandate,  
 15 you know, as directed by the Government, and  
 16 how that fit into your analysis of this. I  
 17 mean, Nalcor has other mandates other than  
 18 power supply.  
 19 MR. ANTONUK:  
 20 A. I can tell you some observations we have  
 21 about that and maybe that can get us started  
 22 in a dialogue here. I think we looked at  
 23 the utility related things that Nalcor is  
 24 doing and tried to determine whether there  
 25 was a more effective way to accomplish those

Page 118

1 without compromising the ability to serve  
 2 any other purpose that the Province would  
 3 give to Nalcor or to some other entity  
 4 besides Nalcor.  
 5 EATON, Q.C.:  
 6 Q. What other purposes are you referring to?  
 7 MR. ANTONUK:  
 8 A. Well, oil and gas or anything else, you  
 9 know, and when I – oil and gas was part of  
 10 the mandate. As you say, energy  
 11 development. It’s not clear to me that  
 12 they’re necessarily the only things that the  
 13 Province might decide or appropriate to  
 14 locate somewhere to serve the interest of  
 15 the Province.  
 16 EATON, Q.C.:  
 17 Q. Okay.  
 18 MR. ANTONUK:  
 19 A. We certainly didn’t want to do anything that  
 20 would leave – that would restrict the  
 21 ability of Nalcor to do these other things,  
 22 but when it’s all said and done, I don’t  
 23 know how we ever could have come up with  
 24 anything like that because at the worst, we  
 25 say – I think you say, well, you know, put

Page 119

1 them – put that function in something that  
 2 stands by itself independently of the entity  
 3 that’s planning, operating and charging for  
 4 utility type assets. I’m not sure I’m  
 5 helping. I’m trying the best I can here.  
 6 EATON, Q.C.:  
 7 Q. You’re suggesting creating a new entity to  
 8 do what they’re already doing?  
 9 MR. ANTONUK:  
 10 A. Yeah.  
 11 EATON, Q.C.:  
 12 Q. Okay.  
 13 MR. ANTONUK:  
 14 A. Or separate – or just give Hydro the  
 15 responsibility for utility operations. You  
 16 don’t necessarily need to create an entity.  
 17 There’s two entities already basically in my  
 18 judgment. There are two operating entities  
 19 anyway. Really there are kind of three  
 20 actually, Power Supply, Hydro and the rest  
 21 of Nalcor.  
 22 EATON, Q.C.:  
 23 Q. You just mentioned oil and gas and when you  
 24 did your work, oil and gas was considered to  
 25 be on the way out, but things have changed.

Page 120

1 Does that change anything for you?  
 2 (12:15 p.m.)  
 3 MR. ANTONUK:  
 4 A. Not from the way I understand it. I’ll tell  
 5 you as I understand it and then this may –  
 6 the Province doesn’t tell me what they’re  
 7 doing in that regard. What I understand –  
 8 as best I understand it, and I’m willing to  
 9 take any correction you can offer, either  
 10 hypothetically or actually because I don’t  
 11 know. If there is an intent to keep certain  
 12 equity ownership control at Nalcor – we’ve  
 13 seen that pretty commonly. We’ve seen a  
 14 number of cases where utilities, for one  
 15 reason or another, have had things that  
 16 they’re investors in but not operators of.  
 17 MR. DASCHBACH:  
 18 A. For the longest time it was aircraft  
 19 leasing.  
 20 MR. ANTONUK:  
 21 A. Aircraft leasing was a big deal for a while.  
 22 We had what we thought was a hugely valuable  
 23 undeveloped coal mine at PPL. Those took  
 24 very, very limited time and effort. They  
 25 were primarily financial things. It

Page 121

1 required financial reports. Occasionally it  
 2 required a lawyer to look at maybe a  
 3 potential development agreement. That was  
 4 done by an outside counsel anyway.  
 5 So, if what they are is an attempt to  
 6 retain something that is an equity ownership  
 7 interest of the Province, that's – those  
 8 resources seem to me would be reasonably  
 9 small. I can't imagine that your Government  
 10 doesn't have some other way to produce those  
 11 efficiently through financial accounting,  
 12 economic and legal resources it otherwise  
 13 has. And if that's not the case, it would  
 14 surprise me a little bit. I'm not sure what  
 15 it would take; that it would take a material  
 16 level of resources at Nalcor to operate  
 17 them. But if it did, nobody told us that  
 18 during the study from Nalcor and if they  
 19 did, we would have considered it. But so  
 20 the best I can do now is just give you these  
 21 general answers.  
 22 EATON, Q.C.:  
 23 Q. If you can look at Slide – it was 24, might  
 24 be 36.  
 25 MR. ANTONUK:

Page 123

1 A. Yes.  
 2 EATON, Q.C.:  
 3 Q. Not Nalcor's cost generally?  
 4 MR. ANTONUK:  
 5 A. Oh, fair point. Good. That's a good  
 6 clarification.  
 7 EATON, Q.C.:  
 8 Q. And in that, you sort of suggest that  
 9 preparing for Churchill Falls marketing  
 10 opportunities two decades away -  
 11 MR. ANTONUK:  
 12 A. Yes.  
 13 EATON, Q.C.:  
 14 Q. - as if it's far too early for that. Is  
 15 that your -  
 16 MR. ANTONUK:  
 17 A. No, not per se. What I'm saying is that  
 18 there is time to examine an initial approach  
 19 of using contracted asset management and  
 20 doing so would not leave you with  
 21 insufficient time to evolve into a different  
 22 approach if Churchill Falls availability is  
 23 the next major change in the external  
 24 marketing responsibilities of Nalcor.  
 25 EATON, Q.C.:

Page 122

1 A. If you've got the caption that might be -  
 2 EATON, Q.C.:  
 3 Q. "Our approach to cost reduction". The  
 4 numbers need to be fixed.  
 5 MR. ANTONUK:  
 6 A. Yeah, good call.  
 7 EATON, Q.C.:  
 8 Q. You say there at I guess it's the fourth  
 9 major bullet talking about pursuing  
 10 Provincial energy development "can be  
 11 pursued through a separate structure and  
 12 without imposing on the customers".  
 13 Customers you're referring to would be  
 14 Nalcor's customers or Hydro's customers?  
 15 MR. ANTONUK:  
 16 A. Yeah, Nalcor's costs, Nalcor's costs for the  
 17 LCP assets are borne by Hydro's customers.  
 18 EATON, Q.C.:  
 19 Q. For the LCP?  
 20 MR. ANTONUK:  
 21 A. Yes.  
 22 EATON, Q.C.:  
 23 Q. Okay. So is that what you're referring to  
 24 there?  
 25 MR. ANTONUK:

Page 124

1 Q. Did you consider sort of other ongoing  
 2 things that Nalcor has in the works? You  
 3 know, development of Gull Island for  
 4 instance as one of the things mentioned in  
 5 the Minister's mandate letter to Nalcor, and  
 6 other projects.  
 7 MR. ANTONUK:  
 8 A. Yeah, well, we considered them – we were not  
 9 – nobody from Nalcor identified resource  
 10 requirements specific to that role, in which  
 11 case we would have assessed them, which is  
 12 not to say we would not have and I think we  
 13 likely would have said, okay, those can be  
 14 done through a separate organization, a new  
 15 organization or a Nalcor that's split off to  
 16 do that and a Hydro that now becomes, you  
 17 know, the one unified source of utility  
 18 operations.  
 19 And certainly, preparing for Gull  
 20 Island and preparing for Churchill Falls, to  
 21 us, and that's what we're saying I think in  
 22 one of those dashes there, certainly isn't  
 23 worth spending, you know, 15 or 20 million  
 24 dollars a year in the extra resources it  
 25 takes to run two parallel organizations.

Page 125	<p>1 That's – I don't think we were trying to go</p> <p>2 much further than that in this area.</p> <p>3 You know, most of those people are</p> <p>4 operational people. They have nothing to do</p> <p>5 with development of Gull Island or selling</p> <p>6 energy out of Churchill Falls.</p> <p>7 EATON, Q.C.:</p> <p>8 Q. So, in terms of integrating Power Supply</p> <p>9 into Hydro, was that driven by cost</p> <p>10 reduction? Is that for you?</p> <p>11 MR. ANTONUK:</p> <p>12 A. No, that was a factor, but I think</p> <p>13 integrating management so that you have a</p> <p>14 common source of planning that focuses on</p> <p>15 customer, optimizing costs and operations</p> <p>16 from a customer perspective, that was, I</p> <p>17 think, ultimately equally as important. I</p> <p>18 think if we'd have come back and said</p> <p>19 "there's a better – we can improve</p> <p>20 performance here by combining the</p> <p>21 organizations, but we couldn't save costs",</p> <p>22 I suspect some people would have said "why</p> <p>23 didn't you do your job?" But, I don't see</p> <p>24 how the fact that we were looking at costs</p> <p>25 foreclosed us from – and it didn't – from</p>	Page 127	<p>1 was taking this holistic view and nobody</p> <p>2 chastised us for it. Nobody said we were</p> <p>3 doing it the wrong way. So, we just</p> <p>4 continued to do it that way in Phase 2 and</p> <p>5 frankly, as someone who's kind of been in</p> <p>6 operations and utility regulation for longer</p> <p>7 than I sometimes like to admit, I don't</p> <p>8 think we've ever done a job differently. I</p> <p>9 don't think we've ever looked at a utility</p> <p>10 without trying to take a holistic view of</p> <p>11 costs with what's companion to costs, which</p> <p>12 is service reliability and not cost – and</p> <p>13 even cost, it's not just cost today. It's</p> <p>14 cost in the long run.</p> <p>15 EATON, Q.C.:</p> <p>16 Q. You made a statement at page 63 of your</p> <p>17 report to the effect that there's no sound</p> <p>18 operational reason for maintaining the</p> <p>19 distinction. You didn't really say why.</p> <p>20 Then you went on for almost 20 pages looking</p> <p>21 at costs and without getting into other</p> <p>22 aspects of that. Is that the – that it, no</p> <p>23 sound operational reason, full stop?</p> <p>24 MR. ANTONUK:</p> <p>25 A. No. If you -</p>
Page 126	<p>1 looking at what the effect of changes we</p> <p>2 were thinking about would have on a lot of</p> <p>3 things, like how utility facilities are</p> <p>4 planned, how they're paid for, how they're</p> <p>5 charged to customers, what role the Board</p> <p>6 should have. I would consider our review</p> <p>7 integrated from that perspective, always</p> <p>8 mindful that the pressing need here is to</p> <p>9 find a way to get rates down.</p> <p>10 EATON, Q.C.:</p> <p>11 Q. That was certainly the direction that you</p> <p>12 were given, to look for ways to get the</p> <p>13 rates down?</p> <p>14 MR. ANTONUK:</p> <p>15 A. I guess I thought all the rest of that was</p> <p>16 implicit in it because we were also asked to</p> <p>17 look at regulatory structure. We were also</p> <p>18 asked to look at energy marketing, and I</p> <p>19 don't know that – first of all, I don't know</p> <p>20 that those were necessarily solely tied to</p> <p>21 costs. I think certainly there was an</p> <p>22 expectation that we would look at them from</p> <p>23 costs.</p> <p>24 And as we went through this, you know,</p> <p>25 we delivered a Phase 1 report which clearly</p>	Page 128	<p>1 EATON, Q.C.:</p> <p>2 Q. Or is it cost?</p> <p>3 MR. ANTONUK:</p> <p>4 A. I mean, I can look. I can't tell you right</p> <p>5 now. I can't quote from the report, I'm</p> <p>6 sorry. But I think if I look through the</p> <p>7 report, I'll be able to show you a lot of</p> <p>8 things that talk about operational issues;</p> <p>9 that talk about regulatory structure; that</p> <p>10 talk about Board authority. So, I think</p> <p>11 that holistic view is expressed at multiple</p> <p>12 locations in the report. But again, I'll</p> <p>13 tell you, if we didn't talk a lot about</p> <p>14 costs, I think – I will grant you some</p> <p>15 people would have said "well, what are you</p> <p>16 doing here?" So, we talked a lot about</p> <p>17 costs.</p> <p>18 EATON, Q.C.:</p> <p>19 Q. So, I take it from what you've said this</p> <p>20 morning that you had people look at this and</p> <p>21 based upon your various experience, this is</p> <p>22 what you concluded was the best way forward?</p> <p>23 MR. ANTONUK:</p> <p>24 A. Are we talking about the reductions now or</p> <p>25 the operating?</p>

Page 129

1 EATON, Q.C.:  
 2 Q. Talking about the integration.  
 3 MR. ANTONUK:  
 4 A. Integration, yeah.  
 5 EATON, Q.C.:  
 6 Q. And the impact that that might have.  
 7 MR. ANTONUK:  
 8 A. Okay. I think I need you to say it again  
 9 just to make sure, because I interrupted you  
 10 and I apologize.  
 11 EATON, Q.C.:  
 12 Q. You said this morning, I think, that the  
 13 model that you're suggesting, the  
 14 integration and the fallout from that, but  
 15 it's part of the integration process, based  
 16 upon your experience and the experience of  
 17 others, was the best way forward.  
 18 MR. ANTONUK:  
 19 A. It was applying that experience to the  
 20 circumstances here, for sure. But that  
 21 experience has performed an important role  
 22 in the perspectives we brought to making  
 23 that judgment.  
 24 EATON, Q.C.:  
 25 Q. But would you dispute that others who might

Page 130

1 have similar experience might come to  
 2 different conclusions?  
 3 MR. ANTONUK:  
 4 A. I'd have to say I have a lot of difficulty  
 5 with that because I don't really – I can't  
 6 think of a model that's like this. I can't  
 7 think of a model that says that costs are  
 8 placed on customers with no choice without  
 9 regulatory review and margins go somewhere  
 10 else. I don't know a model for that. So,  
 11 can others make that judgment? I suppose.  
 12 In my experience, have I seen others make  
 13 that judgment? That's a no, I think. I  
 14 mean, I haven't thought about it in that  
 15 context and we'll talk about it and I'll  
 16 make sure we tell you if there's an  
 17 exception in our experience. But I can't do  
 18 that right now.  
 19 EATON, Q.C.:  
 20 Q. In your Phase 1 report, I think you  
 21 indicated that there might be reductions of  
 22 about five percent?  
 23 MR. ANTONUK:  
 24 A. Well, I think we're confident there are  
 25 reductions – well, I need to make sure we're

Page 131

1 referring to the same thing. Our bottom  
 2 line with respect to reductions, is that  
 3 what you're asking about?  
 4 EATON, Q.C.:  
 5 Q. Um-hm.  
 6 MR. ANTONUK:  
 7 A. Yeah, we're confident that the number we put  
 8 forth is a conservative estimate of the  
 9 number of reductions to expect.  
 10 EATON, Q.C.:  
 11 Q. And your number now on slide 27 is five to  
 12 ten percent?  
 13 MR. ANTONUK:  
 14 A. No, 113 reflects a range of between five and  
 15 ten percent and the point there was that we  
 16 have seen a number of reductions in that  
 17 range, which we consider a very moderate –  
 18 based on our experience, five to ten percent  
 19 is a fairly moderate target and achievement  
 20 rate to achieve for utilities going through  
 21 what's euphemistically described as right-  
 22 sizing. So that was the reference, the five  
 23 to ten percent reference.  
 24 EATON, Q.C.:  
 25 Q. Just in terms of that right-sizing, I mean,

Page 132

1 you know, how frequently can you do that and  
 2 get five to ten percent?  
 3 MR. ANTONUK:  
 4 A. That's hard to answer. That's really a  
 5 question of what your goal is. We have seen  
 6 reductions much greater than that. We were  
 7 working at a company in New England that  
 8 went through a 20 percent at one time. You  
 9 know, could they do 20 percent, then five,  
 10 five, five? No, no. But what if they had  
 11 done five, five, five, five? Well, they  
 12 would have done – they would have done a lot  
 13 of fives. They just did it all at once.  
 14 So, an organization that is lean and size  
 15 based on a strong focus on staffing  
 16 management and resource management certainly  
 17 can't do repeated reductions of five  
 18 percent.  
 19 MR. CELLARS:  
 20 A. Well, I think, John, you're right. I think  
 21 the question is not how often can you do  
 22 that, but how likely is it to do that when  
 23 you see an organization that has two  
 24 structures like engineering or whatever  
 25 discipline you want to pick that's

Page 133

1 structured essentially identical, doing  
 2 identical functions with the same processes  
 3 in two wholly different organizations. When  
 4 you're confronted with organizations that  
 5 are structured that way, I think a five  
 6 percent reduction is very doable. Now, if  
 7 it's structured more efficiently, then  
 8 you're right. You can't go on infinitum. I  
 9 agree.  
 10 MR. ANTONUK:  
 11 A. You know, there actually is a model for what  
 12 you're talking about and Kevin reminded me  
 13 of it. We have seen cases where two  
 14 utilities come together and by definition  
 15 they produce duplicative organizations. It  
 16 is not uncommon to see the first cut be  
 17 let's make a moderate reduction to integrate  
 18 the functions, eliminate the duplication and  
 19 then following the duplication or the base  
 20 elimination of the duplication, then find  
 21 another reduction.  
 22 So, it's – there is a precedent for it.  
 23 It's just hard to – it's just hard to talk  
 24 of – to answer your question in a generic  
 25 way because it all ultimately depends on the

Page 134

1 circumstances of each company involved.  
 2 It's been done.  
 3 (12:30 p.m.)  
 4 EATON, Q.C.:  
 5 Q. Sure it's been done, but when you go in the  
 6 door, do you start off with a five to ten  
 7 percent objective, regardless of what you  
 8 know about that entity?  
 9 MR. ANTONUK:  
 10 A. I have not, but -  
 11 MR. CELLARS:  
 12 A. I don't think we did that at all. I think,  
 13 to what John said earlier, we looked at the  
 14 structure of the organization and looked at  
 15 it as almost two separate organizations  
 16 doing similar functions and then used that  
 17 number as a sanity check in the end.  
 18 MR. ANTONUK:  
 19 A. Yeah. People have. I've seen it happen,  
 20 you know. I've evaluated utilities that did  
 21 it. We were working at a utility on another  
 22 matter and it – bang. It was a Friday and  
 23 then on the Sunday, there was a – that was  
 24 the basis of the reduction. We need the  
 25 reduction.

Page 135

1 EATON, Q.C.:  
 2 Q. That was driven internally by the utility  
 3 that wanted the reduction?  
 4 MR. ANTONUK:  
 5 A. Well, that's an interesting question. It  
 6 was actually driven, they would argue, by  
 7 the – what they thought was fundamentally  
 8 unfair rate treatment in a rate case. So, I  
 9 would agree with you. They would disagree  
 10 with you. They would say the commission did  
 11 it. That was the initiating factor.  
 12 EATON, Q.C.:  
 13 Q. Was your -  
 14 MR. ANTONUK:  
 15 A. I wasn't very sympathetic with the action.  
 16 That's all I'm trying to tell you.  
 17 EATON, Q.C.:  
 18 Q. But was your number in any way driven by the  
 19 Government announcement that they were  
 20 seeking 20 million dollars in reductions?  
 21 MR. ANTONUK:  
 22 A. I first became aware of that after we  
 23 presented the results of Phase 1, so no.  
 24 No, it was not.  
 25 EATON, Q.C.:

Page 136

1 Q. So, the change from Phase 1, the increased  
 2 number was not driven by the 20 million  
 3 dollar amount?  
 4 MR. ANTONUK:  
 5 A. No, no. We did look carefully at at least  
 6 two announcements and the reason was to see  
 7 if a foundation for it was expressed and  
 8 that foundation may have included something  
 9 that we had omitted. So, we looked at it.  
 10 But I don't think we saw anything in it that  
 11 kind of moved our ball forward. I'm not  
 12 knocking it. I'm just saying that, you  
 13 know, we didn't find anything in it that  
 14 looked like we were missing anything.  
 15 EATON, Q.C.:  
 16 Q. In terms of the reductions, so you said this  
 17 morning, it wasn't clear from your report,  
 18 that you did do job analysis, in terms of  
 19 deciding – you know, you came up with  
 20 numbers? You said 20 here, 20 there, 17  
 21 here.  
 22 MR. ANTONUK:  
 23 A. Not quite. We did look at and talk about  
 24 what people do. So, I'd say yes, but I fear  
 25 you've got some more precise definition of

Page 137

1 that term that you're going to have to give  
 2 me for me to take this any further. We did  
 3 analyse what people do.  
 4 EATON, Q.C.:  
 5 Q. At what level did you analyse that?  
 6 MR. ANTONUK:  
 7 A. At what organizational level?  
 8 EATON, Q.C.:  
 9 Q. Yes.  
 10 MR. ANTONUK:  
 11 A. From the CEO of Nalcor down to people who  
 12 answer telephones.  
 13 EATON, Q.C.:  
 14 Q. In terms of – let's pick a group of people.  
 15 Engineering Services. Did you analyse the  
 16 people within the various engineering  
 17 services to see exactly what services they  
 18 provided and then say -  
 19 MR. CELLARS:  
 20 A. Yeah, yeah, I would say yes. What we did is  
 21 we had extensive data given to us on the  
 22 groups of engineering in both organizations  
 23 and then the individual engineers and what  
 24 they do. Now, from there we looked at, you  
 25 know, the two organizations and then we

Page 138

1 looked at the processes and the procedures  
 2 to see if they're doing it in a common  
 3 fashion that there's no differences that  
 4 could cause a combination – cause  
 5 difficulties there. So, we looked at what  
 6 they do, the processes and procedures they  
 7 do it, the spans of control and the –  
 8 basically disciplines, and then we looked at  
 9 those jobs from there and we looked at how  
 10 we could combine them to be more efficient.  
 11 MR. ANTONUK:  
 12 A. To the extent there were metrics available  
 13 that would talk about the units of –  
 14 specific units of work, not vague units,  
 15 specific measureable units, we looked at  
 16 everything management provided. I don't  
 17 think there's anything we have beyond what  
 18 they gave us. So, we used all the stuff,  
 19 all of that stuff that management had,  
 20 unless there's something they didn't give us  
 21 and I'd be a little surprised because I  
 22 think we asked for that stuff and I think -  
 23 MR. CELLARS:  
 24 A. We looked at -  
 25 MR. ANTONUK:

Page 139

1 A. - as I said, management was pretty  
 2 forthcoming.  
 3 MR. CELLARS:  
 4 A. We looked at location also was another  
 5 factor of where people are doing the work.  
 6 So, I think we did a – from an engineering  
 7 organization, did a fairly good look at a  
 8 lot of data to determine the combination.  
 9 EATON, Q.C.:  
 10 Q. Did you look at who's going to do the work  
 11 when the people are gone?  
 12 MR. CELLARS:  
 13 A. Well, if you look at the numbers, you know,  
 14 because of the way that an organization  
 15 organizes and you would have the end state  
 16 organization, you know, half of the – a  
 17 little over half of the reduction would have  
 18 been redundancy. So, there would be no  
 19 additional work there. Some of the  
 20 reductions were in some vacancies, so the  
 21 work is getting done – we didn't even look  
 22 at all the vacancies. We probably did – we  
 23 took credit for maybe even a third of the  
 24 vacancies. So, the work is presumably, from  
 25 what I can tell, getting done right now

Page 140

1 fairly well. And then we then looked at  
 2 basically the numbers of people and we took  
 3 a very, very modest reduction there and I  
 4 think if you look at – take the redundancies  
 5 out of the picture, you're looking at  
 6 probably three to four percent reduction in  
 7 an engineering organization that's fairly  
 8 duplicative. I could do a work task  
 9 analysis, but I would probably be pretty  
 10 assured that the work would get done safely  
 11 and reliably with that modest reduction.  
 12 MR. ANTONUK:  
 13 A. When we were done with each organization, we  
 14 had a sense of the organization. We had a  
 15 picture of it at a reasonably detailed  
 16 level. We had a picture of the difference  
 17 in resources and their alignment. So, from  
 18 that perspective, yes. When you say who's  
 19 going to get the work when it's done, well  
 20 not at the individual level and we allow for  
 21 those kind of factors because you never know  
 22 who's – depending on how you structure a  
 23 departure program and depending on the  
 24 uncertainty you create in structuring it,  
 25 you're not certain who's going to go.

Page 141

1 So, we tried as best we could to kind  
 2 of identify where we were going to produce  
 3 clear busts, like a span of control that was  
 4 too large, and we assumed, in a couple of  
 5 cases, that that would mean that someone –  
 6 that if we eliminated two people at higher –  
 7 I’m sorry, I always forget the reporter – if  
 8 we eliminated two people at a higher level,  
 9 we may have to bring one up from a level  
 10 here to here to match. So we tried to do  
 11 that.  
 12 Honestly, I think from what we were  
 13 seeing spans of control tended to be too  
 14 small and not too large, which was one of  
 15 the indications that there was duplication.  
 16 So, we were sensitive to that, but I think  
 17 the problems tend to be more the reverse.  
 18 The issues we saw were with the current  
 19 structure and numbers, not the ultimate  
 20 structure and numbers. But I think there  
 21 are probably several cases where we clearly  
 22 recognized that somebody who maybe was a top  
 23 level supervisor or a middle level manager  
 24 might have to jump up in order to eliminate  
 25 a span of control problem that would occur

Page 143

1 doing that is not easy. It’s easy to  
 2 conclude that those costs are not a barrier  
 3 to making the change, but to actually go  
 4 through the process of quantifying, you have  
 5 to think about what’s my attrition rate in  
 6 each organization, who am I going to lose to  
 7 retirement. If I trust to that, am I going  
 8 to have to bring in somebody to temporarily  
 9 fill a position that I’m going to lose. So  
 10 all of those things would have to be done.  
 11 I’ve never seen a case where those are the  
 12 kind of factors that say where I can cut 100  
 13 people a year, I should do it because my  
 14 cost of transitioning are too high. That’s  
 15 never a barrier in my experience to making  
 16 these reductions.  
 17 EATON, Q.C.:  
 18 Q. Well, over time for sure, but to suggest  
 19 that you might get 12.7 million dollar  
 20 savings in year one, I’ll call it year one,  
 21 when there will be costs associated with  
 22 termination of those people, 12 million is a  
 23 false number. It has costs that have to be  
 24 attributed against it, would you not agree?  
 25 MR. ANTONUK:

Page 142

1 by bringing two groups together who now have  
 2 what, they have a larger total complement.  
 3 EATON, Q.C.:  
 4 Q. I’m a little confused, something that you  
 5 said this morning, which was that you  
 6 concluded that you could get about 12  
 7 million in savings in 2020 through reduction  
 8 in salaries. Did you cost that out?  
 9 MR. ANTONUK:  
 10 A. Yeah, we were looking at the cost as having  
 11 been amortizable for the most part in the  
 12 first year, you know, with reductions in  
 13 2020. So 2021, I think is the first number.  
 14 It is possible that a constriction of the  
 15 period would increase transition costs, an  
 16 extension of the period will reduce them.  
 17 We did not try to calculate those details  
 18 because where we were at is sort of looking  
 19 at the total savings per year that are  
 20 achievable on a sustainable basis and saying  
 21 that even if those costs are as substantial  
 22 as they can be for transitioning people out,  
 23 they were not material when looking at the  
 24 sustaining savings. We did not try to  
 25 measure the transition costs. You know,

Page 144

1 A. The costs have to be measured against it.  
 2 EATON, Q.C.:  
 3 Q. Right.  
 4 MR. ANTONUK:  
 5 A. The costs that we measured are the costs in  
 6 the positions reduced. We did not offset  
 7 those costs, and by the way, the ordinary  
 8 practice is if those costs are material, you  
 9 don’t take them in one year anyway, you  
 10 amortize them. So I’m not sure how much  
 11 that number would change. It would be a  
 12 function on probably what the Commission  
 13 would decide is the proper amortization  
 14 period, which I assume would be long enough  
 15 to recognize that a long lasting change can  
 16 be amortized over a reasonably long lasting  
 17 period. There are certainly numbers there,  
 18 but I think I’m having trouble seeing how  
 19 (a) we could have measured them with  
 20 precision, or how (b) they would have  
 21 changed the results, but if you’re going to  
 22 give me the construct that says I have to  
 23 eat all those costs in one year, a fair  
 24 point.  
 25 EATON, Q.C.:

Page 145

1 Q. Okay, because at the same time you said this  
 2 morning that some of it could be done  
 3 through attrition, and attrition is going to  
 4 take time. So, you know, that's not always  
 5 going to happen in year one or year two. It  
 6 might take –  
 7 MR. ANTONUK:  
 8 A. Well, I always find myself surprised by the  
 9 level of the reaction to attrition  
 10 announcements and the very large number of  
 11 people who line up to take them. You know,  
 12 that's induced attrition which comes at a  
 13 cost certainly.  
 14 EATON, Q.C.:  
 15 Q. Okay.  
 16 MR. ANTONUK:  
 17 A. But I think particularly with aging  
 18 workforces, and we have not done – I don't  
 19 think we did a greying workforce analysis  
 20 here.  
 21 MR. DASCHBACK:  
 22 A. No.  
 23 MR. ANTONUK:  
 24 A. So we wouldn't be able to give you any clear  
 25 guidance on what we expect would be the case

Page 146

1 here relative to induced versus normal  
 2 attrition.  
 3 EATON, Q.C.:  
 4 Q. Okay.  
 5 MR. ANTONUK:  
 6 A. It's not going to be – if amortized over any  
 7 length of time, it's not going to be enough  
 8 to call these savings into question, no.  
 9 EATON, Q.C.:  
 10 Q. Did you consider the disruption that it  
 11 might have within the organization at a key  
 12 time when Muskrat Falls is soon to be coming  
 13 on stream?  
 14 MR. ANTONUK:  
 15 A. I don't really take your point as having a  
 16 lot of applicability certainly to Hydro  
 17 resources. We did say that there are some  
 18 key resources that would have to be  
 19 sustained on a permanent basis. We tried to  
 20 allow for that and we would have had more  
 21 substantial reductions if we had not. I  
 22 think we also allowed, for example, LCP  
 23 operation to extend to 2023. So I think we  
 24 did try to take account of that. I'm not  
 25 really seeing a case for high concern that a

Page 147

1 process well executed, that makes key people  
 2 aware of where they stand. I don't really  
 3 see that as this great threat to finishing  
 4 the LCP. I think the problem you got with  
 5 the LCP is more function of things like  
 6 whether you can get GE to make the software  
 7 on the LIL work. You know, I see those as  
 8 the challenges for LCP, not kind of scaring  
 9 the organization, if you will. As a matter  
 10 of fact, I think, you know, there are a lot  
 11 of people working on the project now who  
 12 probably are already living with the kind of  
 13 fear I've seen time to time again in the  
 14 industry when a big project is ending. Some  
 15 of those people leave because they're  
 16 afraid, some of them leave because they're  
 17 bored. I don't see that as a cause for  
 18 great alarm. I see that as a cause for some  
 19 management attention.  
 20 MR. CELLARS:  
 21 A. To your point, John, we did look at the  
 22 project coming online and what skillsets and  
 23 resources would be needed, and we took that  
 24 into account in some of the organizational  
 25 structures and a combination.

Page 148

1 EATON, Q.C.:  
 2 Q. Okay. Did you look at the impact this might  
 3 have, cost or otherwise, on existing labour  
 4 agreements, collective agreements?  
 5 MR. ANTONUK:  
 6 A. We certainly looked at that relative to the  
 7 combination of Newfoundland Power and Hydro  
 8 because they're different. I don't think  
 9 that in discussing these, we were made aware  
 10 of insurmountable issues.  
 11 MR. CELLARS:  
 12 A. Well, most of these were professional  
 13 positions.  
 14 MR. ANTONUK:  
 15 A. Yeah. A fairly small number of these were  
 16 bargaining unit positions.  
 17 MR. CELLARS:  
 18 A. So we did consider that.  
 19 MR. ANTONUK:  
 20 A. Yeah, we looked at it, we did look at it.  
 21 EATON, Q.C.:  
 22 Q. And the cost that might be involved?  
 23 (12:45 p.m.)  
 24 MR. CELLARS:  
 25 A. Most of the positions that we're talking

Page 149

1 about here in this combination are non-

2 union.

3 EATON, Q.C.:

4 Q. That's the reductions?

5 MR. CELLARS:

6 A. Right.

7 EATON, Q.C.:

8 Q. Okay, but the movement of power supply into

9 Hydro, employees currently employed by

10 Nalcor would become employees of Hydro with

11 labour agreements in place with respect to

12 that?

13 MR. ANTONUK:

14 A. I don't recall management telling us that

15 there was going to be a kind of a seismic

16 issue associated with that.

17 EATON, Q.C.:

18 Q. So, no?

19 MR. ANTONUK:

20 A. If there is, you know, you could have told

21 us. I guess, now you can tell the Board.

22 Let me say we talked about in agreement with

23 management, and if the kind of thing you're

24 talking about was a matter of currency or

25 concern, we would have dealt with it. It got

Page 150

1 a lot of focus with respect to Newfoundland

2 Power. I would find it surprising if it was

3 an issue internally to Nalcor and Hydro that

4 management didn't kind of put that on the

5 board.

6 EATON, Q.C.:

7 Q. At Slide 26, at the very first bullet point

8 there you suggest that, "Organization review

9 and position definition work do remain to

10 tailor the reductions". Is it correct to

11 assume or to take from that that this needs

12 to be managed to more refine from what you

13 did, which was at a higher level?

14 MR. ANTONUK:

15 A. Refined? Gosh, I was all the way with you -

16 EATON, Q.C.:

17 Q. You're talking about tailored. I'm talking

18 about refined.

19 MR. ANTONUK:

20 A. Yeah, and I'm just trying to see if there's

21 a difference there. If you let me stick

22 with our words, yeah, we do acknowledge

23 that. Refined makes it sound like it's kind

24 of going back to whether we should be

25 targeting a different level, whether we

Page 151

1 should be targeting fundamentally different

2 reductions in this organization versus that

3 organization. No, I don't think that, but I

4 think clearly that's the case. For example,

5 if somebody is doing something very specific

6 to the design or the operation of LIL

7 equipment, you want to make sure that when

8 that person is moved over to a position that

9 doesn't exist in the Hydro hierarchy of

10 jobs, that that's made clear and you want to

11 make sure that it's clear that the person

12 who is responsible for supervising that

13 person understands what needs to be

14 understood, and that may even mean some

15 training for that supervisor. Those are the

16 kind of refinements.

17 EATON, Q.C.:

18 Q. Or as we've already mentioned, perhaps

19 phasing in over time. If somebody is set to

20 retire next year, those types of things.

21 MR. ANTONUK:

22 A. I absolutely agree with that. If you look

23 at our targets, even if you agree they're

24 achievable, if you've got some key resource

25 that staying one more year is going to mean

Page 152

1 that someone is not quite ready to move into

2 the new job, absolutely, you would do that.

3 It's hard to envision that operating on a

4 very wide scale, though, but there will most

5 certainly be cases where you'd want to do

6 that. There might be cases if you have a

7 retirement package, there might be someone

8 who wants to take it that you might want to

9 work hard to talk her out of taking it.

10 That's going to depend on who else is

11 leaving, but these are not barriers to doing

12 it. These are barriers to executing it, or

13 starting it, I should say, not doing it.

14 EATON, Q.C.:

15 Q. If you have your report there, page 82.

16 MR. ANTONUK:

17 A. I think I'll have it in a second.

18 EATON, Q.C.:

19 Q. This chart deals with comparators of, I

20 guess, Crown electric corporations.

21 MR. ANTONUK:

22 A. Yes.

23 EATON, Q.C.:

24 Q. And I'm a little confused about what it's

25 supposed to tell us. You've compared a

Page 153

1 number of Canadian utilities, hydro  
 2 utilities in various categories, I guess.  
 3 MR. ANTONUK:  
 4 A. Yes.  
 5 EATON, Q.C.:  
 6 Q. What does this tell us?  
 7 MR. ANTONUK:  
 8 A. This was a sanity check to say if Nalcor and  
 9 Hydro do what we recommended, is there an  
 10 indicator, is there a comparator that would  
 11 tell us, you know, have we left them just  
 12 too darn short. Our analysis said we  
 13 didn't, but we said it would be good – you  
 14 know, we're always looking for a benchmark,  
 15 right. That's what people do in our  
 16 business. This was the benchmark. We made  
 17 no decisions on this basis. We didn't do  
 18 this until the work was done, and this isn't  
 19 perfect because, for example, Manitoba  
 20 Hydro, which also does gas, will tell you  
 21 how many employees it has. It'll tell you  
 22 how many expenses it has, but it doesn't  
 23 split them out. So you have to come up with  
 24 some way to kind of adjust for that, which  
 25 we did. So the idea was to say once we did

Page 154

1 our work and we look at these comparators,  
 2 does it look like Nalcor and Hydro will be  
 3 left with too few people to do the job. By  
 4 the way, the other thing we had to do, we  
 5 had to add Newfoundland Power in because  
 6 this is the only province where the split  
 7 exists. So all these other companies have  
 8 customer service people and meter readers to  
 9 support full customer and user population.  
 10 So we added Newfoundland Power and Nalcor,  
 11 and I think the other adjustment we made is  
 12 we said – no criticism of Newfoundland  
 13 Power's officer structure, but if we assumed  
 14 an operation that combined Newfoundland  
 15 Power, probably the only two officers you'd  
 16 end up with is probably someone in charge of  
 17 distribution and someone in charge of  
 18 customer service. So we eliminated two of  
 19 the friends that we made at Newfoundland  
 20 Power under that assumed combination. No  
 21 offence intended. It was a strictly  
 22 hypothetical adjustment, but it was designed  
 23 to say we don't want to over count the  
 24 resulting mix of officers. Employees we  
 25 thought was pretty clear, we figured that

Page 155

1 was about the right number to add from an  
 2 employee basis.  
 3 EATON, Q.C.:  
 4 Q. Yet just as a simple comparison, Manitoba  
 5 Hydro with 22,500 gigawatt hours has 6,000  
 6 employees, compared to Nalcor's 1,566.  
 7 MR. ANTONUK:  
 8 A. Yeah. See that –  
 9 EATON, Q.C.:  
 10 Q. So you can't draw any conclusion from that,  
 11 is that what you're saying?  
 12 MR. ANTONUK:  
 13 A. I think you can draw a conclusion if you  
 14 look at all the data here. I don't think  
 15 you can draw a conclusion based on anyone.  
 16 For example – what was the one you  
 17 mentioned?  
 18 EATON, Q.C.:  
 19 Q. Manitoba Hydro.  
 20 MR. ANTONUK:  
 21 A. Yeah, if you noticed, that's all in gigawatt  
 22 hours. Manitoba Hydro also delivers MMBTU.  
 23 There's no way to make that adjustment, so  
 24 we actually quite understated the equivalent  
 25 sales numbers for Manitoba. I was okay with

Page 156

1 that because if anything, that would tend to  
 2 make you all's numbers look more  
 3 competitive. So I should have made an  
 4 adjustment for that. There was no practical  
 5 way to make the adjustment, and if I did  
 6 make the adjustment on a comparative basis,  
 7 you all would have looked worse. So I left  
 8 it alone.  
 9 EATON, Q.C.:  
 10 Q. When I take all of that consideration,  
 11 right, every one of these numbers could be  
 12 adjusted for some factor or other?  
 13 MR. ANTONUK:  
 14 A. No, I don't agree with that. Customers are  
 15 customers, employees are employees,  
 16 executives are executives, and those  
 17 expenses are all measured on a comparable  
 18 basis. If you want to measure them a  
 19 different way, you know, go ahead. I put  
 20 this one out. You can critique it. If  
 21 there's a better one – well, I can't  
 22 critique it because we're not going to be  
 23 here next week, but if there's a better one,  
 24 I guess you can show it to them and you can  
 25 criticize ours, and I guess someone else

Page 157

1 will criticize theirs, because we sure  
 2 won't. We won't be here anymore.  
 3 EATON, Q.C.:  
 4 Q. All in all, bottom line is, you say it's  
 5 just a benchmark.  
 6 MR. ANTONUK:  
 7 A. That's correct. Well, I'm not even going to  
 8 say that because to me a – you can call it a  
 9 benchmark in a general sense. It's a sanity  
 10 check. We were looking for whether or not  
 11 when we were all done here, the Hydro ratios  
 12 that resulted just don't make sense compared  
 13 to this data. We were altogether done with  
 14 that, and the most we would have done if the  
 15 numbers would have shown a concern as  
 16 opposed to what they show, which is the  
 17 opposite, I would have gone back to all  
 18 these people and say you better show me what  
 19 you did again because I want to see an  
 20 accounting for the fact that other people of  
 21 a similar size, you know, need a lot more  
 22 people than we're assuming.  
 23 EATON, Q.C.:  
 24 Q. Okay. I want to move on now to the  
 25 regulation of the Muskrat Falls O & M costs

Page 158

1 and capital costs, and you have suggested  
 2 that they should be subject to regulation by  
 3 the Board. At page 36 of your report, in  
 4 the heading and then in your text there, you  
 5 talk about the dual personality.  
 6 MR. ANTONUK:  
 7 A. Um?  
 8 EATON, Q.C.:  
 9 Q. The dual personality.  
 10 MR. ANTONUK:  
 11 A. Yes, sorry.  
 12 EATON, Q.C.:  
 13 Q. So to understand that correctly then, you're  
 14 saying that by having the cost attributed to  
 15 the customers, and the profits or the  
 16 margins from off system sales going to  
 17 Nalcor, there's a dual personality. Is that  
 18 your point there?  
 19 MR. ANTONUK:  
 20 A. That's certainly one aspect of it. I don't  
 21 know if it's – I'd have to read this again  
 22 to say more than that's one example of what  
 23 I'm talking about in there, or what we're  
 24 talking about. It's the treatment of LCP –  
 25 I'm having a little trouble reading that.

Page 159

1 You probably can't make this much bigger,  
 2 can you? I'm apologizing for my eyes and my  
 3 age. I've got it now, I think. Thanks,  
 4 that's fine. Okay, I'm comfortable with  
 5 what I said. That's clearly an example of  
 6 what we're talking about here.  
 7 EATON, Q.C.:  
 8 Q. And then in that same heading you talk  
 9 about, I guess, the pull between actual cost  
 10 and the fact that the Board has to take the  
 11 cost as they find them. You mentioned that  
 12 this morning in your slide. You used the  
 13 word "fiat".  
 14 MR. ANTONUK:  
 15 A. Yes, the concern that the Board must take  
 16 the cost as Nalcor produces them is a  
 17 concern. Hydro really must take them and  
 18 the Board, therefore, can't do anything  
 19 about them.  
 20 EATON, Q.C.:  
 21 Q. Just in terms of what you're saying in this  
 22 piece of your report, you seem to be  
 23 suggesting that power supply will be  
 24 interested in maximizing margins?  
 25 MR. ANTONUK:

Page 160

1 A. Unquestionably.  
 2 EATON, Q.C.:  
 3 Q. Okay. Margins are one of the significant  
 4 potential sources for rate mitigation here?  
 5 MR. ANTONUK:  
 6 A. Yes.  
 7 EATON, Q.C.:  
 8 Q. Are you suggesting that that will jeopardize  
 9 reliability?  
 10 (1:00 p.m.)  
 11 MR. ANTONUK:  
 12 A. You could theoretically run that plant at a  
 13 time of high value to increase margins and  
 14 then produce by deferring an outage  
 15 increased cost that Nalcor won't bear, but  
 16 customers will. So, yes, it's possible. That  
 17 was really not the principal concern that we  
 18 were focusing on, but I think unless the  
 19 power plant guy says otherwise, I think  
 20 that's one way if I was worried about off  
 21 system margins and wasn't responsible for  
 22 operating costs, that I could do harm.  
 23 MR. CELLARS:  
 24 A. Yeah, I think it's not uncommon in a period  
 25 of high revenue, plant operators will push

Page 161	Page 163
<p>1 the plant to the limits.</p> <p>2 MR. ANTONUK:</p> <p>3 A. Yeah.</p> <p>4 EATON, Q.C.:</p> <p>5 Q. And does that apply in Crown owned plants or</p> <p>6 is that in investor owned plants?</p> <p>7 MR. ANTONUK:</p> <p>8 A. I'm not sure why ownership versus who's</p> <p>9 responsible for costs would change that. By</p> <p>10 the way, I want to amend the answer a little</p> <p>11 bit because I want to say that in the long</p> <p>12 run, I don't think there is – if my focus is</p> <p>13 off system sales and I'm not responsible for</p> <p>14 the consequences on a capital operating</p> <p>15 site, I still think I want a reliable plant.</p> <p>16 So I have a hard time extending what I</p> <p>17 talked about being a potential short term</p> <p>18 phenomenon. I don't what to extrapolate</p> <p>19 that to a standard way of business. I'm</p> <p>20 going to tell you I think that Nalcor has a</p> <p>21 high interest in maintaining reliability of</p> <p>22 the unit, and I was afraid I might have</p> <p>23 conveyed something different. I'm sorry, now</p> <p>24 I've disrupted your other question.</p> <p>25 EATON, Q.C.:</p>	<p>1 no competitive alternative, we still</p> <p>2 regulate Hydro, don't we. Why would we not</p> <p>3 regulate Nalcor? The same exact principles</p> <p>4 apply. So I don't think the need for</p> <p>5 regulation is driven at its core by this</p> <p>6 conflict. The existence of that conflict</p> <p>7 adds to an already fully justifiable reason</p> <p>8 for regulation. So when you say our primary</p> <p>9 concern is off system, the conflict relative</p> <p>10 to off system margins, I don't want to</p> <p>11 diminish that concern, but I don't want to</p> <p>12 say that was primary. I never ranked them.</p> <p>13 If I were to rank them, I'd say the other</p> <p>14 concern is more important because it gets</p> <p>15 more to the core of utility regulation.</p> <p>16 Utility regulation doesn't fundamentally</p> <p>17 exist because there's a conflict of</p> <p>18 interest. It exists because there's no</p> <p>19 competition, and regulation provides an</p> <p>20 alternative to assure that there is</p> <p>21 oversight of capital costs, operating costs,</p> <p>22 and reliability that a market would provide</p> <p>23 if it existed, but in the absence of that</p> <p>24 market, we have regulation. So the conflict</p> <p>25 issue is sort of the icing on the cake, if</p>
Page 162	Page 164
<p>1 Q. Well, I guess the real issue then, or the</p> <p>2 primary issue I seem to take from what</p> <p>3 you're saying is that if the reward goes</p> <p>4 back towards the rates, the concern is</p> <p>5 addressed?</p> <p>6 MR. ANTONUK:</p> <p>7 A. The concern about what? About regulation?</p> <p>8 EATON, Q.C.:</p> <p>9 Q. Well, you've made the point in your report.</p> <p>10 It seems to be suggesting that was your</p> <p>11 primary focus on this.</p> <p>12 MR. ANTONUK:</p> <p>13 A. No, no –</p> <p>14 EATON, Q.C.:</p> <p>15 Q. As long as the margins went back to the</p> <p>16 people who paid for it.</p> <p>17 MR. ANTONUK:</p> <p>18 A. Oh, no, that wasn't the primary concern.</p> <p>19 That was one concern. Of equal concern is</p> <p>20 that when you do not have market discipline</p> <p>21 over capital and operating costs, you need</p> <p>22 regulatory oversight to assure it. I give</p> <p>23 Hydro and Nalcor equal credit for wanting to</p> <p>24 run plants reliably and cost effectively.</p> <p>25 If customers are paying for it and there's</p>	<p>1 you will. I like the cake better, so I</p> <p>2 wanted to say icing in the sense of less</p> <p>3 central.</p> <p>4 EATON, Q.C.:</p> <p>5 Q. All right, let's talk about regulation of</p> <p>6 the O &amp; M costs and capital costs. You're</p> <p>7 aware of the basis upon which this project</p> <p>8 was put together and on which various</p> <p>9 participants agreed to become involved?</p> <p>10 MR. ANTONUK:</p> <p>11 A. I'm going to say Randy Vickroy is a lot more</p> <p>12 familiar than I am, but if you want to test</p> <p>13 the limits of my knowledge, I'm happy to do</p> <p>14 that, and I'll punt when it's fourth down.</p> <p>15 EATON, Q.C.:</p> <p>16 Q. I don't intend to test your legal knowledge,</p> <p>17 but you're aware there was legislation and</p> <p>18 Orders in Council, and that there are</p> <p>19 various commercial agreements in place?</p> <p>20 MR. ANTONUK:</p> <p>21 A. Yes.</p> <p>22 EATON, Q.C.:</p> <p>23 Q. And that those various things in those</p> <p>24 documents and those agreements, the</p> <p>25 legislation, the Orders in Council, require</p>

Page 165

1 that certain things be done?

2 MR. ANTONUK:

3 A. Yes.

4 EATON, Q.C.:

5 Q. And that what you're suggesting by putting

6 the O & M costs in a regulated field is not

7 in keeping with the legislation, the Orders

8 in Council, and the commercial agreements?

9 MR. ANTONUK:

10 A. No, I don't – you would have to explain to

11 me what restrains the Commission – there are

12 things that certainly restrain the

13 Commission from passing, for example,

14 operating costs through the agreements. I

15 agree with you there, but if the Commission

16 were to say – let's say capital costs. If

17 the Commission were to say we want to have a

18 review of capital costs, and the Commission

19 said we don't approve that capital program,

20 I don't think there's anything that says the

21 Federal Government or the bond holders can

22 overturn a decision of the Board that

23 removes capital costs from having to be

24 recovered through those agreements in the

25 first place. If that exists, I would defer

Page 166

1 to it because we clearly do this on the

2 basis that we do not believe it is logical

3 to propose anything that would put anybody

4 in default of any covenants, agreements, or

5 commitments. That's for sure. So I'm also

6 not sure what would happen if the costs are

7 collected by Hydro and then disallowed. I

8 mean, I think – I find what you're raising

9 is a terribly intriguing issue. I don't

10 think it's a very linear one to talk about,

11 but I certainly would respect the fact that

12 whatever the Commission does should be done

13 without crashing any of those agreements

14 because the consequences of that, by

15 definition, are worse than trying to promote

16 efficiency and capital and operation

17 spending on the project. I think that's

18 kind of what you were getting at, right?

19 EATON, Q.C.:

20 Q. That's it. Okay, I want to just talk a

21 little bit about Nalcor Energy Marketing.

22 We've already talked about the margins going

23 to offset rates and you've mentioned that

24 just recently and earlier this morning that

25 that's a government decision to make.

Page 167

1 Right. Now, you mentioned this morning or

2 your suggestion is to move NEM, as it's

3 referred to, into Hydro?

4 MR. ANTONUK:

5 A. Control of NEM. Control of NEM's management

6 and operations.

7 EATON, Q.C.:

8 Q. Okay.

9 MR. ANTONUK:

10 A. NEM as a corporate entity can—it doesn't

11 necessarily have to cease to be a corporate

12 entity.

13 EATON, Q.C.:

14 Q. Okay. And under that model, the risks—so,

15 when you say control of, NEM would then

16 become a subsidiary of Hydro, is that what

17 you're suggesting?

18 MR. ANTONUK:

19 A. But that's the most direct way to do it.

20 Whether that kind of a corporate

21 restructuring under Canadian law causes a

22 lot of problems, I'm okay as long as the

23 operational direction to NEM is from the

24 utility.

25 EATON, Q.C.:

Page 168

1 Q. Okay. My question really relates to risk.

2 MR. ANTONUK:

3 A. Yeah.

4 EATON, Q.C.:

5 Q. Right?

6 MR. ANTONUK:

7 A. Yes.

8 EATON, Q.C.:

9 Q. If NEM is under Hydro, the risk then becomes

10 Hydro's risk, whatever risk is associated

11 with NEM in the marketplace?

12 MR. ANTONUK:

13 A. Yeah, as it is for the 31 states in the US

14 and -

15 EATON, Q.C.:

16 Q. Right.

17 MR. ANTONUK:

18 A. Yes.

19 EATON, Q.C.:

20 Q. Well, and in some states, it's outside of

21 the regulated field, right? The risk is not

22 always with the regulated entity. Sometimes

23 the risk is with a non-regulated?

24 MR. ANTONUK:

25 A. But never under circumstances that apply

Page 169

1 here. Only when other circumstances are  
 2 fundamentally different which is that all  
 3 the risks and the rewards of operating the  
 4 units that are involved in making those  
 5 sales either go to a non-utility operation  
 6 where they stay with the utility operation  
 7 in the sense that their costs are passed  
 8 through to monopoly customers. It's always  
 9 that way in my experience, not necessarily  
 10 all in Canada. There are some jurisdictions  
 11 in Canada that apply the margins, but let  
 12 these entities—yeah.

13 EATON, Q.C.:  
 14 Q. Which was my next question.

15 MR. ANTONUK:  
 16 A. Yeah.

17 EATON, Q.C.:  
 18 Q. So, the margins go. The risks are outside.  
 19 Aren't the customers better protected in  
 20 that scenario?

21 MR. ANTONUK:  
 22 A. No. There are and we evaluate these risks  
 23 and how they're managed. There are in every  
 24 gas distribution utility in the US, every  
 25 one of the 31 utilities, there are the same

Page 170

1 risks. Those risks are hedge-able. It is  
 2 recognized in the utility business that the  
 3 utility should not be moving their assets in  
 4 markets without covering the risks so that  
 5 you make transactions where risks are  
 6 mitigated. The risks in the utility  
 7 operation are protected, A, by regulation  
 8 which oversees these operations, and B,  
 9 they're protected by what we have seen time  
 10 and time again which utilities operate these  
 11 programs sometimes in much more active  
 12 markets, sometimes in much more dynamic  
 13 markets with proper organization, structures  
 14 and risk controls. And if you look at  
 15 actual experience, those who manage risk  
 16 poorly are not the utility. Well, nobody  
 17 manages them poorly. Those who have taken  
 18 risks that have led to financial troubles  
 19 are not the utility operators. They are the  
 20 constellations, the Enrons, the Calpines.  
 21 They're all the ones that are in the totally  
 22 unregulated model. So, I agree with you  
 23 that the risks move with whoever is  
 24 operating it, but I'm saying that those  
 25 risks are manageable and mitigatable. I

Page 171

1 will say this, if it is the province of the  
 2 policy to permit the marketing entity to  
 3 engage in fundamentally riskier transactions  
 4 that their peers do, then moving those  
 5 operations to Hydro with that same risk  
 6 tolerance would be a mistake from the  
 7 utility perspective. So, I would say if the  
 8 province decides that it wants to put its  
 9 taxpayers at risk of uncovered trades,  
 10 that's fine. They can do that. I'm sure  
 11 not going to recommend that. I think that  
 12 would be a catastrophe waiting to happen,  
 13 but if they're going to have higher risk, if  
 14 the province's policy is they want Nalcor to  
 15 operate in fundamentally riskier ways in  
 16 disposing of these excess assets  
 17 capabilities, I would say, yeah, I'd be the  
 18 first one to say to get it the heck out of  
 19 the utility. But you're not really  
 20 minimizing any risk there. You're just  
 21 moving it from customers to taxpayers.

22 EATON, Q.C.:  
 23 Q. At the government's direction?

24 MR. ANTONUK:  
 25 A. Yeah. Wow, yeah. It's just hard for me to

Page 172

1 imagine that the government wants to make  
 2 Nalcor a high-risk energy trader. I'd say  
 3 to everybody in this room, I'd be a little  
 4 scared if that's the case. I wouldn't want  
 5 to see that done by the most sophisticated  
 6 operations that I've looked at in my  
 7 experience. And by the way, that's not how  
 8 people trade any more and they don't trade  
 9 any more because all of these companies went  
 10 bankrupt. Even the big guys, they don't  
 11 take—the big guys or the big girls, call  
 12 them whichever, they don't take those kinds  
 13 of risks anymore either. They've learned  
 14 the hard way. I hope you all learn the easy  
 15 way.

16 EATON, Q.C.:  
 17 Q. So, in Canada today, what's your  
 18 understanding of the regulatory oversight of  
 19 the various utilities that trade excess  
 20 power?

21 MR. ANTONUK:  
 22 A. I don't recall them one by one. I think,  
 23 pretty much everything we know about it is  
 24 what's set forth in the report. So, I mean,  
 25 I can take a look at that and tell you. I

Page 173	<p>1 don't remember them. I just remember in</p> <p>2 general that it is less common to have</p> <p>3 oversight of the operational side of those</p> <p>4 entities. Certainly, and we've done a lot</p> <p>5 of work in Canada or in Nova Scotia, the</p> <p>6 Nova Scotia part of Canada, doing fuel and</p> <p>7 energy audits, and we look very closely at</p> <p>8 all the things I told you, and we've also</p> <p>9 worked in, you know, regular rate cases,</p> <p>10 base rate cases and energy clauses, and we</p> <p>11 were as active and down in the details and</p> <p>12 looking at all of those things as more so</p> <p>13 than was done with costs in general rate</p> <p>14 increase applications.</p> <p>15 (1:15 p.m.)</p> <p>16 EATON, Q.C.:</p> <p>17 Q. What regulatory model are you suggesting?</p> <p>18 You've mentioned it at page 42 of your</p> <p>19 report.</p> <p>20 MR. ANTONUK:</p> <p>21 A. This is about Nalcor Energy Marketing</p> <p>22 specifically, correct?</p> <p>23 EATON, Q.C.:</p> <p>24 Q. Here we go.</p> <p>25 MR. ANTONUK:</p>	Page 175	<p>1 the costs that it takes to operate, just</p> <p>2 like they do the costs it takes to operate</p> <p>3 any other function. They would be looking</p> <p>4 at the revenues expected as a result of</p> <p>5 those operations and they would basically be</p> <p>6 trying to decide from a rate-making purpose</p> <p>7 what is reasonable to include in rates for</p> <p>8 operating and maintenance and if they had</p> <p>9 any capital expenses, they're usually not</p> <p>10 great for these operations, and what revenue</p> <p>11 projections come from it. So, that's the</p> <p>12 base level. I would expect those cases,</p> <p>13 because you've got capable stakeholders</p> <p>14 here, to raise in those cases questions</p> <p>15 about what levels of risk are you taking?</p> <p>16 Are you controlling them? What's your</p> <p>17 experience been? And then, the commission</p> <p>18 could use those in one of a number of ways.</p> <p>19 One way, they can make adjustments to either</p> <p>20 revenues or expenses in a rate case just</p> <p>21 like they do every other aspect of service.</p> <p>22 The other thing they could do is what Nova</p> <p>23 Scotia does and I suspect still does, what</p> <p>24 we used to do for them, which is to do</p> <p>25 periodic audits to look at whether or not</p>
Page 174	<p>1 A. This portion.</p> <p>2 EATON, Q.C.:</p> <p>3 Q. Nalcor Energy Marketing, yes.</p> <p>4 MR. ANTONUK:</p> <p>5 A. Can you show me the reference to –</p> <p>6 EATON, Q.C.:</p> <p>7 Q. There are three bullet points, approximately</p> <p>8 the middle of the screen there now.</p> <p>9 MR. ANTONUK:</p> <p>10 A. Oh, I see. Okay. The model I would propose</p> <p>11 is that the Board review the actions and</p> <p>12 transactions of Nalcor Energy Marketing like</p> <p>13 it does any other utility regulatory</p> <p>14 activity from a standard of prudence.</p> <p>15 EATON, Q.C.:</p> <p>16 Q. Can you be a little more helpful than that</p> <p>17 in terms of how that would play itself out?</p> <p>18 MR. ANTONUK:</p> <p>19 A. You mean what techniques the Board would</p> <p>20 apply, what processes?</p> <p>21 EATON, Q.C.:</p> <p>22 Q. Yes.</p> <p>23 MR. ANTONUK:</p> <p>24 A. First of all, they would be looking at, in</p> <p>25 general rate cases, they would be looking at</p>	Page 176	<p>1 the operations are making effective use of</p> <p>2 markets without taking undue risk. I think</p> <p>3 I'm of the sense or maybe I'm not being fair</p> <p>4 to the filing that you made that somehow you</p> <p>5 were anticipating us doing—requiring some</p> <p>6 kind of prior approval to transactions. Not</p> <p>7 necessarily. You do occasionally see some</p> <p>8 commissions that decide what level of</p> <p>9 hedging and what types of hedging should be</p> <p>10 done. You see sometimes limits on</p> <p>11 transaction types. What you typically see</p> <p>12 in commissions that do periodic audits, that</p> <p>13 they look at every aspect of it,</p> <p>14 organization staffing, risk control, risk</p> <p>15 management, transaction processing to make</p> <p>16 sure that the front, the middle and the back</p> <p>17 offices are all operating—how should I put</p> <p>18 this? Capably and without conflicts, you</p> <p>19 know, because trading doesn't just involve</p> <p>20 market risk. It involves traders who</p> <p>21 sometimes, you know, work for their own</p> <p>22 account and cheat the system, you know,</p> <p>23 cheat the company. These audits do all of</p> <p>24 that. Not everybody does those audits.</p> <p>25 Whether they're done or not, in some cases</p>

Page 177

1 is a function of either the Commission  
 2 itself or stakeholder’s kind of saying we’ve  
 3 seen an adverse trend in external market  
 4 operations. We want to have an examination  
 5 of it. Sometimes that examinations comes  
 6 through something like this, a generic  
 7 proceeding; sometimes in a rate case;  
 8 sometimes the commissioning of a separate  
 9 audit.  
 10 EATON, Q.C.:  
 11 Q. You’re not referring to prior approval.  
 12 MR. ANTONUK:  
 13 A. That’s correct. I think what you all tend  
 14 to refer to as the nimble level where you  
 15 need to kind of make a decision realtime,  
 16 no, nothing like that. Nobody does that;  
 17 nobody should do that; nobody can do that  
 18 effectively.  
 19 EATON, Q.C.:  
 20 Q. In either a regulation of energy marketing  
 21 or the O&M costs, was the cost of regulation  
 22 a factor at all?  
 23 MR. ANTONUK:  
 24 A. I can answer that question in this context,  
 25 but I think you’re looking for something

Page 178

1 deeper, so le me start and see if I missed  
 2 the boat. I don’t think that the cost of  
 3 regulation of the types we’re proposing is  
 4 less than the value it produces. Will  
 5 regulation have a cost? Yes, as I think you  
 6 should read from my discussion, this is a  
 7 part that I wrote, I think the cost of  
 8 regulation is a function of how well you  
 9 manage regulation and it would be my view  
 10 that I would not use the cost you bear to  
 11 manage regulation as a model for cost of  
 12 regulation because I don’t think you manage  
 13 it very well.  
 14 EATON, Q.C.:  
 15 Q. Sorry, you lost me there.  
 16 MR. ANTONUK:  
 17 A. I’m saying that I’ve heard a lot of  
 18 complaints about what regulation does to you  
 19 all and I think that’s less because the  
 20 Board is overly intrusive or inquisitive or  
 21 that the stakeholders are unfair to you, I  
 22 don’t think you all have a good process for  
 23 kind of keeping the regulatory process under  
 24 good control and that’s why we recommended  
 25 as part of this study that you create a

Page 179

1 position that’s dedicated to that. So I do  
 2 believe regulatory costs are a factor. I  
 3 think when regulatory costs are the result  
 4 of a well run regulatory organization, they  
 5 are not prohibitive. When they are  
 6 prohibitive, it’s usually because a company  
 7 makes the kind of mistakes that engage  
 8 regulators a lot more or even if they are  
 9 performing very well, don’t have a very good  
 10 handle on how to allow regulation to happen  
 11 cost effectively.  
 12 EATON, Q.C.:  
 13 Q. Okay. I just want to ask you know about  
 14 your suggestion about seeking a contractor  
 15 and your, I think is the way you expressed  
 16 it, Nalcor Energy Marketing is a very small  
 17 organization.  
 18 MR. ANTONUK:  
 19 A. Yes, and I don’t mean that in a too small to  
 20 operate effectively, I don’t mean that at  
 21 all. I mean they are of a size that makes  
 22 it logical to look at whether they can  
 23 extract more value from these assets by  
 24 using an asset manager. So small in that  
 25 sense; you’re not pipsqueaks, you’re grown

Page 180

1 adults. You can support an organization  
 2 internally that is effective. The question  
 3 is not that, that effective, ineffective,  
 4 the question is maximizing value for  
 5 customers.  
 6 EATON, Q.C.:  
 7 Q. And were you aware of the trading contract  
 8 that existed some years ago  
 9 MR. ANTONUK:  
 10 A. I knew it existed and I have seen—I have  
 11 experience with Emera’s, I think it was  
 12 Emera, I have experience with Emera’s  
 13 operations of a similar nature in other  
 14 places, but at a general level, yes.  
 15 EATON, Q.C.:  
 16 Q. And you know that it came to an end and it  
 17 was considered to be not cost beneficial?  
 18 MR. ANTONUK:  
 19 A. I don’t know that, but I’m not surprised to  
 20 hear that and I think the circumstance—and  
 21 that’s why I sort of talk about outreach to  
 22 the market, as opposed to kind of running  
 23 out there with an RFP. The market now is  
 24 not what it was then. Things are changing,  
 25 a lot is changing in the US northeast. We

Page 181

1 have two very contradictory things going on  
 2 in the markets that I think you want to  
 3 reach. One is that gas has made power  
 4 almost too cheap for the competitive  
 5 suppliers to make money at doing it. That's  
 6 not a good sign for you. On the other hand,  
 7 there is a continuing, I'd say growing  
 8 effort to find ways to generate electricity  
 9 without carbon production. That's a great  
 10 strength for you. And also there's this  
 11 other factor too, which is little old  
 12 Tenaska is big old giant Tenaska now and  
 13 there are others in the business, so I'm not  
 14 sure the market is the same. I'm not sure  
 15 the players are the same. Most  
 16 fundamentally I'm not so sure how interested  
 17 the others would be in this market because  
 18 it is developing. It could be attractive to  
 19 them; it could be a barrier, I don't know.  
 20 I'm not sure how you would know either  
 21 without soliciting interest is what I'm  
 22 saying.  
 23 EATON, Q.C.:  
 24 Q. All right, thank you Mr. Antonuk.  
 25 MR. ANTONUK:

Page 183

CERTIFICATE

I, Judy Moss, hereby certify that the foregoing is a true and correct transcript in the matter of Reference to the Board, Rate Mitigation Options and Impacts, Muskrat Falls Project, heard on the 3rd day of October, 2019 before the Newfoundland and Labrador Board of Commissioners of Public Utilities, 120 Torbay Road, St. John's, Newfoundland and Labrador and was transcribed by me to the best of my ability by means of a sound apparatus.

Dated at St. John's, Newfoundland and Labrador this 3rd day of October, 2019

Judy Moss

Page 182

1 A. Thank you.  
 2 CHAIR:  
 3 Q. Well that's fortuitous timing I guess.  
 4 We'll break for the day and reconvene at 9  
 5 in the morning. Who will we start with in  
 6 the morning, Newfoundland Power's first  
 7 question? Okay, 9 a.m. in the morning.  
 8 Hearing concluded at 1:25 p.m.  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25

<b>A</b>				
<p><b>Ability</b> - 28:25, 32:6, 64:10, 66:1, 71:9, 93:22, 118:1, 118:21</p> <p><b>Able</b> - 10:7, 18:1, 18:14, 31:1, 40:3, 128:7, 145:24, 170:1</p> <p><b>Above</b> - 19:18, 46:16, 81:20, 82:12, 85:23</p> <p><b>Absence</b> - 163:23</p> <p><b>Accept</b> - 52:8</p> <p><b>Acceptable</b> - 3:23</p> <p><b>Accepted</b> - 36:4, 71:18</p> <p><b>Access</b> - 111:4</p> <p><b>Accommodation</b> - 11:10</p> <p><b>Accomplish</b> - 87:2, 4, 110:18, 117:25</p> <p><b>Accomplishing</b> - 1, 17:5</p> <p><b>Account</b> - 29:20, 34:23, 35:16, 42:13, 50:23, 55:13, 64:2, 67:1, 82:15, 146:24, 147:24, 176:22</p> <p><b>Accounting</b> - 121:1, 157:20</p> <p><b>Accounts</b> - 35:12</p> <p><b>ACES</b> - 112:24, 113:5, 113:8</p> <p><b>Achievable</b> - 75:6, 76:7, 76:11, 142:20, 151:24</p> <p><b>Achieve</b> - 89:14, 131:20</p> <p><b>Achieved</b> - 23:13</p> <p><b>Achievement</b> - 40:12, 131:19</p> <p><b>Acknowledge</b> - 10, 0:12, 108:4, 150:22</p> <p><b>Acknowledges</b> - 3:25, 8:9</p> <p><b>Acquire</b> - 23:24, 32:17, 38:21, 43:2</p> <p><b>Acquired</b> - 23:23</p> <p><b>Acquisition</b> - 14:11, 24:13</p> <p><b>Acquisitions</b> - 17:1, 4</p> <p><b>Across</b> - 9:7, 12:4, 15:18, 21:19, 41:12, 50:16</p>	<p><b>Act</b> - 93:20, 95:5</p> <p><b>Action</b> - 106:11, 135:15</p> <p><b>Actions</b> - 74:19, 174:11</p> <p><b>Active</b> - 8:15, 170:11, 173:11</p> <p><b>Activities</b> - 2:16, 51:21, 89:17, 105:24, 116:11</p> <p><b>Activity</b> - 174:14</p> <p><b>Acts</b> - 58:22</p> <p><b>Actual</b> - 43:16, 58:23, 159:9, 170:15</p> <p><b>Add</b> - 4:4, 21:12, 47:12, 48:13, 102:14, 109:19, 154:5, 155:1</p> <p><b>Added</b> - 49:5, 85:2, 85:11, 154:10</p> <p><b>Addition</b> - 38:11, 67:23, 76:20, 83:16, 89:14</p> <p><b>Additive</b> - 93:9</p> <p><b>Address</b> - 18:1, 18:5, 18:22, 19:2, 19:4, 21:17, 29:25, 43:6, 54:9, 59:19, 95:14, 98:17, 113:22</p> <p><b>Addressed</b> - 2:7, 18:8, 21:10, 45:22, 80:4, 95:13, 162:5</p> <p><b>Addressing</b> - 4:13</p> <p><b>Adds</b> - 55:11, 163:7</p> <p><b>Adjust</b> - 74:20, 153:24</p> <p><b>Adjusted</b> - 156:12</p> <p><b>Adjustment</b> - 154:1, 154:22, 155:23, 156:4, 156:5, 156:6</p> <p><b>Adjustments</b> - 50:3, 83:3, 96:6, 175:19</p> <p><b>Administered</b> - 23:12</p> <p><b>Admit</b> - 127:7</p> <p><b>Adults</b> - 180:1</p> <p><b>Advance</b> - 31:1</p> <p><b>Advancing</b> - 68:5</p> <p><b>Advantage</b> - 41:23, 88:21</p> <p><b>Adverse</b> - 42:18, 177:3</p> <p><b>Advise</b> - 18:7</p>	<p><b>Advisors</b> - 8:18</p> <p><b>Advisory</b> - 66:25, 70:17, 70:18, 81:8, 82:9, 104:12</p> <p><b>Advocate</b> - 5:10, 6:2, 6:18, 20:7</p> <p><b>Afar</b> - 69:12</p> <p><b>Affect</b> - 32:15, 42:19, 77:24</p> <p><b>Affecting</b> - 29:4, 53:3, 53:4, 96:23</p> <p><b>Affects</b> - 77:16</p> <p><b>Affiliate</b> - 22:5</p> <p><b>Affiliates</b> - 22:2</p> <p><b>Afford</b> - 44:21, 45:4</p> <p><b>Affordability</b> - 47:1, 6</p> <p><b>Afraid</b> - 147:16, 161:22</p> <p><b>Against</b> - 111:25, 143:24, 144:1</p> <p><b>Age</b> - 159:3</p> <p><b>Aging</b> - 145:17</p> <p><b>Agree</b> - 58:8, 133:9, 135:9, 143:24, 151:22, 151:23, 156:14, 165:15, 170:22</p> <p><b>Agreed</b> - 164:9</p> <p><b>Agreement</b> - 33:10, 33:11, 90:21, 100:11, 121:3, 149:22</p> <p><b>Agreements</b> - 34:1, 9, 34:25, 43:22, 44:7, 90:22, 148:4, 149:11, 164:19, 164:24, 165:8, 165:14, 165:24, 166:4, 166:13</p> <p><b>Ahead</b> - 76:14, 156:19</p> <p><b>Aircraft</b> - 120:18, 120:21</p> <p><b>Alarm</b> - 147:18</p> <p><b>Alberta</b> - 107:6</p> <p><b>Alignment</b> - 22:8, 140:17</p> <p><b>Alliances</b> - 94:1</p> <p><b>Allocated</b> - 35:7, 35:9, 35:17</p> <p><b>Allow</b> - 27:3, 92:25, 140:20, 146:20, 179:10</p> <p><b>Allowed</b> - 94:13, 146:22</p>	<p><b>Allows</b> - 28:9</p> <p><b>All's</b> - 156:2</p> <p><b>Alone</b> - 31:11, 156:8</p> <p><b>Alter</b> - 19:7</p> <p><b>Alternate</b> - 45:5, 117:3</p> <p><b>Alternative</b> - 56:17, 113:12, 163:1, 163:20</p> <p><b>Alternatives</b> - 93:5</p> <p><b>Altogether</b> - 157:1, 3</p> <p><b>Amend</b> - 161:10</p> <p><b>America</b> - 65:4</p> <p><b>Among</b> - 12:19</p> <p><b>Amortizable</b> - 142:11</p> <p><b>Amortization</b> - 144:13</p> <p><b>Amortize</b> - 144:10</p> <p><b>Amortized</b> - 144:16, 146:6</p> <p><b>Amount</b> - 2:17, 8:22, 31:14, 32:16, 32:24, 37:20, 41:13, 44:3, 44:8, 44:15, 47:21, 52:2, 96:10, 96:25, 99:10, 136:3</p> <p><b>Amounts</b> - 19:8, 29:21, 43:16, 47:25, 48:4</p> <p><b>Analyse</b> - 137:3, 137:5, 137:15</p> <p><b>Analyses</b> - 39:22, 76:15, 77:6</p> <p><b>Analysing</b> - 110:12</p> <p><b>Analysis</b> - 14:8, 14:9, 15:5, 16:7, 19:5, 19:14, 20:2, 73:11, 75:23, 76:7, 76:13, 78:11, 78:15, 81:9, 81:13, 82:4, 87:17, 95:1, 95:3, 102:25, 104:12, 111:19, 117:16, 136:18, 140:9, 145:19, 153:12</p> <p><b>Analytical</b> - 33:19</p> <p><b>Analyzed</b> - 72:7</p> <p><b>Analyzing</b> - 81:2</p> <p><b>Announced</b> - 71:2, 4</p> <p><b>Announcement</b> - 1, 35:19</p> <p><b>Announcements</b> -</p>	<p>136:6, 145:10</p> <p><b>Annual</b> - 48:4, 50:3, 81:22, 84:17, 84:21, 84:25, 85:15</p> <p><b>Annually</b> - 25:21, 25:23, 26:3, 26:14</p> <p><b>Anomalous</b> - 57:1, 58:11</p> <p><b>Anomaly</b> - 107:7</p> <p><b>ANTHONUK</b> - 99:4, 110:6</p> <p><b>Anticipating</b> - 176:5</p> <p><b>Anymore</b> - 157:2, 172:13</p> <p><b>Anytime</b> - 9:23</p> <p><b>Anyway</b> - 62:24, 105:18, 119:19, 121:4, 144:9</p> <p><b>Apologize</b> - 129:10</p> <p><b>Apologizing</b> - 159:2</p> <p><b>Appalachians</b> - 48:16</p> <p><b>Apparently</b> - 85:6</p> <p><b>Appear</b> - 72:22, 90:5</p> <p><b>Applicability</b> - 146:16</p> <p><b>Applications</b> - 173:14</p> <p><b>Applied</b> - 32:8, 32:9, 33:1, 47:23, 72:1, 72:2, 72:9, 72:10, 72:14, 73:19, 100:5</p> <p><b>Applies</b> - 99:14, 105:10</p> <p><b>Apply</b> - 36:5, 47:21, 49:25, 58:8, 161:5, 163:4, 168:25, 169:11, 174:20</p> <p><b>Applying</b> - 98:3, 129:19</p> <p><b>Appointed</b> - 5:10</p> <p><b>Appreciation</b> - 8:1, 7</p> <p><b>Approach</b> - 70:19, 94:13, 94:14, 122:3, 123:18, 123:22</p> <p><b>Approaches</b> - 28:2, 71:19, 72:9, 72:11, 72:21</p> <p><b>Appropriate</b> - 23:1, 3, 30:4, 30:20,</p>

<p>45:13, 77:18, 91:7, 92:12, 97:6, 101:24, 106:3, 113:24, 118:13  <b>Appropriately</b> - 67:1  <b>Approval</b> - 176:6, 177:11  <b>Approve</b> - 165:19  <b>Approximately</b> - 174:7  <b>Area</b> - 51:10, 82:20, 83:8, 87:5, 89:23, 95:13, 125:2  <b>Areas</b> - 14:7, 18:1, 18:6, 21:2, 21:5, 26:16, 27:17, 28:1, 29:8, 49:18, 90:15, 91:1, 91:6, 97:13, 98:15, 107:19  <b>Aren't</b> - 83:3, 169:19  <b>Argue</b> - 34:15, 59:12, 65:25, 103:7, 135:6  <b>Argument</b> - 43:25, 105:13, 108:22  <b>Arise</b> - 33:9  <b>Arising</b> - 1:5, 87:9  <b>Arrangements</b> - 68:15, 102:6  <b>Aspect</b> - 67:20, 106:18, 158:20, 175:21, 176:13  <b>Aspects</b> - 18:22, 18:25, 52:16, 74:9, 98:19, 127:22  <b>Asserting</b> - 91:19  <b>Assess</b> - 73:25  <b>Assessed</b> - 124:11  <b>Assessment</b> - 4:10, 14:8  <b>Asset</b> - 14:9, 15:5, 87:19, 96:12, 99:7, 101:12, 101:21, 123:19, 179:24  <b>Assets</b> - 2:15, 33:13, 34:4, 35:1, 43:17, 55:15, 57:21, 58:3, 58:21, 60:13, 60:22, 65:2, 66:8, 69:25, 70:10, 87:10, 87:15, 87:23, 88:1, 88:10, 89:6, 90:2, 99:11, 99:14, 99:16, 101:2, 102:1,</p>	<p>104:5, 104:17, 108:18, 112:19, 112:22, 119:4, 122:17, 170:3, 171:16, 179:23  <b>Assignments</b> - 114:7  <b>Assist</b> - 4:13, 4:16, 11:13  <b>Assisting</b> - 1:14, 1:22  <b>Associated</b> - 33:12, 35:1, 69:24, 73:18, 143:21, 149:16, 168:10  <b>Associates</b> - 15:3  <b>Assumed</b> - 80:18, 141:4, 154:13, 154:20  <b>Assumptions</b> - 28:10  <b>Assure</b> - 23:10, 80:10, 162:22, 163:20  <b>Assured</b> - 140:10  <b>Attach</b> - 88:13, 88:15  <b>Attempt</b> - 29:25, 33:4, 121:5  <b>Attending</b> - 17:24  <b>Attention</b> - 11:11, 55:11, 91:7, 103:5, 147:19  <b>Attractive</b> - 41:10, 181:18  <b>Attribute</b> - 44:2  <b>Attributed</b> - 143:24, 158:14  <b>Attrition</b> - 80:6, 80:7, 143:5, 145:3, 145:9, 145:12, 146:2  <b>Atypical</b> - 88:18  <b>Auction</b> - 14:15  <b>Auctions</b> - 14:17  <b>Audio</b> - 10:25  <b>Audit</b> - 177:9  <b>Audited</b> - 104:20  <b>Audits</b> - 13:23, 16:13, 21:21, 23:21, 24:10, 105:19, 173:7, 175:25, 176:12, 176:23, 176:24  <b>August</b> - 20:11  <b>Authoritative</b> - 85:16</p>	<p><b>Authority</b> - 59:5, 106:18, 128:10  <b>Availability</b> - 19:9, 123:22  <b>Available</b> - 2:21, 4:13, 7:19, 8:13, 10:1, 10:23, 11:2, 25:21, 29:22, 29:23, 30:4, 31:25, 32:2, 41:13, 41:19, 47:21, 111:25, 138:12  <b>Average</b> - 3:14, 37:11, 37:20, 38:7, 79:24  <b>Avoid</b> - 56:16, 99:25  <b>Avoided</b> - 49:13  <b>Aware</b> - 135:22, 147:2, 148:9, 164:7, 164:17, 180:7</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> <p><b>B</b></p> </div> <p><b>Bachelor's</b> - 14:4, 14:24, 17:14  <b>Back</b> - 26:19, 38:16, 44:13, 47:1, 86:23, 87:2, 125:18, 150:24, 157:17, 162:4, 162:15, 176:16  <b>Background</b> - 1:24, 2:1, 12:11, 12:16, 14:19, 21:11  <b>Backloaded</b> - 34:5, 34:16  <b>Backstop</b> - 68:3  <b>Ball</b> - 136:11  <b>Ballpark</b> - 84:13  <b>Baltimore</b> - 15:13, 17:5  <b>Band</b> - 39:8  <b>Bang</b> - 134:22  <b>Bankrupt</b> - 108:21, 172:10  <b>Bar</b> - 109:3  <b>Bargaining</b> - 20:9, 53:5, 148:16  <b>Barrier</b> - 67:21, 143:2, 143:15, 181:19  <b>Barriers</b> - 90:4, 152:11, 152:12  <b>Barry</b> - 15:2  <b>Base</b> - 19:5, 19:13, 65:22, 88:16,</p>	<p>88:19, 89:12, 95:21, 101:7, 106:6, 109:14, 133:19, 173:10, 175:12  <b>Based</b> - 2:25, 8:6, 38:25, 42:14, 72:7, 89:20, 91:3, 94:4, 102:6, 110:20, 128:21, 129:15, 131:18, 132:15, 155:15  <b>Baseline</b> - 37:6  <b>Basis</b> - 34:14, 34:15, 53:3, 63:14, 68:18, 69:18, 76:16, 76:25, 101:13, 101:14, 102:4, 104:17, 134:24, 142:20, 146:19, 153:17, 155:2, 156:6, 156:18, 164:7, 166:2  <b>Bay</b> - 5:21  <b>Bear</b> - 56:14, 101:4, 160:15, 178:10  <b>Bearing</b> - 57:1, 92:4, 101:20, 109:7  <b>Beauty</b> - 94:19  <b>Became</b> - 19:18, 29:19, 30:14, 135:22  <b>Beck</b> - 14:21, 17:22  <b>Become</b> - 31:25, 37:16, 41:19, 72:22, 101:17, 149:10, 164:9, 167:16  <b>Becomes</b> - 40:15, 124:16, 168:9  <b>Began</b> - 13:2, 27:1, 37:5, 114:17  <b>Begins</b> - 25:19, 30:7, 48:1  <b>Begun</b> - 91:14  <b>Behind</b> - 42:2  <b>Believed</b> - 70:18  <b>Below</b> - 40:14  <b>Benchmark</b> - 153:14, 153:16, 157:5, 157:9  <b>Benchmarking</b> - 78:14  <b>Beneficial</b> - 108:16, 180:17</p>	<p><b>Benefit</b> - 63:12, 94:23, 107:10, 112:6  <b>Benefits</b> - 30:22, 31:2, 51:3, 60:24, 61:18, 101:5, 101:21, 108:14  <b>Big</b> - 50:9, 73:10, 105:6, 113:12, 120:21, 147:14, 172:10, 172:11, 181:12  <b>Biggest</b> - 35:2, 96:3  <b>Billion</b> - 34:1, 112:18  <b>Bit</b> - 23:14, 32:19, 41:16, 41:22, 48:7, 48:18, 48:19, 53:6, 57:3, 78:18, 86:20, 103:11, 107:7, 121:14, 161:11, 166:21  <b>Blundon</b> - 1:17, 11:12  <b>Board</b> - 1:7, 1:13, 1:14, 1:16, 1:18, 2:3, 2:8, 2:11, 3:7, 3:25, 4:17, 4:25, 5:2, 6:20, 7:13, 7:16, 7:17, 7:23, 8:9, 8:21, 9:2, 10:3, 10:7, 10:21, 12:12, 20:22, 21:14, 43:12, 65:8, 65:15, 70:19, 87:6, 95:18, 98:24, 102:19, 114:8, 114:20, 126:5, 128:10, 149:21, 150:5, 158:3, 159:10, 159:15, 159:18, 165:22, 174:11, 174:19, 178:20  <b>Boards</b> - 65:16  <b>Board's</b> - 1:4, 3:2, 3:5, 3:11, 7:25, 8:17, 10:1, 10:16, 10:24, 11:12, 18:4  <b>Boat</b> - 178:2  <b>Bobbi</b> - 1:21, 1:23  <b>Bond</b> - 165:21  <b>Bonds</b> - 16:4  <b>Book</b> - 88:11  <b>Books</b> - 44:2  <b>Border</b> - 65:4  <b>Bored</b> - 147:17</p>
---	---	--	---	---

<p><b>Borne</b> - 122:17  <b>Bot</b> - 1:25  <b>Both</b> - 4:20, 15:2, 16:15, 17:6, 20:4, 22:3, 22:9, 26:20, 38:3, 39:23, 66:25, 79:23, 87:23, 89:21, 96:23, 114:6, 137:22  <b>Bottom</b> - 25:7, 82:8, 97:1, 131:1, 157:4  <b>Bowman</b> - 6:22  <b>Box</b> - 46:8  <b>Brand</b> - 46:6  <b>Break</b> - 11:16, 79:7, 85:19, 88:8, 98:18, 182:4  <b>Brian</b> - 15:8  <b>Brief</b> - 12:10, 12:15, 28:15  <b>Brings</b> - 97:17  <b>Broad</b> - 42:20, 67:2, 72:1, 73:20, 74:17  <b>Broader</b> - 24:5  <b>Broadly</b> - 72:6  <b>Brook</b> - 5:14  <b>Brought</b> - 129:22  <b>Browne</b> - 5:9, 6:21  <b>Brunswick</b> - 77:5, 107:21  <b>Budget</b> - 50:4  <b>Budgets</b> - 50:3  <b>Build</b> - 37:8, 48:9  <b>Building</b> - 49:15, 57:22  <b>Built</b> - 36:21, 96:4  <b>Bullet</b> - 93:13, 122:9, 150:7, 174:7  <b>Burdens</b> - 62:23  <b>Business</b> - 10:11, 15:18, 41:1, 54:16, 57:18, 65:18, 72:16, 104:22, 104:24, 113:2, 113:8, 153:16, 161:19, 170:2, 181:13  <b>Businesses</b> - 12:2  <b>Busts</b> - 141:3  <b>Buying</b> - 57:22</p>	<p><b>Calculate</b> - 44:8, 142:17  <b>Calculated</b> - 78:23  <b>Calculation</b> - 45:6  <b>Call</b> - 22:21, 31:24, 54:22, 58:2, 63:17, 92:8, 92:16, 102:4, 103:19, 114:16, 122:6, 143:20, 146:8, 157:8, 172:11  <b>Called</b> - 30:12, 39:13, 54:13, 74:8, 78:10, 85:23, 112:16, 113:4  <b>Calling</b> - 54:12, 97:24  <b>Calls</b> - 55:1, 77:22, 77:23  <b>Calpines</b> - 170:20  <b>Camel</b> - 97:25  <b>Canada</b> - 13:15, 39:5, 64:21, 65:21, 106:21, 107:7, 107:14, 107:15, 108:1, 108:5, 109:4, 111:8, 169:10, 169:11, 172:17, 173:5, 173:6  <b>Canadian</b> - 55:22, 65:24, 78:21, 83:10, 107:18, 153:1, 167:21  <b>Candidly</b> - 94:16  <b>Can't</b> - 26:19, 56:16, 69:14, 69:17, 74:10, 83:14, 85:9, 90:24, 94:10, 111:9, 121:9, 128:4, 128:5, 130:5, 130:6, 130:17, 132:17, 133:8, 155:10, 156:21, 159:1, 159:18  <b>Capabilities</b> - 111:6, 111:25, 171:17  <b>Capability</b> - 108:24  <b>Capable</b> - 175:13  <b>Capably</b> - 176:18  <b>Capacity</b> - 2:18, 2:21, 13:4  <b>Capital</b> - 16:8, 37:2, 59:24, 63:2, 88:21, 91:10, 92:11, 98:22, 99:19,</p>	<p>101:1, 158:1, 161:14, 162:21, 163:21, 164:6, 165:16, 165:18, 165:19, 165:23, 166:16, 175:9  <b>Caption</b> - 122:1  <b>Captive</b> - 61:14, 68:1, 68:21, 69:16  <b>Capture</b> - 41:18, 61:3  <b>Carbon</b> - 181:9  <b>Career</b> - 13:2, 15:25, 17:2  <b>Careful</b> - 80:10, 91:18  <b>Carefully</b> - 67:25, 72:7, 92:22, 136:5  <b>Carried</b> - 91:17  <b>Carry</b> - 69:15  <b>Carrying</b> - 116:11  <b>Case</b> - 26:2, 30:19, 38:24, 46:10, 53:21, 56:6, 56:20, 56:21, 56:23, 58:1, 59:10, 60:4, 62:17, 64:14, 65:21, 85:1, 85:13, 104:19, 106:21, 108:17, 121:13, 124:11, 135:8, 143:11, 145:25, 146:25, 151:4, 172:4, 175:20, 177:7  <b>Cases</b> - 24:12, 62:23, 72:4, 80:20, 103:16, 109:8, 120:14, 133:13, 141:5, 141:21, 152:5, 152:6, 173:9, 173:10, 174:25, 175:12, 175:14, 176:25  <b>Catastrophe</b> - 171:12  <b>Categories</b> - 49:12, 153:2  <b>Cause</b> - 3:24, 88:1, 88:8, 138:4, 147:17, 147:18  <b>Causes</b> - 34:7, 167:21  <b>Cease</b> - 167:11  <b>Cell</b> - 11:4  <b>CELLARS</b> - 16:23, 16:24, 132:19, 134:11, 137:19,</p>	<p>138:23, 139:3, 139:12, 147:20, 148:11, 148:17, 148:24, 149:5, 160:23  <b>Central</b> - 33:2, 164:3  <b>Cents</b> - 3:19, 28:19, 31:12, 31:16, 49:17  <b>CEO</b> - 1:7, 71:24, 114:20, 115:8, 137:11  <b>Certain</b> - 3:16, 4:3, 18:6, 19:4, 19:9, 82:19, 87:14, 96:8, 96:9, 96:17, 120:11, 140:25, 165:1  <b>Certainly</b> - 28:21, 30:2, 35:20, 40:25, 43:1, 75:14, 75:16, 76:17, 77:7, 79:16, 91:2, 100:9, 107:21, 116:25, 118:19, 124:19, 124:22, 126:11, 126:21, 132:16, 144:17, 145:13, 146:16, 148:6, 152:5, 158:20, 165:12, 166:11, 173:4  <b>Cetera</b> - 16:16, 16:20  <b>CHAIR</b> - 1:1, 1:7, 1:8, 1:12, 6:10, 6:12, 6:17, 6:20, 6:24, 7:2, 7:5, 7:11, 11:22, 11:25, 19:24, 79:4, 79:8, 86:21, 87:1, 113:16, 113:17, 113:21, 182:2  <b>Challenge</b> - 4:14, 54:2  <b>Challenges</b> - 54:24, 147:8  <b>Change</b> - 28:25, 33:22, 35:22, 40:21, 40:22, 40:23, 41:3, 41:4, 41:14, 43:24, 44:1, 44:19, 44:22, 45:2, 53:14, 59:23, 61:16, 62:2, 76:3, 81:20, 83:4, 87:12, 94:21, 95:9, 95:10,</p>	<p>101:11, 114:18, 120:1, 123:23, 136:1, 143:3, 144:11, 144:15, 161:9  <b>Changed</b> - 67:8, 67:14, 103:25, 119:25, 144:21  <b>Changers</b> - 49:2  <b>Changes</b> - 19:7, 28:10, 30:16, 30:17, 48:23, 52:6, 60:22, 72:5, 74:13, 74:18, 75:21, 76:15, 80:2, 80:5, 126:1  <b>Changing</b> - 46:20, 48:21, 112:14, 180:24, 180:25  <b>Characteristics</b> - 60:14, 89:4  <b>Charge</b> - 73:9, 84:3, 111:17, 154:16, 154:17  <b>Charged</b> - 99:11, 126:5  <b>Charging</b> - 22:18, 119:3  <b>Chart</b> - 47:25, 85:6, 98:12, 152:19  <b>Charts</b> - 33:18, 41:22, 50:21, 82:10, 82:11, 82:23, 84:16  <b>Chastised</b> - 127:2  <b>Cheap</b> - 181:4  <b>Cheat</b> - 176:22, 176:23  <b>Cheating</b> - 62:7  <b>Check</b> - 77:11, 78:10, 115:18, 134:17, 153:8, 157:10  <b>Cheryl</b> - 1:17, 11:12  <b>Chief</b> - 15:15  <b>Choice</b> - 56:15, 56:16, 57:16, 57:20, 99:24, 130:8  <b>Christine</b> - 72:18  <b>Churchill</b> - 20:23, 38:4, 38:10, 38:12, 48:18, 53:18, 95:15, 98:23, 123:9, 123:22, 124:20, 125:6  <b>Circumstance</b> - 18</p>
<p style="text-align: center;"><b>C</b></p> <p><b>Cake</b> - 163:25, 164:1</p>				

<p>0:20  <b>Circumstances</b> - 2                  4:14, 40:22, 40:23,                  55:23, 58:8, 89:18,                  92:2, 129:20,                  134:1, 168:25,                  169:1  <b>Cited</b> - 56:20  <b>City</b> - 5:22  <b>Clarification</b> - 7:21                  , 123:6  <b>Class</b> - 28:20  <b>Classes</b> - 28:24  <b>Classic</b> - 55:18,                  57:13, 66:9, 81:24  <b>Clauses</b> - 173:10  <b>Cleanest</b> - 87:21  <b>Close</b> - 38:8, 84:11,                  91:7, 91:17  <b>Closely</b> - 89:16,                  92:21, 173:7  <b>Closer</b> - 92:8  <b>Coal</b> - 120:23  <b>Cold</b> - 1:25, 105:2  <b>Coldest</b> - 104:25  <b>Collaboratively</b> - 7                  :14  <b>Colleagues</b> - 1:11  <b>Collected</b> - 166:7  <b>Collective</b> - 148:4  <b>Colorado</b> - 16:2,                  83:24  <b>Combination</b> - 94:                  2, 138:4, 139:8,                  147:25, 148:7,                  149:1, 154:20  <b>Combine</b> - 138:10  <b>Combined</b> - 48:11,                  154:14  <b>Combining</b> - 125:2                  0  <b>Come</b> - 25:9, 34:6,                  42:21, 47:13,                  47:15, 48:16,                  51:16, 73:23, 84:11,                  116:5, 118:23,                  125:18, 130:1,                  133:14, 153:23,                  175:11  <b>Comes</b> - 33:7,                  70:16, 145:12,                  177:5  <b>Comfort</b> - 108:22  <b>Comfortable</b> - 97:3                  , 159:4  <b>Comfortably</b> - 78:2                  5</p>	<p><b>Comforts</b> - 11:9  <b>Coming</b> - 25:12,                  44:21, 44:24,                  146:12, 147:22  <b>Commend</b> - 20:13,                  93:1  <b>Commending</b> - 92:                  9  <b>Comments</b> - 9:22  <b>Commercial</b> - 164:                  19, 165:8  <b>Commission</b> - 13:3                  , 24:11, 103:24,                  135:10, 144:12,                  165:11, 165:13,                  165:15, 165:17,                  165:18, 166:12,                  175:17, 177:1  <b>Commissioner</b> - 1:                  12, 1:13  <b>Commissioners</b> -                  1:9, 7:2, 9:13,                  17:22, 29:11, 87:16,                  102:25  <b>Commissioning</b> -                  3:20, 177:8  <b>Commissions</b> - 10                  5:12, 105:23,                  106:9, 176:8,                  176:12  <b>Commitments</b> - 16                  6:5  <b>Common</b> - 22:15,                  24:9, 27:12, 37:1,                  93:13, 125:14,                  138:2, 173:2  <b>Commonly</b> - 22:11,                  28:4, 120:13  <b>Community</b> - 112:2                  5, 113:7  <b>Companies</b> - 16:15                  , 16:17, 16:19,                  22:16, 72:12,                  83:23, 86:7,                  104:24, 154:7,                  172:9  <b>Companion</b> - 127:1                  1  <b>Company</b> - 13:5,                  22:14, 103:21,                  105:5, 112:16,                  114:5, 115:23,                  132:7, 134:1,                  176:23, 179:6  <b>Company's</b> - 21:12  <b>Comparable</b> - 156:                  17</p>	<p><b>Comparative</b> - 73:1                  1, 76:23, 77:10,                  156:6  <b>Comparatively</b> - 5                  5:20  <b>Comparator</b> - 153:                  10  <b>Comparators</b> - 81:                  23, 152:19, 154:1  <b>Compare</b> - 78:11,                  104:14  <b>Compared</b> - 30:23,                  41:5, 77:9, 84:9,                  111:1, 152:25,                  155:6, 157:12  <b>Comparison</b> - 76:2                  5, 77:5, 155:4  <b>Comparisons</b> - 77:                  2  <b>Compelled</b> - 52:7,                  52:9  <b>Compelling</b> - 72:4,                  113:13  <b>Compensation</b> - 7                  9:22, 83:18, 85:8  <b>Competence</b> - 62:1                  9  <b>Competition</b> - 58:1                  9, 58:20, 63:1,                  163:19  <b>Competitive</b> - 15:5,                  23:4, 56:16, 58:13,                  99:9, 99:24,                  101:10, 156:3,                  163:1, 181:4  <b>Competitiveness</b> -                  69:19  <b>Complaints</b> - 178:1                  8  <b>Complement</b> - 142                  :2  <b>Complete</b> - 85:15  <b>Completed</b> - 3:6,                  4:6, 4:15  <b>Completely</b> - 106:1                  7  <b>Completing</b> - 10:8,                  53:17, 53:24, 56:10  <b>Completion</b> - 55:1  <b>Compliance</b> - 15:6  <b>Component</b> - 35:2  <b>Comprehensive</b> -                  21:21  <b>Comprised</b> - 65:16  <b>Compromising</b> - 1                  16:24, 118:1  <b>Compulsion</b> - 62:4</p>	<p><b>Computer</b> - 14:9  <b>Concede</b> - 100:13,                  100:14  <b>Concentrating</b> - 17                  :18  <b>Concentration</b> - 14                  :5  <b>Concept</b> - 68:9  <b>Conceptually</b> - 109                  :12  <b>Concern</b> - 97:2,                  146:25, 149:25,                  157:15, 159:15,                  159:17, 160:17,                  162:4, 162:7,                  162:18, 162:19,                  163:9, 163:11,                  163:14  <b>Concerns</b> - 11:7,                  11:8, 27:25  <b>Concessions</b> - 46:                  11  <b>Conclude</b> - 52:19,                  83:5, 103:14, 143:2  <b>Concluded</b> - 128:2                  2, 142:6, 182:8  <b>Concludes</b> - 113:1                  5  <b>Conclusion</b> - 10:6,                  84:12, 116:5,                  155:10, 155:13,                  155:15  <b>Conclusions</b> - 77:1                  , 130:2  <b>Condition</b> - 55:25  <b>Conduct</b> - 106:5,                  106:6  <b>Conducts</b> - 105:24                  8, 20:11  <b>Confidence</b> - 75:5,                  79:19  <b>Confident</b> - 130:24                  , 131:7  <b>Confidential</b> - 10:1                  5  <b>Confirmed</b> - 29:16,                  30:18  <b>Conflict</b> - 100:20,                  100:25, 163:6,                  163:9, 163:17,                  163:24  <b>Conflicted</b> - 58:18  <b>Conflicts</b> - 176:18  <b>Confronted</b> - 133:4  <b>Confused</b> - 82:3,                  142:4, 152:24</p>	<p><b>Consequence</b> - 10                  1:4  <b>Consequences</b> - 2                  4:16, 59:16, 105:2,                  161:14, 166:14  <b>Conservatism</b> - 96                  :4, 96:15, 96:18  <b>Conservative</b> - 131                  :8  <b>Consider</b> - 35:11,                  35:20, 40:19, 68:6,                  95:18, 108:6,                  108:7, 110:1,                  112:13, 124:1,                  126:6, 131:17,                  146:10, 148:18  <b>Considerable</b> - 8:2                  2  <b>Consideration</b> - 18                  :5, 51:25, 52:18,                  156:10  <b>Considerations</b> - 7                  1:3  <b>Considered</b> - 35:7,                  35:9, 52:4, 83:19,                  85:22, 97:8, 119:24,                  121:19, 124:8,                  180:17  <b>Considering</b> - 95:9                  , 117:3  <b>Consist</b> - 31:23,                  48:24  <b>Consistent</b> - 43:14,                  53:10, 72:11, 75:19  <b>Constellations</b> - 1                  70:20  <b>Constitute</b> - 39:8  <b>Constriction</b> - 142:                  14  <b>Construct</b> - 110:11,                  144:22  <b>Construction</b> - 17:                  10, 17:12  <b>Constructs</b> - 83:12  <b>Consultant</b> - 14:2,                  14:22, 15:10, 66:24  <b>Consultants</b> - 4:18                  , 7:13, 7:25  <b>Consulting</b> - 4:19,                  12:6, 15:3, 16:11  <b>Consumer</b> - 5:10,                  6:2, 6:18, 20:7  <b>Consumers</b> - 3:10,                  3:24  <b>Contention</b> - 111:9  <b>Context</b> - 54:18,                  130:15, 177:24</p>
--	--	---	---	---

<p><b>Contingency</b> - 96:10, 96:25  <b>Continuation</b> - 30:21  <b>Continue</b> - 37:17, 39:11, 52:14, 68:4, 69:2, 69:14  <b>Continued</b> - 21:5, 26:22, 26:23, 27:6, 127:4  <b>Continues</b> - 19:15, 36:13, 55:3  <b>Continuing</b> - 31:14, 68:20, 69:2, 181:7  <b>Contract</b> - 111:22, 180:7  <b>Contracted</b> - 110:4, 123:19  <b>Contractor</b> - 179:14  <b>Contractors</b> - 15:22, 94:2, 96:24  <b>Contradictory</b> - 181:1  <b>Contrary</b> - 36:14, 64:11  <b>Contribute</b> - 12:20  <b>Contribution</b> - 4:7, 39:14, 48:8, 48:9, 48:15, 48:20, 66:3  <b>Contributions</b> - 33:13, 49:4  <b>Control</b> - 63:4, 73:1, 74:1, 83:17, 120:12, 138:7, 141:3, 141:13, 141:25, 167:5, 167:15, 176:14, 178:24  <b>Controlling</b> - 175:16  <b>Controls</b> - 63:15, 103:15, 106:1, 170:14  <b>Conundrum</b> - 91:21  <b>Conveyed</b> - 161:23  <b>Convince</b> - 109:11  <b>Cooperate</b> - 89:16  <b>Cooperation</b> - 8:15, 20:14, 20:16, 89:21  <b>Cooperatives</b> - 83:23, 107:3, 113:2  <b>Core</b> - 69:15, 163:5, 163:15  <b>Corner</b> - 5:14</p>	<p><b>Corporate</b> - 1:18, 13:19, 15:25, 16:10, 16:22, 53:1, 116:18, 116:20, 167:10, 167:11, 167:20  <b>Corporation</b> - 65:13, 65:14  <b>Corporations</b> - 39:4, 65:24, 76:24, 78:13, 78:22, 81:1, 83:11, 103:23, 152:20  <b>Correction</b> - 24:25, 120:9  <b>Correctly</b> - 23:11, 25:25, 26:12, 158:13  <b>Correspondingly</b> - 56:1  <b>Couldn't</b> - 125:21  <b>Council</b> - 164:18, 164:25, 165:8  <b>Counsel</b> - 1:16, 1:17, 6:21, 8:20, 82:21, 121:4  <b>Count</b> - 82:11, 82:12, 82:22, 82:23, 85:11, 154:23  <b>Counted</b> - 84:7  <b>Counting</b> - 81:19, 85:4  <b>Country</b> - 107:5  <b>Couple</b> - 21:17, 66:16, 141:4  <b>Course</b> - 22:16, 32:5, 39:21, 115:19  <b>Covenants</b> - 166:4  <b>Coverable</b> - 78:5  <b>Covered</b> - 66:16, 66:18, 78:5, 102:10, 102:16, 109:18  <b>Covering</b> - 170:4  <b>Coxworthy</b> - 7:9  <b>Crashing</b> - 166:13  <b>Create</b> - 52:22, 71:7, 83:12, 119:16, 140:24, 178:25  <b>Created</b> - 47:6, 57:5, 109:13  <b>Creates</b> - 67:21  <b>Creating</b> - 54:8, 73:8, 103:6, 104:8, 119:7  <b>Creature</b> - 11:9</p>	<p><b>Credit</b> - 32:15, 42:7, 82:15, 139:23, 162:23  <b>Critical</b> - 54:10, 58:12, 70:10  <b>Critically</b> - 72:14  <b>Criticism</b> - 70:24, 73:23, 110:9, 154:12  <b>Criticize</b> - 53:20, 156:25, 157:1  <b>Criticized</b> - 53:23  <b>Criticizing</b> - 96:16, 111:5  <b>Critique</b> - 67:19, 156:20, 156:22  <b>Crown</b> - 39:4, 65:24, 76:24, 78:13, 78:21, 81:1, 83:10, 152:20, 161:5  <b>Currency</b> - 149:24  <b>Current</b> - 24:14, 49:23, 50:12, 52:12, 71:4, 115:6, 141:18  <b>Currently</b> - 149:9  <b>Customer</b> - 7:6, 9:17, 28:20, 60:11, 63:5, 69:16, 72:20, 101:3, 101:17, 101:25, 106:8, 125:15, 125:16, 154:8, 154:9, 154:18  <b>Customers</b> - 3:15, 3:16, 4:2, 4:3, 5:13, 5:19, 5:24, 7:10, 20:8, 27:17, 28:6, 44:23, 45:25, 46:21, 56:14, 56:18, 56:25, 57:15, 57:16, 58:12, 61:14, 68:2, 68:6, 68:16, 68:21, 70:11, 99:18, 99:23, 100:6, 104:19, 122:12, 122:13, 122:14, 122:17, 126:5, 130:8, 156:14, 156:15, 158:15, 160:16, 162:25, 169:8, 169:19, 171:21, 180:5  <b>Cut</b> - 90:5, 133:16, 143:12</p>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td><b>D</b></td> </tr> </table> <p><b>Daily</b> - 11:14  <b>Darlene</b> - 1:6  <b>Darn</b> - 153:12  <b>DASCHBACH</b> - 15:7, 15:8, 120:17  <b>DASCHBACK</b> - 145:21  <b>Dashes</b> - 124:22  <b>Data</b> - 20:2, 35:14, 51:18, 105:6, 137:21, 139:8, 155:14, 157:13  <b>Date</b> - 8:16, 10:14, 58:5, 59:15, 72:8  <b>Dated</b> - 24:23  <b>Dates</b> - 9:9  <b>David</b> - 6:10  <b>Day</b> - 10:11, 50:12, 104:25, 111:16, 182:4  <b>Days</b> - 54:14  <b>Day's</b> - 10:22, 11:1  <b>DC</b> - 105:9  <b>Deal</b> - 20:18, 21:16, 38:17, 55:12, 90:22, 103:9, 120:21  <b>Dealing</b> - 61:13, 90:9, 91:12, 104:11  <b>Deals</b> - 80:14, 152:19  <b>Dealt</b> - 149:25  <b>Dean</b> - 7:8  <b>Debt</b> - 24:9, 24:17, 37:4, 40:5, 42:1, 42:2, 42:4, 43:22  <b>Decades</b> - 14:12, 21:20, 123:10  <b>December</b> - 4:20  <b>Decide</b> - 30:3, 42:11, 60:21, 64:23, 100:15, 118:13, 144:13, 175:6, 176:8  <b>Decided</b> - 19:10, 45:1  <b>Decides</b> - 64:13, 64:24, 171:8  <b>Deciding</b> - 75:13, 84:2, 136:19  <b>Decision</b> - 36:10, 36:13, 46:24, 58:5, 62:9, 64:10, 64:11, 101:1, 101:11, 112:7, 165:22, 166:25, 177:15</p>	<b>D</b>	<p><b>Decisions</b> - 63:10, 65:22, 68:11, 74:19, 101:24, 153:17  <b>Declare</b> - 58:5  <b>Declared</b> - 58:10  <b>Decreased</b> - 61:22  <b>Dedicated</b> - 179:1  <b>Deeper</b> - 178:1  <b>Deeply</b> - 13:20  <b>Default</b> - 166:4  <b>Defensiveness</b> - 94:17  <b>Defer</b> - 165:25  <b>Deferring</b> - 92:7, 160:14  <b>Define</b> - 46:8  <b>Defined</b> - 22:17  <b>Definition</b> - 57:13, 63:18, 74:12, 86:14, 89:3, 133:14, 136:25, 150:9, 166:15  <b>Definitions</b> - 81:21  <b>Deform</b> - 44:9  <b>Degree</b> - 14:4, 14:24, 17:15, 68:1, 75:5  <b>Delivered</b> - 126:25  <b>Delivers</b> - 155:22  <b>Demonstrate</b> - 89:1  <b>Dennis</b> - 5:9, 6:21, 7:8  <b>Deny</b> - 64:9  <b>Departure</b> - 140:23  <b>Depreciation</b> - 43:7, 43:9, 43:15, 44:9, 44:19, 45:8, 45:10  <b>Deregulating</b> - 62:18  <b>Deregulation</b> - 22:23  <b>Describe</b> - 4:15, 29:9, 51:14, 71:14, 111:1  <b>Described</b> - 96:7, 131:21  <b>Design</b> - 17:9, 22:7, 52:15, 104:25, 105:21, 110:22, 117:1, 151:6  <b>Designed</b> - 23:11, 54:9, 59:18, 97:22, 110:18, 110:20, 154:22</p>
<b>D</b>					

<p><b>Designs</b> - 53:8  <b>Despite</b> - 20:17, 98:4  <b>Detailed</b> - 74:7, 74:22, 75:22, 90:20, 140:15  <b>Determination</b> - 39:18  <b>Determine</b> - 40:17, 52:15, 82:4, 90:24, 106:2, 112:3, 117:13, 117:24, 139:8  <b>Determined</b> - 91:1  <b>Determines</b> - 32:25  <b>Determining</b> - 116:21  <b>Developed</b> - 28:8, 29:18, 106:25  <b>Developing</b> - 111:15, 181:18  <b>Development</b> - 14:11, 20:2, 67:3, 67:4, 67:19, 67:24, 68:4, 68:15, 68:24, 69:17, 70:7, 71:12, 102:3, 106:24, 107:4, 107:18, 110:10, 118:11, 121:3, 122:10, 124:3, 125:5  <b>Dialogue</b> - 117:22  <b>Didn't</b> - 45:1, 46:4, 52:5, 65:9, 71:1, 73:24, 76:24, 77:1, 82:8, 83:15, 88:22, 90:17, 104:3, 117:9, 118:19, 125:23, 125:25, 127:19, 128:13, 136:13, 138:20, 139:21, 150:4, 153:13, 153:17  <b>Difference</b> - 35:13, 36:7, 41:3, 44:8, 45:20, 52:4, 74:11, 82:14, 85:3, 96:3, 104:4, 140:16, 150:21  <b>Differences</b> - 83:9, 90:22, 93:17, 138:3  <b>Different</b> - 26:25, 30:17, 38:21, 44:4, 48:2, 50:1, 50:6, 52:9, 52:10, 55:12, 64:19, 64:22, 64:23, 64:25, 66:8,</p>	<p>71:10, 83:12, 86:14, 91:19, 92:18, 96:1, 107:11, 107:14, 108:6, 111:15, 123:21, 130:2, 133:3, 148:8, 150:25, 151:1, 156:19, 161:23, 169:2  <b>Differently</b> - 30:15, 65:1, 127:8  <b>Difficult</b> - 60:3, 68:17, 89:23, 94:8  <b>Difficulties</b> - 138:5  <b>Difficulty</b> - 108:3, 108:19, 130:4  <b>Diminish</b> - 163:11  <b>Directed</b> - 117:15  <b>Directing</b> - 2:2  <b>Direction</b> - 88:23, 107:20, 108:4, 108:7, 108:12, 126:11, 167:23, 171:23  <b>Directly</b> - 10:25, 92:22, 109:10  <b>Director</b> - 1:17  <b>Directors</b> - 65:8, 65:15  <b>Disagree</b> - 36:11, 116:15, 135:9  <b>Disagreement</b> - 36:3  <b>Disallowed</b> - 166:7  <b>Discipline</b> - 57:25, 59:8, 59:25, 61:24, 63:2, 99:10, 99:12, 132:25, 162:20  <b>Disciplines</b> - 138:8  <b>Discounts</b> - 94:3  <b>Discoveries</b> - 1:19, 10:20  <b>Discussing</b> - 148:9  <b>Discussions</b> - 91:4  <b>Disenfranchise</b> - 105:8  <b>Dishonest</b> - 58:16, 62:6  <b>Disposing</b> - 171:16  <b>Disposition</b> - 14:12  <b>Dispute</b> - 129:25  <b>Disrupt</b> - 11:5  <b>Disrupted</b> - 161:24  <b>Disruption</b> - 146:10  <b>Disruptive</b> - 55:10, 77:14</p>	<p><b>Distinction</b> - 59:12, 64:17, 66:6, 86:12, 102:11, 127:19  <b>Distinguish</b> - 102:2  <b>Distinguished</b> - 73:15, 73:16  <b>Distribution</b> - 2:15, 22:24, 154:17, 169:24  <b>Distributors</b> - 113:5  <b>Diverge</b> - 5:25, 100:16  <b>Divert</b> - 47:1  <b>Dividends</b> - 30:5, 33:9, 33:14, 33:24, 33:25, 34:22, 35:4, 38:2, 38:3, 38:13, 48:11, 48:13, 48:14, 48:18, 50:7, 50:23, 51:2  <b>Doable</b> - 74:23, 133:6  <b>Doctorate</b> - 14:6  <b>Document</b> - 1:23  <b>Documentation</b> - 10:17  <b>Documents</b> - 164:24  <b>Doesn't</b> - 46:7, 59:5, 59:13, 60:2, 60:25, 104:9, 107:13, 109:9, 120:6, 121:10, 151:9, 153:22, 163:16, 167:10, 176:19  <b>Dollar</b> - 49:10, 49:11, 61:1, 112:18, 136:3, 143:19  <b>Dollars</b> - 25:20, 26:7, 28:13, 28:19, 30:8, 31:8, 32:10, 32:11, 32:24, 34:21, 37:12, 38:8, 38:14, 46:17, 46:18, 49:12, 49:13, 96:22, 124:24, 135:20  <b>Domestic</b> - 45:25  <b>Dominant</b> - 31:17, 48:12  <b>Dominating</b> - 55:10  <b>Door</b> - 134:6  <b>Doubling</b> - 48:6  <b>Doug</b> - 6:22</p>	<p><b>Dozen</b> - 13:20, 13:22, 21:20  <b>Dramatic</b> - 77:14  <b>Dramatically</b> - 38:1, 49:6, 53:2, 53:4, 80:12, 97:24, 98:13  <b>Draw</b> - 155:10, 155:13, 155:15  <b>Drive</b> - 51:8  <b>Driven</b> - 51:23, 98:10, 125:9, 135:2, 135:6, 135:18, 136:2, 163:5  <b>Driver</b> - 39:19  <b>Driver's</b> - 26:20  <b>Driving</b> - 18:20, 77:4  <b>Drop</b> - 98:4, 98:6  <b>Dual</b> - 158:5, 158:9, 158:17  <b>Due</b> - 52:18  <b>Duke</b> - 16:16  <b>Duplication</b> - 52:25, 133:18, 133:19, 133:20, 141:15  <b>Duplicative</b> - 133:15, 140:8  <b>Dwanda</b> - 1:12  <b>Dynamic</b> - 170:12</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> <p><b>E</b></p> </div> <p><b>Each</b> - 10:22, 11:1, 11:3, 12:13, 12:14, 21:10, 81:23, 134:1, 140:13, 143:6  <b>Earlier</b> - 23:4, 27:23, 38:1, 41:7, 41:8, 41:21, 71:1, 95:25, 96:8, 97:16, 134:13, 166:24  <b>Early</b> - 87:19, 91:24, 96:5, 123:14  <b>Earn</b> - 101:6, 101:8  <b>Earning</b> - 39:11, 39:24  <b>Earns</b> - 36:23  <b>East</b> - 16:19  <b>Easy</b> - 33:6, 143:1, 172:14  <b>Eat</b> - 89:13, 144:23  <b>Economic</b> - 99:7, 121:12  <b>Economical</b> - 111:4  <b>Economically</b> - 92:</p>	<p>3  <b>Economics</b> - 4:20, 17:15  <b>Economy</b> - 91:23  <b>Editing</b> - 24:24  <b>Effect</b> - 4:2, 28:14, 41:18, 46:13, 50:17, 57:4, 88:3, 88:20, 89:15, 106:10, 107:12, 109:12, 116:5, 116:10, 126:1, 127:17  <b>Effecting</b> - 52:19  <b>Effective</b> - 52:21, 53:12, 53:13, 59:9, 117:25, 176:1, 180:2, 180:3  <b>Effectively</b> - 162:24, 177:18, 179:11, 179:20  <b>Effectiveness</b> - 23:2, 71:8, 116:25  <b>Effects</b> - 28:23, 108:16  <b>Efficiency</b> - 71:8, 92:15, 92:22, 166:16  <b>Efficient</b> - 138:10  <b>Efficiently</b> - 121:11, 133:7  <b>Effort</b> - 11:13, 68:20, 74:22, 75:7, 75:8, 75:22, 76:1, 90:20, 112:10, 120:24, 181:8  <b>Efforts</b> - 8:10, 8:18, 8:25, 76:18  <b>Eight</b> - 39:25, 103:19  <b>Electric</b> - 14:3, 15:11, 15:13, 16:1, 17:5, 39:4, 45:13, 46:21, 53:11, 104:22, 105:4, 112:25, 152:20  <b>Electrical</b> - 14:4  <b>Electricity</b> - 2:5, 2:10, 2:13, 2:23, 3:10, 4:11, 47:2, 47:23, 181:8  <b>Electrification</b> - 107:3, 107:9  <b>Electronic</b> - 1:22  <b>Elements</b> - 24:4, 53:7, 96:17  <b>Eliminate</b> - 52:25,</p>
---	---	--	--	--

<p>133:18, 141:24  <b>Eliminated</b> - 75:17, 141:6, 141:8, 154:18  <b>Elimination</b> - 133:20  <b>Embarking</b> - 74:23  <b>Emera</b> - 180:12  <b>Emera's</b> - 180:11, 180:12  <b>Employ</b> - 93:18  <b>Employed</b> - 149:9  <b>Employee</b> - 155:2  <b>Employees</b> - 15:21, 77:25, 79:2, 149:9, 149:10, 153:21, 154:24, 155:6, 156:15  <b>Empowered</b> - 59:23  <b>Encouraging</b> - 92:20  <b>Endeavour</b> - 10:3  <b>Ending</b> - 147:14  <b>Endorse</b> - 37:6  <b>Ends</b> - 37:18  <b>Energy</b> - 2:16, 2:18, 2:21, 4:19, 13:21, 15:1, 22:20, 23:21, 23:23, 28:3, 67:19, 68:5, 68:14, 68:23, 69:16, 71:11, 102:20, 102:22, 103:1, 103:6, 108:13, 109:24, 110:10, 110:13, 111:5, 111:12, 113:11, 118:10, 122:10, 125:6, 126:18, 166:21, 172:2, 173:7, 173:10, 173:21, 174:3, 174:12, 177:20, 179:16  <b>Engage</b> - 75:21, 111:21, 171:3, 179:7  <b>Engaged</b> - 4:17, 13:8, 13:14, 13:20, 24:2  <b>Engagement</b> - 115:19, 115:20  <b>Engagements</b> - 13:12, 22:4, 71:23  <b>Engineer</b> - 14:25, 15:15, 17:9  <b>Engineering</b> - 14:5</p>	<p>, 14:24, 17:11, 17:13, 17:17, 132:24, 137:15, 137:16, 137:22, 139:6, 140:7  <b>Engineers</b> - 137:23  <b>England</b> - 132:7  <b>Enrons</b> - 170:20  <b>Ensure</b> - 8:23, 10:6, 11:18  <b>Enterprise</b> - 107:1, 112:18  <b>Entire</b> - 15:24  <b>Entities</b> - 24:15, 73:12, 89:15, 91:10, 94:3, 109:6, 119:17, 119:18, 169:12, 173:4  <b>Entitle</b> - 34:2  <b>Entity</b> - 38:22, 52:22, 70:8, 103:7, 104:8, 110:21, 116:6, 118:3, 119:2, 119:7, 119:16, 134:8, 167:10, 167:12, 168:22, 171:2  <b>Environmental</b> - 15:6  <b>Environments</b> - 22:10  <b>Envision</b> - 152:3  <b>Equal</b> - 40:3, 50:11, 92:1, 162:19, 162:23  <b>Equally</b> - 125:17  <b>Equipment</b> - 151:7  <b>Equity</b> - 24:17, 34:3, 36:23, 37:1, 37:3, 37:8, 37:14, 38:17, 38:21, 38:23, 39:15, 39:17, 39:20, 39:21, 39:23, 120:12, 121:6  <b>Equivalent</b> - 155:24  <b>Essence</b> - 101:9  <b>Essential</b> - 101:25  <b>Essentially</b> - 36:15, 52:19, 58:6, 64:12, 133:1  <b>Establish</b> - 30:1  <b>Established</b> - 107:23  <b>Establishing</b> - 109:14</p>	<p><b>Estimate</b> - 95:22, 95:23, 95:25, 96:5, 96:11, 96:16, 96:17, 97:2, 97:4, 97:9, 131:8  <b>Estimates</b> - 3:1, 95:25  <b>Et</b> - 16:16, 16:20  <b>Euphemistically</b> - 131:21  <b>Evaluate</b> - 169:22  <b>Evaluated</b> - 71:22, 134:20  <b>Evaluation</b> - 14:9, 15:5  <b>Evaluations</b> - 14:13  <b>Evening</b> - 10:24, 11:3  <b>Eventually</b> - 56:14  <b>Everybody</b> - 1:2, 50:2, 54:15, 54:17, 64:15, 76:14, 172:3, 176:24  <b>Everyone</b> - 1:3  <b>Everything</b> - 21:24, 47:11, 138:16, 172:23  <b>Everywhere</b> - 59:1  <b>Evidence</b> - 5:5  <b>Evolve</b> - 123:21  <b>Examination</b> - 22:5, 55:2, 177:4  <b>Examinations</b> - 13:21, 177:5  <b>Examine</b> - 123:18  <b>Examined</b> - 51:18  <b>Examining</b> - 27:7, 92:15  <b>Example</b> - 68:8, 89:8, 107:6, 146:22, 151:4, 153:19, 155:16, 158:22, 159:5, 165:13  <b>Except</b> - 49:8  <b>Exception</b> - 10:15, 11:14, 130:17  <b>Excess</b> - 23:24, 60:24, 100:3, 105:2, 105:5, 171:16, 172:19  <b>Exchanged</b> - 8:1  <b>Excluded</b> - 109:12  <b>Excused</b> - 17:24  <b>Execute</b> - 21:25  <b>Executed</b> - 71:20,</p>	<p>147:1  <b>Executing</b> - 68:13, 152:12  <b>Execution</b> - 74:17, 75:8, 89:17  <b>Executive</b> - 8:13, 13:18, 15:14, 17:10, 53:3, 78:4, 78:23, 81:6, 81:9, 81:13, 82:18, 83:21, 84:3, 84:24  <b>Executives</b> - 71:21, 73:2, 81:19, 82:2, 84:12, 85:8, 85:21, 86:8, 86:9, 156:16  <b>Exelon</b> - 16:16, 17:4, 64:15  <b>Exempt</b> - 63:24  <b>Existed</b> - 85:3, 163:23, 180:8, 180:10  <b>Existence</b> - 163:6  <b>Existential</b> - 54:1, 54:6  <b>Exists</b> - 58:14, 62:24, 62:25, 63:16, 100:21, 105:14, 154:7, 163:18, 165:25  <b>Expand</b> - 100:23, 110:4  <b>Expect</b> - 50:5, 50:10, 56:1, 56:2, 83:9, 111:3, 111:24, 131:9, 145:25, 175:12  <b>Expectation</b> - 54:21, 126:22  <b>Expected</b> - 3:12, 9:24, 175:4  <b>Expend</b> - 59:24  <b>Expenditure</b> - 62:11  <b>Expense</b> - 71:2  <b>Expenses</b> - 28:11, 29:2, 60:17, 80:14, 98:22, 99:6, 99:19, 103:23, 153:22, 156:17, 175:9, 175:20  <b>Expensive</b> - 88:6  <b>Experience</b> - 12:11, 14:3, 14:23, 15:12, 16:21, 16:25, 17:6, 17:8, 17:11, 21:12, 72:19, 73:21, 128:21,</p>	<p>129:16, 129:19, 129:21, 130:1, 130:12, 130:17, 131:18, 143:15, 169:9, 170:15, 172:7, 175:17, 180:11, 180:12  <b>Experienced</b> - 108:18  <b>Experiencing</b> - 108:3  <b>Expert</b> - 4:18  <b>Expertise</b> - 14:7, 15:12  <b>Experts</b> - 7:19  <b>Explain</b> - 19:21, 29:10, 30:12, 36:1, 46:1, 87:15, 93:14, 99:3, 165:10  <b>Explaining</b> - 62:11  <b>Explicitly</b> - 80:9  <b>Explore</b> - 113:12  <b>Export</b> - 2:22, 20:25, 35:13, 35:21, 100:4, 101:16, 102:23  <b>Express</b> - 26:1, 81:12  <b>Expressed</b> - 66:25, 80:13, 128:11, 136:7, 179:15  <b>Expression</b> - 110:2  <b>Extended</b> - 8:17, 30:13  <b>Extending</b> - 43:14, 161:16  <b>Extends</b> - 80:19  <b>Extension</b> - 142:16  <b>Extensive</b> - 8:11, 20:1, 22:19, 72:8, 107:2, 137:21  <b>Extent</b> - 36:12, 64:18, 68:19, 138:12  <b>External</b> - 112:13, 123:23, 177:3  <b>Extra</b> - 124:24  <b>Extract</b> - 179:23  <b>Extraordinary</b> - 3:14  <b>Extrapolate</b> - 161:18  <b>Eyes</b> - 159:2</p> <div style="border: 1px solid black; width: 100px; margin: 10px auto; text-align: center;">F</div> <p><b>Faced</b> - 72:3, 91:21  <b>Faces</b> - 41:2</p>
--	--	--	---	--

<p><b>Facilitated</b> - 7:17  <b>Facilities</b> - 56:13, 56:22, 56:25, 96:20, 126:3  <b>Facing</b> - 43:2  <b>Factors</b> - 29:3, 35:22, 51:8, 83:18, 83:25, 140:21, 143:12  <b>Failed</b> - 62:23  <b>Fails</b> - 109:4  <b>Fair</b> - 49:2, 52:2, 57:7, 117:7, 123:5, 144:23, 176:3  <b>Fairly</b> - 9:4, 23:12, 39:3, 39:8, 40:1, 77:25, 82:17, 94:7, 106:10, 110:14, 111:19, 112:11, 131:19, 139:7, 140:1, 140:7, 148:15  <b>Fall</b> - 3:1, 102:5  <b>Fallout</b> - 129:14  <b>Falls</b> - 1:6, 2:4, 2:9, 2:18, 3:13, 30:6, 34:3, 35:8, 38:4, 38:9, 38:10, 38:12, 48:18, 48:20, 53:18, 68:8, 69:23, 69:25, 108:10, 123:9, 123:22, 124:20, 125:6, 146:12, 157:25  <b>False</b> - 110:11, 143:23  <b>Far</b> - 45:17, 52:17, 80:21, 83:6, 83:10, 123:14  <b>Fashion</b> - 138:3  <b>Fast</b> - 112:15  <b>Fear</b> - 75:15, 136:24, 147:13  <b>Feature</b> - 20:3  <b>February</b> - 3:5, 5:1, 5:2  <b>Federal</b> - 19:12, 19:17, 165:21  <b>Federally</b> - 16:18  <b>Fee</b> - 89:11, 89:13, 112:5  <b>Feehan</b> - 6:23  <b>Feet</b> - 40:9  <b>Fiat</b> - 58:9, 159:13  <b>Field</b> - 15:17, 15:19, 17:9, 165:6, 168:21</p>	<p><b>Figure</b> - 22:21, 47:9, 73:16  <b>Figured</b> - 154:25  <b>File</b> - 9:5, 9:24  <b>Filed</b> - 3:4, 4:21, 4:24, 8:4, 8:8, 9:22, 10:9, 10:14, 24:21, 36:8, 81:7  <b>Filing</b> - 65:6, 66:23, 73:24, 81:16, 92:14, 176:4  <b>Fill</b> - 143:9  <b>Final</b> - 3:5, 49:3  <b>Finance</b> - 14:6, 15:25, 16:3, 16:10, 16:13, 16:22, 19:16, 24:8  <b>Financial</b> - 3:24, 14:8, 16:7, 16:8, 23:15, 24:14, 26:21, 29:8, 29:11, 30:25, 31:4, 31:22, 32:5, 36:17, 40:4, 40:7, 40:19, 42:14, 42:17, 45:23, 47:20, 54:6, 60:12, 108:19, 120:25, 121:1, 121:11, 170:18  <b>Financing</b> - 19:4, 19:6, 32:17, 43:1, 43:2, 43:21, 43:23  <b>Find</b> - 56:8, 90:11, 93:24, 111:3, 126:9, 133:20, 136:13, 145:8, 150:2, 159:11, 166:8, 181:8  <b>Finding</b> - 51:16, 57:8  <b>Findings</b> - 3:2, 4:22, 8:5, 9:12  <b>Finds</b> - 30:4  <b>Fine</b> - 77:12, 83:2, 86:22, 159:4, 171:10  <b>Finishing</b> - 147:3  <b>Firm</b> - 43:19  <b>First</b> - 3:3, 5:20, 11:19, 12:21, 29:8, 30:21, 30:23, 31:2, 46:3, 56:12, 58:14, 63:20, 69:21, 74:5, 78:6, 78:19, 91:8, 91:23, 98:16, 98:20, 99:14, 110:7, 126:19, 133:16,</p>	<p>135:22, 142:12, 142:13, 150:7, 165:25, 171:18, 174:24, 182:6  <b>FITZGERALD</b> - 6:1, 9, 6:21  <b>Five</b> - 15:10, 72:21, 76:12, 91:11, 94:7, 108:20, 130:22, 131:11, 131:14, 131:18, 131:22, 132:2, 132:9, 132:10, 132:11, 132:17, 133:5, 134:6  <b>Fives</b> - 132:13  <b>Fixed</b> - 43:19, 122:4  <b>Flat</b> - 16:20, 50:9, 51:4  <b>Flatter</b> - 50:15  <b>FLEMING</b> - 7:7, 7:8  <b>Flow</b> - 31:24, 34:17, 58:24  <b>Focus</b> - 13:9, 13:17, 13:23, 20:1, 21:23, 22:6, 26:16, 53:24, 114:21, 132:15, 150:1, 161:12, 162:11  <b>Focused</b> - 18:21, 22:4, 51:11, 51:20  <b>Focuses</b> - 125:14  <b>Focusing</b> - 160:18  <b>Focussed</b> - 72:19, 103:5  <b>Folks</b> - 53:25, 90:19  <b>Follow</b> - 100:15  <b>Followed</b> - 9:15, 20:3  <b>Following</b> - 3:20, 4:22, 13:7, 133:19  <b>Footing</b> - 68:24, 92:1  <b>Force</b> - 106:17  <b>Forecast</b> - 35:16  <b>Forecasts</b> - 98:10  <b>Foreclosed</b> - 117:3, 125:25  <b>Forget</b> - 93:20, 110:15, 141:7  <b>Form</b> - 19:24, 35:24  <b>Formula</b> - 109:9  <b>Forth</b> - 131:8, 172:24</p>	<p><b>Forthcoming</b> - 139:2  <b>Fortuitous</b> - 182:3  <b>Forum</b> - 9:2  <b>Forward</b> - 41:11, 41:20, 51:4, 59:21, 81:25, 128:22, 129:17, 136:11  <b>Fossil</b> - 17:6  <b>Found</b> - 43:9, 76:6, 85:1, 85:5, 85:9, 85:13, 89:25, 95:23, 96:20  <b>Foundation</b> - 96:2, 99:13, 136:7, 136:8  <b>Founded</b> - 64:18  <b>Founder</b> - 12:25  <b>Four</b> - 13:14, 78:12, 85:5, 85:10, 94:7, 108:20, 140:6  <b>Fourth</b> - 122:8, 164:14  <b>Framework</b> - 27:25, 64:2, 98:17  <b>Frankly</b> - 36:2, 55:14, 68:13, 82:16, 96:13, 127:5  <b>Free</b> - 53:7, 62:9, 108:20  <b>Freely</b> - 20:17  <b>Frequently</b> - 132:1  <b>Friday</b> - 9:20, 134:22  <b>Friends</b> - 12:19, 154:19  <b>Front</b> - 34:16, 45:2, 176:16  <b>Fuel</b> - 13:20, 23:21, 23:22, 173:6  <b>Fulfilled</b> - 23:8  <b>Full</b> - 4:9, 5:12, 5:17, 25:14, 26:7, 37:19, 105:11, 127:23, 154:9  <b>Fully</b> - 9:4, 69:23, 163:7  <b>Function</b> - 43:19, 80:7, 84:3, 84:4, 87:24, 105:15, 106:24, 110:14, 119:1, 144:12, 147:5, 175:3, 177:1, 178:8  <b>Functionally</b> - 116:12  <b>Functions</b> - 27:16, 27:18, 51:20,</p>	<p>79:13, 110:19, 113:6, 133:2, 133:18, 134:16  <b>Fund</b> - 101:12  <b>Fundamental</b> - 99:13, 107:4  <b>Fundamentally</b> - 4, 8:21, 76:3, 97:9, 135:7, 151:1, 163:16, 169:2, 171:3, 171:15, 181:16  <b>Funding</b> - 33:11  <b>Funds</b> - 31:24, 32:7, 39:12, 39:16, 39:17, 39:18, 47:1, 47:22  <b>Further</b> - 55:8, 94:25, 125:2, 137:2  <b>Fussing</b> - 82:1  <b>Future</b> - 32:9, 40:18, 43:3, 51:6, 67:2, 70:6, 87:22, 98:22, 102:3</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> <p><b>G</b></p> </div> <p><b>Gage</b> - 69:12  <b>Gain</b> - 75:23, 101:5, 101:16  <b>Game</b> - 46:5, 49:2  <b>Gas</b> - 15:11, 15:13, 16:1, 17:5, 104:23, 104:24, 118:8, 118:9, 119:23, 119:24, 153:20, 169:24, 181:3  <b>Gathered</b> - 8:6  <b>Gave</b> - 52:17, 74:25, 82:15, 117:14, 138:18  <b>GE</b> - 147:6  <b>General</b> - 6:1, 82:15, 82:20, 121:21, 157:9, 173:2, 173:13, 174:25, 180:14  <b>Generally</b> - 38:18, 84:19, 105:3, 123:3  <b>Generate</b> - 90:8, 181:8  <b>Generating</b> - 17:7  <b>Generation</b> - 2:14, 14:8, 16:18, 17:1, 22:23, 57:15, 57:18, 67:2, 69:24, 113:1  <b>Generators</b> - 63:12</p>
--	--	---	--	---

<p><b>Generic</b> - 133:24, 177:6  <b>Geoff</b> - 6:15  <b>Get</b> - 8:24, 10:10, 25:9, 41:6, 46:4, 46:16, 50:7, 53:6, 56:19, 59:1, 60:18, 61:1, 67:6, 68:25, 74:10, 74:15, 81:15, 86:4, 88:21, 105:14, 117:21, 126:9, 126:12, 132:2, 140:10, 140:19, 142:6, 143:19, 147:6, 171:18  <b>Gets</b> - 163:14  <b>Giant</b> - 181:12  <b>Gibbons</b> - 1:19  <b>Gigawatt</b> - 155:5, 155:21  <b>Girls</b> - 172:11  <b>Give</b> - 12:9, 12:15, 41:22, 44:17, 45:4, 57:16, 101:13, 108:21, 118:3, 119:14, 121:20, 137:1, 138:20, 144:22, 145:24, 162:22  <b>Given</b> - 20:17, 71:5, 79:25, 92:12, 95:6, 116:17, 117:9, 126:12, 137:21  <b>Gives</b> - 48:2  <b>Glenda</b> - 1:19  <b>Glynn</b> - 1:16  <b>Go</b> - 18:18, 26:19, 41:13, 45:18, 64:15, 66:1, 71:14, 74:20, 75:25, 78:8, 79:11, 84:10, 90:19, 94:12, 94:13, 100:3, 101:21, 102:9, 108:12, 109:2, 109:17, 109:20, 113:18, 125:1, 130:9, 133:8, 134:5, 140:25, 143:3, 156:19, 169:5, 169:18, 173:24  <b>Goal</b> - 132:5  <b>Goals</b> - 42:16  <b>Gone</b> - 108:21, 139:11, 157:17  <b>Good</b> - 1:2, 6:3,</p>	<p>6:10, 6:20, 7:2, 7:8, 14:1, 15:8, 16:24, 19:24, 58:25, 59:1, 89:21, 97:10, 113:12, 122:6, 123:5, 139:7, 153:13, 178:22, 178:24, 179:9, 181:6  <b>Goose</b> - 5:21  <b>Got</b> - 1:25, 50:8, 54:11, 56:17, 67:6, 72:15, 72:18, 122:1, 136:25, 147:4, 149:25, 151:24, 159:3, 175:13  <b>Government</b> - 2:2, 3:12, 3:21, 4:12, 5:1, 5:11, 10:9, 18:4, 31:22, 32:2, 32:25, 33:3, 34:1, 38:22, 40:7, 46:25, 63:23, 64:4, 64:5, 64:6, 64:9, 64:13, 64:22, 65:10, 95:17, 107:2, 107:10, 107:13, 107:24, 117:15, 121:9, 135:19, 165:21, 166:25, 172:1  <b>Government's</b> - 32:6, 32:15, 66:1, 171:23  <b>Grade</b> - 19:19  <b>Gradual</b> - 50:11  <b>Grant</b> - 128:14  <b>Granted</b> - 5:17, 5:22, 52:5, 77:10  <b>Greater</b> - 16:25, 34:11, 106:4, 132:6  <b>Greying</b> - 145:19  <b>Group</b> - 4:19, 5:13, 5:18, 7:6, 9:17, 12:6, 16:11, 49:3, 77:24, 137:14  <b>Groups</b> - 84:18, 107:24, 137:22, 142:1  <b>Grow</b> - 30:22, 33:14  <b>Growing</b> - 181:7  <b>Grown</b> - 107:24, 179:25  <b>Grows</b> - 30:10  <b>Growth</b> - 2:22,</p>	<p>31:14  <b>Guarantees</b> - 112:6  <b>Guess</b> - 12:24, 44:11, 90:2, 92:9, 117:10, 122:8, 126:15, 149:21, 152:20, 153:2, 156:24, 156:25, 159:9, 162:1, 182:3  <b>Guidance</b> - 145:25  <b>Gull</b> - 124:3, 124:19, 125:5  <b>Guys</b> - 172:10, 172:11  <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;">H</div> <b>Hadn't</b> - 67:1  <b>Half</b> - 11:16, 39:25, 139:16, 139:17  <b>Halfway</b> - 25:15  <b>Hampshire</b> - 35:9, 35:10  <b>Hand</b> - 181:6  <b>Handle</b> - 16:13, 73:11, 179:10  <b>Handled</b> - 89:11  <b>Happening</b> - 68:14, 104:22  <b>Happy</b> - 5:20, 96:1, 164:13  <b>Hard</b> - 31:9, 41:1, 117:13, 132:4, 133:23, 152:3, 152:9, 161:16, 171:25, 172:14  <b>Hardships</b> - 3:24  <b>Harm</b> - 160:22  <b>Harmonized</b> - 45:24, 46:14  <b>Hat</b> - 70:23  <b>Haven't</b> - 11:18, 62:17, 109:10, 114:25, 130:14  <b>Heading</b> - 158:4, 159:8  <b>Hear</b> - 9:2, 28:22, 180:20  <b>Heard</b> - 9:19, 112:17, 178:17  <b>Hearing</b> - 1:3, 1:8, 1:14, 1:16, 5:6, 8:24, 9:1, 9:6, 9:9, 9:10, 10:1, 10:6, 10:18, 182:8  <b>Heck</b> - 171:18  <b>Hedge</b> - 170:1  <b>Hedging</b> - 106:3,</p>	<p>176:9  <b>Help</b> - 105:21  <b>Helped</b> - 22:20  <b>Helpful</b> - 174:16  <b>Helping</b> - 119:5  <b>Helps</b> - 48:19  <b>Here's</b> - 44:11, 52:4, 57:14, 62:16, 82:8, 107:14  <b>Hi</b> - 1:23  <b>Hierarchy</b> - 151:9  <b>High</b> - 12:15, 21:18, 75:5, 79:18, 94:18, 96:11, 111:21, 143:14, 146:25, 160:13, 160:25, 161:21, 172:2  <b>Higher</b> - 3:20, 39:16, 39:17, 79:20, 79:22, 88:2, 88:13, 141:6, 141:8, 150:13, 171:13  <b>Highlight</b> - 91:15  <b>Highly</b> - 93:3  <b>Historical</b> - 53:19  <b>History</b> - 59:20  <b>Holders</b> - 165:21  <b>Holding</b> - 72:24, 83:22, 86:7  <b>Holds</b> - 14:23  <b>Holistic</b> - 127:1, 127:10, 128:11  <b>Honestly</b> - 141:12  <b>Hope</b> - 50:5, 82:3, 172:14  <b>Hoped</b> - 4:5  <b>Hopkins</b> - 7:3, 17:17  <b>Host</b> - 90:23  <b>Hour</b> - 3:19, 11:16, 28:19, 31:13, 49:18  <b>Hours</b> - 155:5, 155:22  <b>Housekeeping</b> - 10:12  <b>HST</b> - 47:1  <b>Huge</b> - 99:7  <b>Hugely</b> - 120:22  <b>Human</b> - 80:3  <b>Hump</b> - 97:25  <b>Hydro's</b> - 35:16, 36:6, 36:21, 37:8, 38:17, 39:1, 40:13, 42:2, 42:15, 43:11, 49:23, 62:19,</p>	<p>62:20, 73:19, 87:14, 88:19, 92:14, 93:22, 99:6, 99:16, 101:17, 101:23, 122:14, 122:17, 168:10  <b>Hypothetical</b> - 45:7, 154:22  <b>Hypothetically</b> - 120:10  <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;">I</div> <b>Ice</b> - 50:24  <b>Iceberg</b> - 50:24  <b>Icecap</b> - 49:16  <b>Icing</b> - 163:25, 164:2  <b>I'd</b> - 1:2, 4:14, 10:13, 11:17, 12:3, 12:8, 24:20, 29:7, 64:14, 116:13, 130:4, 136:24, 138:21, 158:21, 163:13, 171:17, 172:2, 172:3, 181:7  <b>Identical</b> - 133:1, 133:2  <b>Identification</b> - 4:9  <b>Identified</b> - 2:24, 18:22, 26:7, 29:4, 29:21, 44:15, 48:23, 67:22, 69:4, 97:13, 98:3, 124:9  <b>Identifying</b> - 19:15, 74:23  <b>I'll</b> - 12:1, 19:25, 21:17, 30:12, 31:24, 53:6, 54:22, 57:3, 91:8, 112:15, 114:16, 114:18, 120:4, 128:7, 128:12, 130:15, 143:20, 152:17, 164:14  <b>Illogical</b> - 61:8  <b>Imagine</b> - 121:9, 172:1  <b>Immaterial</b> - 48:25  <b>Impact</b> - 2:4, 2:9, 4:4, 42:18, 79:24, 97:19, 129:6, 148:2  <b>Impacts</b> - 1:5, 2:24, 3:13  <b>Impairing</b> - 71:9  <b>Implement</b> - 74:13  <b>Implementation</b> - 80:18</p>
---	--	---	--	--

<p><b>Implications</b> - 31:2 1, 32:4, 32:21, 32:23, 41:25, 42:4 <b>Implicit</b> - 126:16 <b>Importance</b> - 3:7, 12:21, 91:16 <b>Important</b> - 35:15, 41:11, 60:10, 60:14, 67:23, 68:23, 93:2, 111:12, 125:17, 129:21, 163:14 <b>Imposes</b> - 69:3 <b>Imposing</b> - 122:12 <b>Improve</b> - 125:19 <b>Improvement</b> - 15: 4 <b>Inappropriately</b> - 1 06:12 <b>Inc</b> - 4:20 <b>Inclusion</b> - 99:22 <b>Incompetent</b> - 58:1 7 <b>Inconsiderable</b> - 1 13:9 <b>Inconsistent</b> - 93:8 <b>Incorporate</b> - 27:1 <b>Incorporated</b> - 28: 12 <b>Incorporating</b> - 28: 7 <b>Increase</b> - 3:18, 31:15, 33:16, 34:7, 88:16, 98:5, 142:15, 160:13, 173:14 <b>Increased</b> - 61:3, 61:4, 61:21, 88:20, 136:1, 160:15 <b>Increases</b> - 3:22, 4:1, 4:5, 31:3, 101:8 <b>Increasing</b> - 80:15, 96:19, 98:8 <b>Independently</b> - 11 9:2 <b>Indicated</b> - 85:14, 114:4, 130:21 <b>Indicating</b> - 20:1 <b>Indication</b> - 84:23 <b>Indications</b> - 141:1 5 <b>Indicator</b> - 153:10 <b>Individually</b> - 20:4 <b>Induced</b> - 145:12, 146:1 <b>Industrial</b> - 5:13, 7:6, 7:10, 9:17,</p>	<p>20:8 <b>Industry</b> - 14:3, 14:23, 15:11, 20:25, 28:2, 36:16, 36:23, 38:18, 40:22, 59:6, 60:8, 64:5, 71:19, 73:20, 88:12, 93:25, 102:22, 103:3, 106:25, 107:5, 147:14 <b>Ineffective</b> - 180:3 <b>Infallible</b> - 60:6 <b>Inferred</b> - 81:21 <b>Infinitum</b> - 133:8 <b>Inflation</b> - 50:13, 51:7, 98:5, 98:11 <b>Influenced</b> - 70:21 <b>Inherent</b> - 89:3 <b>Initial</b> - 80:14, 123:18 <b>Initially</b> - 56:13 <b>Initials</b> - 13:6 <b>Initiating</b> - 135:11 <b>Innu</b> - 5:20 <b>Input</b> - 7:21 <b>Inputs</b> - 28:25 <b>Inquisitive</b> - 178:2 0 <b>Inserted</b> - 26:3 <b>Insofar</b> - 116:17 <b>Institutions</b> - 12:23 <b>Insufficient</b> - 123:2 1 <b>Insurmountable</b> - 148:10 <b>Integrate</b> - 133:17 <b>Integrated</b> - 52:24, 55:17, 55:19, 58:23, 61:14, 63:15, 65:23, 66:10, 104:17, 126:7 <b>Integrating</b> - 27:11, 48:24, 51:12, 125:8, 125:13 <b>Integration</b> - 52:20, 57:8, 71:15, 72:23, 79:6, 79:12, 129:2, 129:4, 129:14, 129:15 <b>Integrity</b> - 62:21 <b>Intend</b> - 164:16 <b>Intended</b> - 154:21 <b>Intent</b> - 46:20, 82:4, 120:11 <b>Interaction</b> - 72:8, 114:22</p>	<p><b>Interchangeably</b> - 85:20 <b>Interconnected</b> - 2 :20, 5:19, 5:24 <b>Interest</b> - 5:23, 6:1, 64:1, 110:2, 110:3, 112:4, 118:14, 121:7, 161:21, 163:18, 181:21 <b>Interesting</b> - 90:1, 135:5 <b>Interestingly</b> - 41:6 <b>Interests</b> - 5:25 <b>Interim</b> - 3:1, 3:11, 4:21, 4:25, 8:7 <b>Internal</b> - 96:23, 111:24 <b>Internally</b> - 135:2, 150:3, 180:2 <b>Internet</b> - 84:22 <b>Interpret</b> - 25:25 <b>Interrupted</b> - 129:9 <b>Interruption</b> - 54:2 3 <b>Intriguing</b> - 166:9 <b>Introduce</b> - 6:5, 11:19, 12:9, 12:13 <b>Introducing</b> - 12:3 <b>Intrusive</b> - 106:12, 178:20 <b>Intuitively</b> - 88:5 <b>Investment</b> - 34:1, 36:24, 38:12, 60:15, 60:16, 60:22, 61:5, 61:7, 61:16, 62:1, 63:10, 68:11, 68:18, 101:1, 101:6, 101:18, 101:23 <b>Investments</b> - 34:1 8, 59:24, 61:20, 65:23, 68:3, 102:5 <b>Investor</b> - 65:14, 88:9, 161:6 <b>Investors</b> - 120:16 <b>Invitation</b> - 5:3 <b>Invite</b> - 113:25 <b>Involve</b> - 176:19 <b>Involves</b> - 176:20 <b>Island</b> - 2:19, 3:11, 3:25, 5:13, 7:9, 20:7, 124:3, 124:20, 125:5 <b>Isn't</b> - 23:25, 58:1, 62:8, 65:10, 104:21, 124:22, 153:18</p>	<p><b>Isolated</b> - 42:6 <b>Issuances</b> - 24:17 <b>Issue</b> - 24:9, 38:16, 40:14, 42:1, 42:10, 42:13, 43:6, 44:16, 66:18, 70:15, 81:6, 81:17, 94:15, 102:18, 103:12, 103:15, 104:4, 104:9, 104:13, 104:16, 108:10, 109:24, 149:16, 150:3, 162:1, 162:2, 163:25, 166:9 <b>Issued</b> - 2:2 <b>Issues</b> - 3:9, 7:21, 8:3, 9:3, 11:8, 11:23, 16:9, 19:1, 19:5, 20:19, 24:13, 33:3, 42:5, 69:16, 80:3, 90:10, 90:23, 95:17, 103:8, 103:9, 128:8, 141:18, 148:10 <b>Issuing</b> - 38:23 <b>It'</b> - 79:17 <b>It'll</b> - 25:9, 153:21 <b>I've</b> - 1:25, 13:7, 13:10, 14:10, 14:14, 14:18, 15:9, 16:9, 64:4, 83:21, 83:24, 86:1, 86:6, 103:17, 108:8, 134:19, 134:20, 143:11, 147:13, 159:3, 161:24, 172:6, 178:17</p> <p style="text-align: center;"><b>J</b></p> <p><b>Jacqui</b> - 1:16 <b>James</b> - 6:23 <b>January</b> - 3:6, 9:6, 10:10 <b>Jeopardize</b> - 160:8 <b>Jim</b> - 14:1, 23:3 <b>Job</b> - 41:1, 69:13, 72:13, 125:23, 127:8, 136:18, 152:2, 154:3 <b>Jobs</b> - 138:9, 151:10 <b>John</b> - 1:13, 12:7, 12:8, 12:24, 16:12, 17:16, 132:20, 134:13, 147:21 <b>Joining</b> - 1:11</p>	<p><b>Jointly</b> - 20:4 <b>Judgment</b> - 119:18 , 129:23, 130:11, 130:13 <b>Judgments</b> - 32:19 , 33:7 <b>Jump</b> - 37:24, 50:9, 141:24 <b>June</b> - 20:11 <b>Jurisdiction</b> - 61:1 3 <b>Jurisdictions</b> - 105 :7, 169:10 <b>Justifiable</b> - 163:7 <b>Justify</b> - 68:17, 112:4</p> <p style="text-align: center;"><b>K</b></p> <p><b>Kelly</b> - 7:3 <b>Kentucky</b> - 16:19 <b>Kevin</b> - 16:24, 133:12 <b>Key</b> - 14:19, 20:2, 24:13, 32:22, 39:10, 39:18, 39:19, 39:20, 71:3, 73:1, 73:2, 94:15, 146:11, 146:18, 147:1, 151:24 <b>Kilowatt</b> - 3:19, 28:19, 31:13, 49:18 <b>Kinds</b> - 52:9, 52:10, 90:7, 93:22, 106:3, 172:12 <b>Knocking</b> - 136:12 <b>Knowledge</b> - 11:22 , 29:17, 164:13, 164:16 <b>Knowledgeable</b> - 1 11:11 <b>Kozlosky</b> - 72:18</p> <p style="text-align: center;"><b>L</b></p> <p><b>Labour</b> - 49:3, 49:8, 49:9, 90:22, 148:3, 149:11 <b>Labrador</b> - 3:17, 5:17, 5:19, 5:22, 5:24, 6:15, 13:16, 34:4 <b>Lack</b> - 99:12 <b>Large</b> - 16:15, 17:4, 29:15, 38:11, 47:6, 49:6, 51:18, 111:7, 113:8, 141:4, 141:14, 145:10</p>
---	--	---	---	---

<p><b>Largely</b> - 48:24, 106:23  <b>Larger</b> - 41:20, 47:6, 47:8, 142:2  <b>Largest</b> - 83:22  <b>Lasting</b> - 144:15, 144:16  <b>Later</b> - 25:24, 26:6, 34:8, 36:1, 41:19, 51:3, 53:6, 57:3  <b>Lawyer</b> - 82:16, 82:18, 121:2  <b>Layout</b> - 11:9  <b>Lays</b> - 78:18  <b>LCP</b> - 19:7, 27:19, 30:5, 31:25, 33:8, 33:13, 34:2, 35:1, 35:4, 43:23, 48:10, 48:13, 49:4, 50:7, 53:17, 53:24, 55:1, 55:5, 56:10, 58:3, 63:17, 66:7, 80:11, 80:14, 96:5, 101:2, 122:17, 122:19, 146:22, 147:4, 147:5, 147:8, 158:24  <b>Le</b> - 178:1  <b>Lead</b> - 8:20  <b>Leaders</b> - 65:18  <b>Leadership</b> - 71:11  <b>Lean</b> - 132:14  <b>Learn</b> - 172:14  <b>Learned</b> - 74:5, 172:13  <b>Leasing</b> - 120:19, 120:21  <b>Leave</b> - 19:10, 53:7, 75:14, 78:23, 78:24, 78:25, 118:20, 123:20, 147:15, 147:16  <b>Leaving</b> - 77:8, 152:11  <b>Led</b> - 53:16, 170:18  <b>Left</b> - 153:11, 154:3, 156:7  <b>Legal</b> - 82:5, 86:3, 86:13, 86:16, 121:12, 164:16  <b>Legislation</b> - 63:24, 164:17, 164:25, 165:7  <b>Length</b> - 146:7  <b>Lessons</b> - 74:5  <b>Let's</b> - 44:5, 133:17, 137:14,</p>	<p>164:5, 165:16  <b>Letter</b> - 124:5  <b>LETZELTER</b> - 13:2  5, 14:1  <b>Level</b> - 12:15, 15:14, 17:8, 21:18, 27:20, 30:7, 37:7, 37:14, 39:15, 39:17, 39:20, 39:23, 40:1, 41:5, 56:2, 72:19, 73:4, 75:19, 76:12, 77:25, 78:23, 79:19, 79:25, 96:3, 106:4, 121:16, 137:5, 137:7, 140:16, 140:20, 141:8, 141:9, 141:23, 145:9, 150:13, 150:25, 175:12, 176:8, 177:14, 180:14  <b>Levelling</b> - 31:3  <b>Levels</b> - 76:23, 77:10, 78:1, 79:22, 175:15  <b>Liam</b> - 7:3  <b>Liberty</b> - 4:19, 4:21, 8:4, 9:11, 12:5, 12:7, 12:25, 13:8, 15:9, 16:11, 21:1, 87:5  <b>Liberty's</b> - 18:8, 21:9, 24:23  <b>Light</b> - 13:5, 103:20  <b>LIL</b> - 34:12, 147:7, 151:6  <b>Limited</b> - 5:15, 5:17, 5:22, 120:24  <b>Limits</b> - 32:14, 32:20, 161:1, 164:13, 176:10  <b>Line</b> - 34:14, 44:5, 50:15, 51:4, 51:5, 76:17, 76:22, 82:9, 83:6, 83:10, 97:1, 98:7, 98:8, 131:2, 145:11, 157:4  <b>Linear</b> - 166:10  <b>Lines</b> - 15:18, 43:11, 43:17  <b>List</b> - 22:17  <b>Listed</b> - 19:24, 84:25  <b>Listing</b> - 85:11  <b>Lived</b> - 54:3, 71:23</p>	<p><b>Lives</b> - 45:12  <b>Load</b> - 2:20, 2:22  <b>Locate</b> - 118:14  <b>Located</b> - 105:15  <b>Location</b> - 83:17, 139:4  <b>Locations</b> - 128:12  <b>Logical</b> - 22:17, 63:19, 75:4, 112:11, 166:2, 179:22  <b>Long</b> - 74:22, 127:14, 144:14, 144:15, 144:16, 161:11, 162:15, 167:22  <b>Longer</b> - 13:7, 80:21, 127:6  <b>Longest</b> - 120:18  <b>Looked</b> - 23:1, 27:11, 27:13, 27:18, 27:24, 28:1, 31:7, 41:2, 41:4, 45:16, 59:7, 67:25, 72:21, 72:25, 73:4, 73:6, 73:12, 79:14, 83:9, 83:21, 87:19, 89:1, 89:20, 90:14, 91:22, 114:13, 117:22, 127:9, 134:13, 134:14, 136:9, 136:14, 137:24, 138:1, 138:5, 138:8, 138:9, 138:15, 138:24, 139:4, 140:1, 148:6, 148:20, 156:7, 172:6  <b>Looking</b> - 24:3, 28:23, 35:21, 46:9, 71:15, 72:12, 77:17, 80:24, 81:22, 90:16, 92:21, 92:24, 125:24, 126:1, 127:20, 140:5, 142:10, 142:18, 142:23, 153:14, 157:10, 173:12, 174:24, 174:25, 175:3, 177:25  <b>Lose</b> - 143:6, 143:9  <b>Losing</b> - 56:18  <b>Lost</b> - 75:12, 178:15  <b>Lot</b> - 16:12, 29:24, 46:6, 55:9, 55:16,</p>	<p>55:18, 56:8, 77:19, 81:15, 90:3, 90:4, 91:9, 92:8, 94:8, 97:1, 103:5, 104:14, 105:1, 105:5, 105:17, 107:6, 112:20, 112:22, 126:2, 128:7, 128:13, 128:16, 130:4, 132:12, 139:8, 146:16, 147:10, 150:1, 157:21, 164:11, 167:22, 173:4, 178:17, 179:8, 180:25  <b>Lower</b> - 20:23, 39:15, 39:16, 40:13, 73:3, 79:21, 88:21, 95:15, 96:14, 98:23  <div style="border: 1px solid black; text-align: center; width: 100px; margin: 10px auto;">M</div> <b>Madam</b> - 6:10, 6:20, 7:2, 79:4  <b>Madame</b> - 113:21  <b>Magnitude</b> - 29:16  <b>Main</b> - 26:16, 27:8  <b>Mainstream</b> - 55:7  <b>Maintain</b> - 10:3, 40:3, 69:22  <b>Maintained</b> - 8:24  <b>Maintaining</b> - 37:13, 43:14, 70:10, 127:18, 161:21  <b>Maintenance</b> - 20:24, 27:19, 95:16, 175:8  <b>Major</b> - 50:25, 51:8, 53:14, 54:1, 54:20, 77:15, 86:7, 122:9, 123:23  <b>Making</b> - 8:12, 33:7, 50:3, 57:24, 60:20, 65:23, 68:3, 75:20, 76:25, 80:4, 83:2, 91:16, 101:18, 110:9, 129:22, 143:3, 143:15, 169:4, 175:6, 176:1  <b>Manage</b> - 21:24, 98:6, 170:15, 178:9, 178:11, 178:12  <b>Manageable</b> - 170:25</p>	<p><b>Managed</b> - 13:11, 103:17, 150:12, 169:23  <b>Management</b> - 13:4, 13:10, 13:18, 13:23, 13:24, 14:2, 14:22, 15:20, 16:12, 17:10, 17:13, 17:17, 17:19, 21:21, 23:21, 24:10, 51:19, 53:25, 55:11, 74:6, 74:8, 77:17, 78:4, 92:17, 106:2, 123:19, 125:13, 132:16, 138:16, 138:19, 139:1, 147:19, 149:14, 149:23, 150:4, 167:5, 176:15  <b>Manager</b> - 17:13, 141:23, 179:24  <b>Managers</b> - 73:2, 73:4  <b>Manages</b> - 170:17  <b>Managing</b> - 13:17, 72:24, 103:22, 112:19, 112:23  <b>Mandate</b> - 67:2, 70:19, 70:21, 115:6, 115:22, 116:17, 117:14, 118:10, 124:5  <b>Mandates</b> - 117:17  <b>Manitoba</b> - 153:19, 155:4, 155:19, 155:22, 155:25  <b>Many</b> - 24:4, 24:5, 71:21, 73:1, 75:9, 79:21, 90:10, 104:20, 153:21, 153:22  <b>March</b> - 20:11  <b>Margins</b> - 29:3, 36:5, 56:22, 56:24, 60:18, 61:3, 61:21, 61:22, 62:12, 101:9, 104:11, 130:9, 158:16, 159:24, 160:3, 160:13, 160:21, 162:15, 163:10, 166:22, 169:11, 169:18  <b>Mark</b> - 106:16  <b>Market</b> - 2:15, 14:7, 21:1, 23:2, 23:8,</p>
--	---	--	--	---

<p>23:14, 23:23, 38:20, 57:19, 57:25, 59:8, 60:1, 60:19, 64:14, 69:19, 88:12, 99:9, 99:12, 100:4, 101:13, 102:4, 108:20, 111:14, 111:15, 112:14, 113:11, 162:20, 163:22, 163:24, 176:20, 177:3, 180:22, 180:23, 181:14, 181:17  <b>Marketers</b> - 107:25  <b>Marketing</b> - 13:21, 28:3, 102:20, 103:1, 103:6, 109:25, 110:10, 111:13, 123:9, 123:24, 126:18, 166:21, 171:2, 173:21, 174:3, 174:12, 177:20, 179:16  <b>Marketing's</b> - 110:13, 111:6  <b>Marketplace</b> - 101:10, 102:7, 112:1, 112:3, 168:11  <b>Markets</b> - 22:3, 22:20, 40:6, 40:19, 104:15, 111:11, 170:4, 170:12, 170:13, 176:2, 181:2  <b>Markup</b> - 88:14, 88:15  <b>Married</b> - 17:23  <b>Marshall</b> - 115:8  <b>Masa</b> - 98:1  <b>Massive</b> - 68:18  <b>Master's</b> - 17:16  <b>Match</b> - 27:3, 35:6, 82:13, 82:24, 141:10  <b>Material</b> - 85:3, 103:14, 121:15, 142:23, 144:8  <b>Math</b> - 88:25  <b>Mathematics</b> - 17:15  <b>Matters</b> - 10:13, 11:11, 29:25, 110:17  <b>Matured</b> - 29:18  <b>Maureen</b> - 1:15,</p>	<p>8:19, 27:23  <b>Maximizing</b> - 159:24, 180:4  <b>Maximum</b> - 44:15  <b>MBA</b> - 14:5, 14:24  <b>Meaningful</b> - 86:12  <b>Means</b> - 21:21, 34:5, 40:5, 50:17  <b>Meant</b> - 93:15  <b>Measure</b> - 3:14, 142:25, 156:18  <b>Measureable</b> - 138:15  <b>Measured</b> - 62:12, 77:21, 78:2, 84:8, 144:1, 144:5, 144:19, 156:17  <b>Measurement</b> - 83:12, 110:15  <b>Measures</b> - 78:6, 96:15  <b>Medium</b> - 16:4  <b>Meet</b> - 2:19, 40:7, 40:9, 115:7, 117:4  <b>Meeting</b> - 14:20, 114:19  <b>Meetings</b> - 20:7  <b>Megawatts</b> - 112:20  <b>Melting</b> - 49:16, 50:24  <b>Member</b> - 12:13, 12:14, 15:9  <b>Members</b> - 14:20, 71:19, 114:20  <b>Merger</b> - 24:17  <b>Merit</b> - 19:15, 90:11  <b>Met</b> - 8:1, 20:8  <b>Meter</b> - 154:8  <b>Method</b> - 84:10  <b>Methodology</b> - 45:12  <b>Methods</b> - 43:11, 44:4, 44:5, 45:5  <b>Metrics</b> - 78:3, 138:12  <b>MF</b> - 35:8  <b>Michael</b> - 14:21  <b>Million</b> - 25:20, 26:1, 26:6, 26:12, 30:8, 33:15, 33:16, 34:21, 37:11, 37:17, 37:21, 38:8, 38:10, 38:14, 41:7, 80:15, 80:16, 94:5, 96:22, 124:23, 135:20, 136:2, 142:7,</p>	<p>143:19, 143:22  <b>Millions</b> - 48:4  <b>Mindful</b> - 126:8  <b>Mine</b> - 120:23  <b>Minimizing</b> - 171:20  <b>Minister's</b> - 124:5  <b>Minor</b> - 77:15  <b>Missed</b> - 11:18, 178:1  <b>Missing</b> - 136:14  <b>Mission</b> - 51:25, 52:3, 52:6, 52:8, 52:12, 52:14, 52:16, 52:18, 53:8, 67:19, 67:24, 69:2, 117:5  <b>Mistake</b> - 171:6  <b>Mistakenly</b> - 26:3  <b>Mistakes</b> - 179:7  <b>Mistrust</b> - 85:15  <b>Mitigatable</b> - 170:25  <b>Mitigated</b> - 28:13, 170:6  <b>Mitigation</b> - 1:4, 4:10, 18:2, 19:10, 28:9, 29:13, 29:22, 32:9, 32:12, 33:1, 34:11, 35:18, 35:23, 36:17, 37:13, 37:23, 38:15, 41:9, 41:15, 42:23, 42:25, 43:8, 44:3, 44:10, 47:2, 47:8, 47:22, 49:24, 87:9, 98:2, 160:4  <b>Mix</b> - 68:20, 154:24  <b>Mixed</b> - 70:8  <b>Mixes</b> - 69:15  <b>Mixing</b> - 69:8  <b>MMBTU</b> - 155:22  <b>Model</b> - 27:3, 28:9, 28:12, 28:16, 28:17, 28:25, 100:16, 106:14, 129:13, 130:6, 130:7, 130:10, 133:11, 167:14, 170:22, 173:17, 174:10, 178:11  <b>Modelling</b> - 14:10  <b>Moderate</b> - 131:17, 131:19, 133:17  <b>Modest</b> - 56:2, 140:3, 140:11  <b>Monday</b> - 9:15</p>	<p><b>Money</b> - 16:4, 44:14, 47:10, 60:20, 89:7, 91:9, 92:6, 181:5  <b>Monitor</b> - 14:15  <b>Monopolistic</b> - 66:10  <b>Monopoly</b> - 22:25, 58:22, 169:8  <b>Monster</b> - 54:14  <b>Months</b> - 7:12  <b>Moreover</b> - 43:17  <b>Morning</b> - 1:2, 1:25, 6:10, 6:20, 7:2, 7:8, 14:1, 15:8, 16:24, 128:20, 129:12, 136:17, 142:5, 145:2, 159:12, 166:24, 167:1, 182:5, 182:6, 182:7  <b>Mountain</b> - 48:10, 49:15, 50:21  <b>Move</b> - 41:10, 41:20, 51:3, 87:5, 87:22, 108:25, 152:1, 157:24, 167:2, 170:23  <b>Moved</b> - 32:7, 32:11, 136:11, 151:8  <b>Movement</b> - 39:5, 45:19, 149:8  <b>Moving</b> - 98:15, 170:3, 171:4, 171:21  <b>Much</b> - 17:21, 21:22, 24:6, 24:7, 33:21, 36:3, 37:16, 40:16, 44:15, 45:3, 46:8, 50:24, 51:5, 52:23, 62:2, 62:10, 71:23, 76:13, 79:11, 104:8, 105:3, 106:11, 106:17, 106:22, 114:16, 125:2, 132:6, 144:10, 159:1, 170:11, 170:12, 172:23  <b>Multi</b> - 75:22  <b>Multiple</b> - 22:12, 88:10, 128:11  <b>Muskrat</b> - 1:5, 2:4, 2:9, 2:18, 2:25, 3:13, 30:6, 34:3, 35:8, 38:4, 38:9,</p>	<p>48:20, 68:8, 69:23, 69:25, 108:9, 146:12, 157:25  <b>Mutually</b> - 93:7  <b>Myth</b> - 74:8, 74:9</p> <table border="1"> <tr> <td style="text-align: center;">N</td> </tr> </table> <p><b>Nalcor/Hydro</b> - 71:7  <b>Nalcor/Hydro's</b> - 83:5  <b>Nalcor's</b> - 52:5, 58:2, 60:12, 63:17, 66:7, 70:16, 71:16, 76:20, 110:24, 111:18, 115:22, 117:14, 122:14, 122:16, 123:3, 155:6  <b>NARL</b> - 5:15  <b>Narrow</b> - 39:8  <b>Narrower</b> - 116:13  <b>Nation</b> - 5:20  <b>Native</b> - 28:5  <b>Natural</b> - 32:14, 94:17  <b>Navy</b> - 17:3  <b>Near</b> - 25:7  <b>Necessary</b> - 7:15, 8:13, 20:16, 40:20, 80:22  <b>Needed</b> - 44:18, 147:23  <b>Negotiating</b> - 93:25  <b>NEM</b> - 167:2, 167:5, 167:10, 167:15, 167:23, 168:9, 168:11  <b>NEM's</b> - 167:5  <b>Net</b> - 32:10, 46:21  <b>Nevertheless</b> - 36:19, 89:20  <b>New</b> - 26:25, 32:10, 35:9, 35:10, 46:6, 49:11, 49:12, 49:13, 68:18, 73:7, 77:5, 96:11, 107:21, 119:7, 124:14, 132:7, 152:2  <b>Newfoundland</b> - 3:15, 3:16, 4:3, 5:12, 5:16, 6:15, 6:25, 7:4, 7:23, 8:10, 9:16, 13:16, 20:5, 20:15, 27:10, 27:15, 35:10,</p>	N
N					

<p>35:12, 39:1, 46:15, 87:11, 87:13, 88:6, 88:7, 89:8, 89:22, 91:4, 91:5, 93:19, 93:23, 94:12, 94:14, 148:7, 150:1, 154:5, 154:10, 154:12, 154:14, 154:19, 182:6  <b>Newman</b> - 1:12  <b>NH</b> - 35:17  <b>Nice</b> - 1:23  <b>Nimble</b> - 105:13, 105:16, 177:14  <b>Nimbleness</b> - 105:14, 108:23  <b>Nine</b> - 3:19, 31:16  <b>Nobody</b> - 82:3, 112:17, 121:17, 124:9, 127:1, 127:2, 170:16, 177:16, 177:17  <b>Non</b> - 42:18, 44:4, 44:9, 49:3, 49:9, 102:12, 149:1, 168:23, 169:5  <b>Nor</b> - 34:16, 62:19, 62:21, 67:18, 72:6, 94:13  <b>Norm</b> - 39:9, 78:25, 79:1  <b>Normal</b> - 11:14, 50:10, 50:19, 54:22, 98:11, 146:1  <b>North</b> - 65:3  <b>Northeast</b> - 180:25  <b>Note</b> - 34:5, 35:15, 37:22  <b>Noted</b> - 3:11, 3:23, 27:23, 28:6  <b>Notes</b> - 16:5  <b>Notice</b> - 9:6, 71:25, 79:4  <b>Notion</b> - 64:19, 68:12, 106:13, 113:10  <b>Nova</b> - 13:15, 55:8, 173:5, 173:6, 175:22  <b>November</b> - 9:25  <b>Nuclear</b> - 17:2, 17:7, 54:3, 54:16  <b>Numbering</b> - 67:8  <b>Numbers</b> - 33:17, 33:23, 35:6, 38:7, 49:25, 50:4, 67:14,</p>	<p>75:2, 79:1, 79:16, 80:24, 82:24, 88:19, 90:6, 90:8, 90:18, 122:4, 136:20, 139:13, 140:2, 141:19, 141:20, 144:17, 155:25, 156:2, 156:11, 157:15  <div style="border: 1px solid black; width: 100px; height: 15px; margin: 10px auto; text-align: center;">O</div> <b>O&amp;M</b> - 80:14, 177:21  <b>Objective</b> - 134:7  <b>Objectively</b> - 94:16  <b>Obligations</b> - 40:9, 43:20  <b>O'brien</b> - 1:13, 7:1, 7:3  <b>Observations</b> - 117:20  <b>Observe</b> - 46:12, 67:20  <b>Observed</b> - 29:15  <b>Occasionally</b> - 108:1, 121:1, 176:7  <b>Occur</b> - 141:25  <b>October</b> - 9:20, 9:23, 95:23  <b>Offence</b> - 154:21  <b>Offer</b> - 14:16, 120:9  <b>Officer</b> - 17:2, 86:5, 86:13, 154:13  <b>Officers</b> - 82:2, 83:6, 85:20, 86:8, 86:9, 154:15, 154:24  <b>Offices</b> - 7:18, 176:17  <b>Officials</b> - 19:18  <b>Offset</b> - 36:5, 56:24, 104:2, 144:6, 166:23  <b>Offsets</b> - 97:18  <b>Often</b> - 22:11, 40:13, 65:16, 105:6, 132:21  <b>Oil</b> - 118:8, 118:9, 119:23, 119:24  <b>Old</b> - 54:14, 74:17, 107:23, 181:11, 181:12  <b>Omitted</b> - 136:9  <b>Ones</b> - 93:7, 108:20, 170:21  <b>Ongoing</b> - 1:4, 40:8, 124:1</p>	<p><b>Online</b> - 147:22  <b>Open</b> - 64:13  <b>Operate</b> - 22:2, 28:17, 32:6, 58:20, 69:22, 93:21, 104:16, 111:8, 121:16, 170:10, 171:15, 175:1, 175:2, 179:20  <b>Operates</b> - 58:21  <b>Operating</b> - 20:24, 22:9, 22:12, 22:16, 43:16, 52:22, 53:1, 53:18, 57:23, 59:24, 60:17, 60:19, 60:23, 61:17, 63:3, 65:1, 70:9, 86:2, 87:12, 90:21, 95:16, 98:22, 99:19, 101:1, 101:23, 103:17, 108:24, 119:3, 119:18, 128:25, 152:3, 160:22, 161:14, 162:21, 163:21, 165:14, 169:3, 170:24, 175:8, 176:17  <b>Operation</b> - 32:1, 38:5, 39:19, 55:16, 56:4, 58:2, 63:17, 66:7, 67:22, 80:11, 96:6, 96:20, 107:8, 109:1, 112:12, 146:23, 151:6, 154:14, 166:16, 169:5, 169:6, 170:7  <b>Operational</b> - 15:4, 27:6, 27:14, 48:23, 55:5, 82:6, 84:6, 86:10, 87:21, 89:2, 89:5, 116:24, 125:4, 127:18, 127:23, 128:8, 167:23, 173:3  <b>Operationally</b> - 53:13  <b>Operations</b> - 13:24, 15:17, 15:20, 22:14, 27:8, 27:19, 36:24, 39:12, 48:25, 52:10, 53:11, 56:7, 57:9, 61:21, 64:20, 66:11, 90:2, 105:10, 110:13, 110:25, 111:20,</p>	<p>119:15, 124:18, 125:15, 127:6, 167:6, 170:8, 171:5, 172:6, 175:5, 175:10, 176:1, 177:4, 180:13  <b>Operation's</b> - 87:22  <b>Operators</b> - 120:16, 160:25, 170:19  <b>Opinion</b> - 54:11, 98:21, 104:7, 106:13  <b>Opportunities</b> - 2:13, 4:11, 20:22, 23:15, 26:22, 27:2, 27:4, 27:5, 27:21, 29:9, 29:12, 29:18, 31:11, 31:23, 32:5, 45:23, 47:20, 70:20, 87:9, 123:10  <b>Opposed</b> - 51:7, 79:20, 82:5, 157:16, 180:22  <b>Opposite</b> - 157:17  <b>Optimization</b> - 55:3  <b>Optimizing</b> - 23:1, 125:15  <b>Optimum</b> - 117:1  <b>Option</b> - 111:22, 112:11  <b>Options</b> - 1:5, 2:3, 2:8, 2:24, 19:16, 31:4, 46:6, 69:10  <b>Order</b> - 13:11, 13:22, 31:15, 91:8, 141:24  <b>Orders</b> - 164:18, 164:25, 165:7  <b>Ordinarily</b> - 34:17, 36:5, 50:18  <b>Organic</b> - 15:21  <b>Organization</b> - 13:18, 17:18, 22:17, 51:20, 52:16, 53:17, 55:24, 73:7, 73:10, 74:11, 82:10, 82:11, 82:23, 83:21, 105:23, 110:17, 110:22, 112:24, 114:5, 117:2, 117:4, 124:14, 124:15, 132:14, 132:23, 134:14, 139:7, 139:14, 139:16,</p>	<p>140:7, 140:13, 140:14, 143:6, 146:11, 147:9, 150:8, 151:2, 151:3, 170:13, 176:14, 179:4, 179:17, 180:1  <b>Organizational</b> - 22:7, 27:7, 70:22, 71:3, 137:7, 147:24  <b>Organizations</b> - 53:2, 53:9, 54:8, 57:5, 82:17, 111:7, 124:25, 125:21, 133:3, 133:4, 133:15, 134:15, 137:22, 137:25  <b>Organizes</b> - 139:15  <b>Oriented</b> - 74:7  <b>Originally</b> - 16:1  <b>Otherwise</b> - 91:20, 121:12, 148:3, 160:19  <b>Ours</b> - 35:14, 156:25  <b>Outage</b> - 17:12, 160:14  <b>Outline</b> - 43:8, 102:24  <b>Outreach</b> - 180:21  <b>Outright</b> - 87:11  <b>Overly</b> - 72:5, 178:20  <b>Overnight</b> - 71:25  <b>Oversee</b> - 23:4  <b>Overseeing</b> - 14:16  <b>Oversees</b> - 170:8  <b>Oversight</b> - 61:25, 62:15, 65:7, 65:10, 65:11, 66:17, 162:22, 163:21, 172:18, 173:3  <b>Overturn</b> - 165:22  <b>Overview</b> - 12:10, 12:15  <b>Own</b> - 21:10, 36:20, 40:8, 42:1, 57:21, 78:15, 87:10, 94:19, 111:18, 111:24, 176:21  <b>Owned</b> - 23:25, 112:18, 161:5, 161:6  <b>Owner's</b> - 68:6  <b>Ownership</b> - 66:7, 120:12, 121:6,</p>
---	--	---	---	---

<p>161:8</p> <p style="text-align: center;"><b>P</b></p> <p><b>PA</b> - 15:3  <b>Package</b> - 152:7  <b>Paid</b> - 3:15, 34:25, 104:18, 126:4, 162:16  <b>Pair</b> - 84:18  <b>Panel</b> - 1:9, 1:11, 12:4, 17:25, 71:20, 113:16, 113:24  <b>Papers</b> - 9:7  <b>Parallel</b> - 57:5, 75:7, 124:25  <b>Participants</b> - 164:9  <b>Participated</b> - 24:11  <b>Participation</b> - 8:16, 23:2  <b>Particularly</b> - 8:19, 27:1, 30:14, 145:17  <b>Parties</b> - 4:8, 5:7, 6:4, 7:13, 7:20, 8:1, 8:8, 8:14, 9:13, 9:24, 10:4, 10:25, 11:6, 11:7, 24:12, 72:9  <b>Partner</b> - 15:1  <b>Partnership</b> - 5:16  <b>Party</b> - 20:10, 104:2  <b>Pass</b> - 63:13  <b>Passages</b> - 25:24  <b>Passed</b> - 61:1, 169:7  <b>Passes</b> - 59:3  <b>Passing</b> - 165:13  <b>Past</b> - 7:12, 46:12, 46:19  <b>Path</b> - 48:22, 50:10, 74:24  <b>Paul</b> - 7:9  <b>Pay</b> - 19:19, 38:20, 44:6, 57:19, 57:20, 58:12, 99:18, 100:6  <b>Paying</b> - 61:6, 88:17, 162:25  <b>Payment</b> - 68:21  <b>Payments</b> - 33:12, 38:3, 38:6, 43:20, 44:22, 45:25, 46:14  <b>Pays</b> - 32:16, 58:7  <b>Pedantic</b> - 84:5  <b>Peers</b> - 78:12, 171:4</p>	<p><b>Pegged</b> - 38:19  <b>Pennsylvania</b> - 13:2, 13:5, 103:20  <b>Penny</b> - 103:23, 103:24, 104:1  <b>People</b> - 57:20, 59:1, 59:6, 72:15, 72:24, 72:25, 73:1, 75:10, 77:16, 77:20, 79:25, 82:5, 125:3, 125:4, 125:22, 128:15, 128:20, 134:19, 136:24, 137:3, 137:11, 137:14, 137:16, 139:5, 139:11, 140:2, 141:6, 141:8, 142:22, 143:13, 143:22, 145:11, 147:1, 147:11, 147:15, 153:15, 154:3, 154:8, 157:18, 157:20, 157:22, 162:16, 172:8  <b>People's</b> - 78:2  <b>Perceived</b> - 88:11  <b>Percent</b> - 34:3, 34:13, 37:1, 37:2, 37:3, 37:9, 37:14, 39:3, 39:24, 39:25, 40:11, 40:13, 41:5, 41:14, 71:24, 76:13, 130:22, 131:12, 131:15, 131:18, 131:23, 132:2, 132:8, 132:9, 132:18, 133:6, 134:7, 140:6  <b>Percentage</b> - 53:3, 110:20  <b>Perfect</b> - 74:8, 76:2, 89:19, 153:19  <b>Performance</b> - 55:4, 125:20  <b>Performed</b> - 129:21  <b>Performing</b> - 179:9  <b>Perhaps</b> - 151:18  <b>Period</b> - 2:11, 21:20, 26:2, 26:7, 26:13, 30:11, 30:13, 30:20, 37:18, 37:19, 38:9, 49:21, 80:1, 80:7, 80:19, 80:22, 142:15,</p>	<p>142:16, 144:14, 144:17, 160:24  <b>Periodic</b> - 175:25, 176:12  <b>Permanent</b> - 146:19  <b>Permit</b> - 171:2  <b>Person</b> - 74:7, 75:12, 75:13, 151:8, 151:11, 151:13  <b>Personal</b> - 12:10  <b>Personality</b> - 158:5, 158:9, 158:17  <b>Personnel</b> - 20:6, 73:13  <b>Persons</b> - 4:8, 9:18  <b>Person's</b> - 75:16  <b>Perspective</b> - 40:15, 47:17, 51:24, 55:4, 60:9, 60:11, 61:23, 63:6, 63:19, 76:6, 84:7, 86:2, 86:3, 87:22, 88:24, 92:5, 99:8, 101:3, 101:25, 125:16, 126:7, 140:18, 171:7  <b>Perspectives</b> - 9:3, 27:20, 72:15, 129:22  <b>Phase</b> - 1:3, 8:25, 19:1, 19:4, 20:13, 21:5, 21:6, 26:23, 29:16, 29:17, 29:18, 30:19, 31:5, 54:4, 80:10, 87:19, 88:25, 96:5, 126:25, 127:4, 130:20, 135:23, 136:1  <b>Phasing</b> - 151:19  <b>Phenomenon</b> - 161:18  <b>Phones</b> - 11:4  <b>Pick</b> - 89:9, 132:25, 137:14  <b>Picked</b> - 49:18  <b>Picking</b> - 40:24  <b>Picks</b> - 89:5  <b>Picture</b> - 48:3, 140:5, 140:15, 140:16  <b>Piece</b> - 75:10, 159:22  <b>Pipsqueaks</b> - 179:25</p>	<p><b>Place</b> - 58:14, 63:20, 78:6, 80:8, 99:14, 109:3, 149:11, 164:19, 165:25  <b>Placed</b> - 130:8  <b>Places</b> - 76:19, 107:22, 180:14  <b>Plan</b> - 21:24, 54:21  <b>Planned</b> - 32:8, 91:9, 126:4  <b>Planning</b> - 89:17, 119:3, 125:14  <b>Plans</b> - 111:24  <b>Plant</b> - 14:11, 17:14, 160:12, 160:19, 160:25, 161:1, 161:15  <b>Plants</b> - 17:1, 54:5, 161:5, 161:6, 162:24  <b>Play</b> - 174:17  <b>Players</b> - 181:15  <b>Pleasure</b> - 12:19  <b>Points</b> - 30:9, 100:19, 102:10, 109:18, 174:7  <b>Policies</b> - 106:2  <b>Policy</b> - 14:6, 33:3, 36:10, 46:24, 64:1, 171:2, 171:14  <b>Pool</b> - 30:1, 30:4  <b>Poorly</b> - 170:16, 170:17  <b>Population</b> - 154:9  <b>Porter</b> - 7:8  <b>Portfolio</b> - 23:1  <b>Portion</b> - 16:14, 35:3, 35:8, 35:11, 35:12, 35:17, 35:18, 46:14, 57:18, 106:11, 116:10, 174:1  <b>Portions</b> - 30:3  <b>Posed</b> - 54:5  <b>Position</b> - 32:18, 44:12, 74:12, 75:16, 77:8, 143:9, 150:9, 151:8, 179:1  <b>Positions</b> - 53:4, 53:5, 72:22, 72:24, 73:12, 78:4, 79:22, 84:24, 144:6, 148:13, 148:16, 148:25  <b>Possibilities</b> - 69:11</p>	<p><b>Post</b> - 24:17  <b>Posted</b> - 10:16, 10:18  <b>Pot</b> - 31:1, 41:20, 44:14, 44:25, 47:6, 47:7, 47:8  <b>Potential</b> - 2:23, 27:13, 29:13, 31:11, 31:18, 37:11, 38:15, 41:17, 43:7, 45:24, 51:11, 71:15, 87:7, 87:8, 90:3, 94:1, 94:4, 97:18, 102:2, 121:3, 160:4, 161:17  <b>Potentially</b> - 31:6, 42:25, 101:5  <b>Potentials</b> - 92:19  <b>Powerful</b> - 107:23  <b>Power's</b> - 39:1, 98:19, 154:13, 182:6  <b>PPA</b> - 43:18, 44:7  <b>PPL</b> - 120:23  <b>Practical</b> - 45:7, 103:13, 156:4  <b>Practice</b> - 36:15, 41:18, 100:12, 144:8  <b>Practices</b> - 15:2, 20:25, 28:2, 94:19, 102:21  <b>Precedent</b> - 133:22  <b>Precise</b> - 33:18, 33:20, 136:25  <b>Precision</b> - 144:20  <b>Preferred</b> - 38:13  <b>Preliminary</b> - 3:2, 4:22, 95:10  <b>Premise</b> - 94:9  <b>Preparing</b> - 123:9, 124:19, 124:20  <b>Prescriptive</b> - 72:6  <b>Present</b> - 5:5, 6:4, 6:7, 9:12  <b>Presentation</b> - 9:11, 9:14, 9:21, 11:20, 18:13, 117:13  <b>Presentations</b> - 9:9, 9:15, 9:17  <b>Presented</b> - 10:17, 27:4, 104:12, 116:4, 135:23  <b>President</b> - 12:7, 15:15, 15:16, 85:10, 85:23  <b>Presidents</b> - 81:19,</p>
---	--	--	--	--

<p>82:12, 85:6  <b>Pressing</b> - 126:8  <b>Presumably</b> - 139:24  <b>Presumed</b> - 62:22  <b>Presumption</b> - 52:13  <b>Prevalent</b> - 104:23  <b>Previous</b> - 115:5  <b>Previously</b> - 114:7  <b>Price</b> - 57:19  <b>Prices</b> - 23:12, 57:25  <b>Pricewise</b> - 92:3, 92:12  <b>Principal</b> - 13:17, 19:25, 32:4, 39:14, 56:11, 57:6, 57:7, 160:17  <b>Principally</b> - 13:15, 51:7, 98:10  <b>Principle</b> - 47:5, 58:6  <b>Principles</b> - 36:4, 163:3  <b>Prior</b> - 114:18, 176:6, 177:11  <b>Private</b> - 24:12, 107:1, 107:5  <b>Privately</b> - 112:18  <b>Privilege</b> - 12:20  <b>Problem</b> - 18:14, 54:20, 56:11, 59:14, 68:9, 87:25, 141:25, 147:4  <b>Problematic</b> - 57:2  <b>Problems</b> - 141:17, 167:22  <b>Procedures</b> - 138:1, 138:6  <b>Proceed</b> - 68:15, 69:6, 95:4  <b>Proceedings</b> - 10:19, 10:23, 11:1, 24:13  <b>Processes</b> - 23:10, 93:18, 133:2, 138:1, 138:6, 174:20  <b>Processing</b> - 176:15  <b>Procurement</b> - 17:12  <b>Produce</b> - 41:15, 44:10, 50:14, 51:5, 52:21, 56:22, 57:10, 61:18, 72:5,</p>	<p>76:2, 88:16, 94:3, 94:22, 121:10, 133:15, 141:2, 160:14  <b>Produced</b> - 44:3, 53:15, 79:12, 104:6, 114:23  <b>Produces</b> - 41:16, 60:17, 62:1, 159:16, 178:4  <b>Producing</b> - 38:13, 49:11, 57:4, 62:12, 62:14, 67:21  <b>Production</b> - 181:9  <b>Professional</b> - 14:25, 148:12  <b>Profit</b> - 100:2  <b>Profits</b> - 158:15  <b>Program</b> - 140:23, 165:19  <b>Programs</b> - 92:11, 105:22, 170:11  <b>Progress</b> - 94:8  <b>Prohibitive</b> - 179:5, 179:6  <b>Project</b> - 1:6, 2:5, 2:9, 2:19, 3:1, 3:13, 3:21, 17:13, 17:18, 20:24, 95:15, 98:23, 147:11, 147:14, 147:22, 164:7, 166:17  <b>Projected</b> - 3:17, 3:18, 4:5  <b>Projections</b> - 49:24, 175:11  <b>Projects</b> - 13:17, 54:9, 68:5, 124:6  <b>Promising</b> - 90:14, 94:7  <b>Promote</b> - 71:8, 166:15  <b>Promoting</b> - 71:5  <b>Proper</b> - 22:18, 35:20, 95:5, 144:13, 170:13  <b>Properly</b> - 73:25  <b>Proportion</b> - 56:3  <b>Propose</b> - 76:16, 76:17, 93:4, 166:3, 174:10  <b>Proposed</b> - 93:6  <b>Proposing</b> - 178:3  <b>Protected</b> - 169:19, 170:7, 170:9  <b>Provide</b> - 5:4, 7:20, 9:1, 14:18, 22:15,</p>	<p>46:25, 57:17, 57:21, 89:16, 99:10, 109:4, 163:22  <b>Provided</b> - 27:18, 85:4, 85:5, 137:18, 138:16  <b>Provider</b> - 23:7  <b>Providers</b> - 22:25  <b>Provides</b> - 163:19  <b>Providing</b> - 14:13, 31:3, 53:24, 89:12  <b>Province</b> - 3:10, 9:7, 12:23, 27:10, 27:25, 30:3, 32:18, 34:7, 36:10, 38:6, 40:17, 42:1, 42:4, 42:11, 42:21, 42:24, 44:5, 44:13, 44:17, 44:20, 45:3, 46:10, 46:22, 47:9, 60:2, 69:18, 71:10, 100:14, 102:3, 118:2, 118:13, 118:15, 120:6, 121:7, 154:6, 171:1, 171:8  <b>Provinces</b> - 13:14, 55:9  <b>Province's</b> - 36:13, 39:2, 40:25, 42:6, 42:16, 42:17, 44:24, 47:16, 171:14  <b>Provincial</b> - 19:12, 19:18, 29:24, 31:22, 31:24, 41:24, 42:16, 46:13, 122:10  <b>Provision</b> - 27:9  <b>Proxy</b> - 38:24  <b>Prudence</b> - 174:14  <b>PSEG</b> - 17:5  <b>Public</b> - 1:3, 1:8, 5:6, 8:24, 9:1, 10:18, 13:3, 63:25  <b>Published</b> - 5:2, 9:7  <b>Pull</b> - 159:9  <b>Pulp</b> - 5:14  <b>Punt</b> - 164:14  <b>Purchase</b> - 33:10  <b>Purchases</b> - 93:19, 102:23  <b>Purchasing</b> - 93:14, 95:4  <b>Purposed</b> - 42:5</p>	<p><b>Pursue</b> - 45:4, 53:7, 71:1, 102:4  <b>Pursued</b> - 122:11  <b>Pursuing</b> - 69:18, 122:9  <b>Push</b> - 160:25  <b>Puts</b> - 66:8  <b>Putting</b> - 73:9, 165:5</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> <p><b>Q</b></p> </div> <p><b>Qualifications</b> - 21:9, 21:13  <b>Quality</b> - 94:19  <b>Quantifying</b> - 143:4  <b>Quarters</b> - 35:3  <b>Questioning</b> - 65:18, 113:19  <b>Quick</b> - 97:14  <b>Quickly</b> - 10:13  <b>Quote</b> - 128:5</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> <p><b>R</b></p> </div> <p><b>Raise</b> - 175:14  <b>Raised</b> - 11:23  <b>Raising</b> - 16:4, 166:8  <b>Randall</b> - 15:24  <b>Randy</b> - 23:14, 164:11  <b>Range</b> - 3:18, 16:21, 23:14, 30:7, 38:8, 38:13, 42:21, 45:15, 48:5, 69:4, 72:1, 73:20, 75:6, 80:16, 83:25, 94:6, 112:20, 131:14, 131:17  <b>Ranges</b> - 45:16, 45:17  <b>Rank</b> - 163:13  <b>Ranked</b> - 163:12  <b>Rare</b> - 62:22  <b>Rate</b> - 1:4, 2:24, 3:12, 4:1, 4:5, 4:10, 18:2, 29:13, 29:22, 31:3, 31:18, 32:9, 33:1, 34:14, 35:16, 38:24, 39:4, 39:7, 40:16, 43:8, 47:2, 47:7, 47:22, 49:14, 50:10, 50:13, 87:8, 88:16, 88:19, 98:9, 101:3, 101:7, 109:9, 131:20,</p>	<p>135:8, 143:5, 160:4, 173:9, 173:10, 173:13, 174:25, 175:6, 175:20, 177:7  <b>Ratepayers</b> - 6:1  <b>Rates</b> - 2:5, 2:10, 3:15, 28:14, 31:9, 31:12, 36:22, 40:12, 43:2, 43:18, 46:21, 47:23, 50:18, 51:1, 51:8, 58:24, 87:25, 99:23, 101:17, 109:15, 126:9, 126:13, 162:4, 166:23, 175:7  <b>Rather</b> - 40:24, 49:10, 114:13  <b>Ratings</b> - 24:9, 32:16  <b>Ratios</b> - 78:22, 83:3, 157:11  <b>Re</b> - 55:2  <b>Reach</b> - 37:8, 181:3  <b>Reached</b> - 44:12  <b>Reaction</b> - 145:9  <b>Readers</b> - 154:8  <b>Ready</b> - 152:1  <b>Realistic</b> - 75:3, 76:7, 95:7  <b>Realistically</b> - 73:10  <b>Realtime</b> - 177:15  <b>Rearrangements</b> - 30:25  <b>Reason</b> - 67:18, 81:20, 84:5, 85:14, 87:20, 99:5, 100:17, 120:15, 127:18, 127:23, 136:6, 163:7  <b>Reasonable</b> - 4:10, 45:17, 45:18, 71:18, 88:14, 111:9, 111:23, 175:7  <b>Reasonableness</b> - 27:21  <b>Reasonably</b> - 45:11, 121:8, 140:15, 144:16  <b>Reasons</b> - 34:9, 53:19, 57:3, 101:22  <b>Rebate</b> - 45:24, 47:1  <b>Received</b> - 10:19,</p>
---	--	---	--	--

<p>18:4, 20:14  <b>Recent</b> - 2:25, 84:21  <b>Recently</b> - 43:12, 166:24  <b>Recognize</b> - 36:12, 55:5, 67:24, 79:18, 80:8, 86:11, 144:15  <b>Recognized</b> - 54:1, 141:22, 170:2  <b>Recognizing</b> - 30:2, 33:21  <b>Recommend</b> - 94:25, 100:2, 100:5, 171:11  <b>Recommendation</b> - 51:15  <b>Recommended</b> - 153:9, 178:24  <b>Reconvene</b> - 86:22, 182:4  <b>Recorded</b> - 10:20  <b>Recording</b> - 11:1, 11:6  <b>Recovered</b> - 43:16, 165:24  <b>Recovery</b> - 101:15  <b>Reduce</b> - 2:4, 2:8, 20:23, 27:21, 31:12, 47:23, 96:9, 96:15, 142:16  <b>Reduced</b> - 108:14, 144:6  <b>Reducing</b> - 89:4, 92:7, 96:25  <b>Reduction</b> - 49:14, 49:17, 51:24, 75:6, 76:18, 77:15, 88:23, 92:23, 122:3, 125:10, 133:6, 133:17, 133:21, 134:24, 134:25, 135:3, 139:17, 140:3, 140:6, 140:11, 142:7  <b>Reductions</b> - 31:19, 71:24, 76:10, 76:11, 77:20, 77:23, 78:1, 80:24, 93:1, 96:21, 97:5, 128:24, 130:21, 130:25, 131:2, 131:9, 131:16, 132:6, 132:17, 135:20, 136:16, 139:20, 142:12,</p>	<p>143:16, 146:21, 149:4, 150:10, 151:2  <b>Redundancies</b> - 140:4  <b>Redundancy</b> - 57:6, 139:18  <b>Redundant</b> - 72:23  <b>Referenced</b> - 5:8  <b>References</b> - 26:10  <b>Referred</b> - 28:4, 167:3  <b>Refers</b> - 25:24  <b>Refine</b> - 26:24, 150:12  <b>Refined</b> - 150:15, 150:18, 150:23  <b>Refinements</b> - 151:16  <b>Refining</b> - 5:15  <b>Reflect</b> - 110:14  <b>Reflects</b> - 131:14  <b>Registered</b> - 14:25  <b>Regular</b> - 99:5, 173:9  <b>Regulate</b> - 63:20, 99:8, 106:22, 163:2, 163:3  <b>Regulated</b> - 14:17, 22:10, 22:13, 54:13, 56:7, 56:11, 64:5, 64:20, 65:24, 98:20, 98:24, 100:7, 102:11, 102:12, 104:1, 104:3, 106:7, 106:8, 106:16, 108:25, 109:5, 165:6, 168:21, 168:22, 168:23  <b>Regulated/Unregulated</b> - 57:11  <b>Regulating</b> - 104:11, 105:22, 106:15  <b>Regulation</b> - 58:14, 60:1, 60:10, 62:24, 63:7, 63:16, 65:20, 99:13, 100:22, 105:11, 106:5, 106:19, 107:19, 107:20, 108:5, 108:13, 127:6, 157:25, 158:2, 162:7, 163:5, 163:8, 163:15, 163:16, 163:19,</p>	<p>163:24, 164:5, 170:7, 177:20, 177:21, 178:3, 178:5, 178:8, 178:9, 178:11, 178:12, 178:18, 179:10  <b>Regulations</b> - 58:19, 103:18  <b>Regulator</b> - 62:20, 62:21  <b>Regulators</b> - 179:8  <b>Regulatory</b> - 13:4, 27:24, 36:4, 59:2, 59:4, 63:25, 66:17, 98:17, 103:18, 103:21, 126:17, 128:9, 130:9, 162:22, 172:18, 173:17, 174:13, 178:23, 179:2, 179:3, 179:4  <b>Relate</b> - 31:9  <b>Relation</b> - 4:24, 10:14, 115:20  <b>Relationship</b> - 43:15  <b>Relationships</b> - 22:1, 22:5  <b>Relative</b> - 19:7, 78:20, 110:16, 146:1, 148:6, 163:9  <b>Released</b> - 9:9  <b>Reliability</b> - 61:18, 91:22, 91:23, 91:25, 92:5, 127:12, 160:9, 161:21, 163:22  <b>Reliable</b> - 161:15  <b>Reliably</b> - 140:11, 162:24  <b>Rely</b> - 40:6, 62:18, 62:20  <b>Remain</b> - 22:24, 37:14, 74:12, 150:9  <b>Remaining</b> - 2:20, 80:25  <b>Remembering</b> - 105:8  <b>Reminded</b> - 133:12  <b>Removed</b> - 96:18  <b>Removes</b> - 165:23  <b>Repeated</b> - 132:17  <b>Repeating</b> - 47:14  <b>Repercussions</b> - 59:17  <b>Report</b> - 2:3, 3:2,</p>	<p>3:6, 3:12, 4:25, 9:5, 10:8, 18:5, 24:21, 24:23, 25:25, 26:6, 26:16, 26:17, 29:10, 36:9, 43:6, 45:22, 80:13, 81:8, 85:7, 85:15, 85:21, 91:22, 91:25, 109:25, 116:3, 117:12, 126:25, 127:17, 128:5, 128:7, 128:12, 130:20, 136:17, 152:15, 158:3, 159:22, 162:9, 172:24, 173:19  <b>Reported</b> - 21:4, 26:17  <b>Reporter</b> - 141:7  <b>Reporting</b> - 75:10  <b>Reports</b> - 4:21, 4:23, 8:4, 8:7, 81:23, 84:17, 84:21, 84:25, 121:1  <b>Representatives</b> - 12:5, 19:13, 20:9  <b>Represented</b> - 6:2  <b>Reproductions</b> - 79:25  <b>Request</b> - 5:3, 9:21  <b>Requested</b> - 9:18  <b>Requests</b> - 5:7, 7:23, 7:25, 8:12  <b>Require</b> - 164:25  <b>Required</b> - 2:19, 3:4, 5:1, 5:7, 7:15, 8:14, 9:5, 10:2, 11:10, 18:8, 34:24, 40:18, 85:7, 121:1, 121:2  <b>Requirement</b> - 28:21, 55:11, 100:6  <b>Requirements</b> - 27:2, 28:9, 28:16, 28:18, 29:5, 36:6, 73:13, 73:18, 73:25, 77:18, 90:7, 124:10  <b>Requires</b> - 22:16, 23:10, 55:5  <b>Requiring</b> - 176:5  <b>Research</b> - 85:12, 85:14  <b>Residents</b> - 12:22  <b>Resolve</b> - 33:3  <b>Resort</b> - 23:7  <b>Resource</b> - 22:7,</p>	<p>67:3, 81:2, 124:9, 132:16, 151:24  <b>Resources</b> - 27:8, 51:21, 56:2, 56:3, 69:8, 71:11, 76:12, 76:21, 76:23, 87:23, 92:23, 111:22, 121:8, 121:12, 121:16, 124:24, 140:17, 146:17, 146:18, 147:23  <b>Respect</b> - 2:13, 3:3, 24:8, 29:2, 32:4, 35:19, 43:9, 45:10, 46:11, 49:8, 52:3, 54:24, 58:21, 59:12, 60:13, 65:2, 66:11, 79:1, 81:9, 86:12, 90:13, 90:17, 98:18, 101:2, 102:22, 106:6, 108:9, 109:24, 131:2, 149:11, 150:1, 166:11  <b>Respected</b> - 105:9  <b>Respecting</b> - 52:11  <b>Respond</b> - 7:16, 9:4, 70:23, 74:3, 81:11, 83:14, 113:24  <b>Responded</b> - 7:22, 7:24, 81:16  <b>Responding</b> - 5:6, 8:11  <b>Response</b> - 36:8, 54:25, 67:4  <b>Responsibilities</b> - 21:25, 23:7, 82:5, 82:6, 86:16, 89:10, 123:24  <b>Responsibility</b> - 1:10, 15:17, 27:14, 68:20, 70:9, 86:3, 87:13, 87:14, 89:2, 89:6, 101:20, 107:10, 119:15  <b>Responsible</b> - 15:19, 16:3, 28:1, 53:17, 61:6, 62:10, 73:3, 109:6, 110:19, 151:12, 160:21, 161:9, 161:13  <b>Restrain</b> - 165:12  <b>Restrains</b> - 165:11  <b>Restrict</b> - 93:22,</p>
--	---	--	--	---

<p>118:20  <b>Restrictions</b> - 94:2                  2  <b>Restructured</b> - 23:                  6  <b>Restructuring</b> - 15:                  6, 22:22, 74:2,                  167:21  <b>Result</b> - 4:9, 61:22,                  88:24, 101:18,                  110:8, 112:8,                  115:24, 175:4,                  179:3  <b>Resulted</b> - 157:12  <b>Resulting</b> - 154:24  <b>Results</b> - 28:7,                  72:6, 87:16,                  135:23, 144:21  <b>RESUME</b> - 86:25  <b>Retail</b> - 28:14,                  56:14, 90:13, 90:17  <b>Retain</b> - 39:11,                  121:6  <b>Retained</b> - 117:1  <b>Retire</b> - 151:20  <b>Retirement</b> - 143:7                  , 152:7  <b>Retrieval</b> - 1:23  <b>Return</b> - 34:3,                  34:12, 34:15,                  36:23, 38:25, 39:1,                  39:14, 39:21,                  39:24, 40:1, 44:10,                  44:16, 54:22,                  60:16, 61:5, 63:5,                  88:2, 101:6  <b>Returned</b> - 56:24  <b>Returning</b> - 38:16  <b>Returns</b> - 34:6,                  34:17, 36:21,                  37:12, 37:14,                  38:18, 38:19,                  62:13, 63:11,                  101:16, 104:6,                  108:15, 109:5,                  109:11  <b>Revenue</b> - 2:12,                  27:2, 28:8, 28:16,                  28:18, 28:21, 29:4,                  36:6, 97:18, 100:6,                  160:25, 175:10  <b>Revenues</b> - 28:11,                  29:2, 40:10, 104:5,                  110:16, 110:21,                  175:4, 175:20  <b>Reverse</b> - 91:8,                  141:17</p>	<p><b>Reviewed</b> - 29:12,                  43:12, 59:7, 103:24  <b>Reviewing</b> - 97:12  <b>Reward</b> - 101:13,                  162:3  <b>Rewards</b> - 169:3  <b>RFP</b> - 112:2, 112:5,                  180:23  <b>Rise</b> - 50:11, 50:12  <b>Risk</b> - 14:9, 42:14,                  47:14, 57:22,                  57:23, 57:24,                  63:12, 68:3, 68:6,                  68:10, 75:11, 89:9,                  96:19, 103:11,                  106:1, 108:16,                  111:21, 168:1,                  168:9, 168:10,                  168:21, 168:23,                  170:14, 170:15,                  171:5, 171:9,                  171:13, 171:20,                  172:2, 175:15,                  176:2, 176:14,                  176:20  <b>Riskier</b> - 171:3,                  171:15  <b>Risks</b> - 24:16, 74:1,                  90:9, 167:14,                  169:3, 169:18,                  169:22, 170:1,                  170:4, 170:5,                  170:6, 170:18,                  170:23, 170:25,                  172:13  <b>Risky</b> - 105:17  <b>River</b> - 16:20  <b>Robustly</b> - 106:16  <b>Rockies</b> - 48:17  <b>Role</b> - 8:20, 15:16,                  63:23, 67:3,                  124:10, 126:5,                  129:21  <b>Room</b> - 6:7, 11:8,                  43:13, 108:25,                  172:3  <b>Round</b> - 33:22  <b>Run</b> - 30:20, 86:17,                  108:1, 124:25,                  127:14, 160:12,                  161:12, 162:24,                  179:4  <b>Running</b> - 180:22  <b>Rural</b> - 107:2,                  112:25</p>	<p style="text-align: center;"><b>S</b></p> <p><b>Sacrificing</b> - 71:2  <b>Safely</b> - 140:10  <b>Salaries</b> - 142:8  <b>Salary</b> - 79:24  <b>Sales</b> - 2:15, 21:1,                  28:4, 28:5, 29:3,                  30:6, 35:2, 35:13,                  35:21, 45:24,                  46:14, 56:23,                  57:24, 60:18,                  60:19, 60:21, 61:4,                  61:19, 62:13,                  100:4, 101:8,                  101:16, 102:23,                  104:18, 105:22,                  109:5, 109:12,                  110:21, 155:25,                  158:16, 161:13,                  169:5  <b>Sanity</b> - 77:11,                  78:10, 134:17,                  153:8, 157:9  <b>Sat</b> - 86:6  <b>Satisfied</b> - 45:11  <b>Save</b> - 125:21  <b>Savings</b> - 2:12,                  49:11, 57:10, 67:22,                  70:20, 71:1, 79:11,                  80:15, 87:8, 89:14,                  90:3, 97:13, 97:17,                  116:22, 117:5,                  142:7, 142:19,                  142:24, 143:20,                  146:8  <b>Saw</b> - 20:17, 77:7,                  81:2, 89:20, 90:2,                  91:6, 92:18, 94:5,                  94:6, 96:14, 97:16,                  110:14, 136:10,                  141:18  <b>Scale</b> - 152:4  <b>Scared</b> - 172:4  <b>Scaring</b> - 147:8  <b>Scenario</b> - 169:20  <b>Schedule</b> - 8:23,                  9:8, 9:25, 10:4  <b>Scheduled</b> - 9:14  <b>Schedules</b> - 54:7  <b>Sciences</b> - 17:16  <b>Scotia</b> - 13:15,                  55:8, 173:5, 173:6,                  175:23  <b>Screen</b> - 25:10,                  25:12, 174:8  <b>Searches</b> - 84:22  <b>Seat</b> - 26:21</p>	<p><b>Seated</b> - 1:15, 6:4,                  12:4  <b>Second</b> - 30:23,                  31:1, 32:13, 34:10,                  35:2, 91:23, 92:13,                  152:17  <b>Secondarily</b> - 32:1,                  92:23, 92:24  <b>Secondly</b> - 78:22  <b>Secretary</b> - 1:18,                  10:22, 11:12  <b>Sector</b> - 15:11  <b>Seeing</b> - 50:18,                  107:25, 141:13,                  144:18, 146:25  <b>Seek</b> - 7:21  <b>Seeking</b> - 135:20,                  179:14  <b>Seen</b> - 54:15,                  71:22, 75:20, 76:11,                  76:19, 81:20, 83:7,                  83:24, 106:7,                  109:10, 120:13,                  130:12, 131:16,                  132:5, 133:13,                  134:19, 143:11,                  147:13, 170:9,                  177:3, 180:10  <b>Sees</b> - 100:17  <b>Segregation</b> - 28:2                  0  <b>Seismic</b> - 149:15  <b>Select</b> - 57:17  <b>Selected</b> - 78:12,                  84:18  <b>Self</b> - 39:13, 40:4,                  40:19, 42:3, 42:15,                  42:18  <b>Sell</b> - 23:24  <b>Selling</b> - 125:5  <b>Senior</b> - 15:1,                  15:14, 15:15  <b>Senses</b> - 58:12  <b>Sensitive</b> - 141:16  <b>Sent</b> - 10:25  <b>Separate</b> - 53:15,                  53:16, 70:7, 81:8,                  103:7, 103:22,                  104:8, 119:14,                  122:11, 124:14,                  134:15, 177:8  <b>Separation</b> - 53:20,                  56:9  <b>September</b> - 2:1,                  8:5, 8:9, 9:8, 24:21,                  24:23, 65:7, 66:23,                  70:17</p>	<p><b>Serious</b> - 74:25  <b>Serve</b> - 1:8, 118:1,                  118:14  <b>Served</b> - 13:3,                  14:14, 15:1, 27:17,                  83:23  <b>Service</b> - 14:16,                  22:14, 22:15,                  22:25, 27:9, 45:11,                  57:21, 69:23,                  72:20, 77:23,                  106:8, 110:3,                  127:12, 154:8,                  154:18, 175:21  <b>Services</b> - 1:18,                  4:18, 22:18, 22:19,                  89:12, 96:24,                  137:15, 137:17  <b>Sessions</b> - 20:4  <b>Set</b> - 2:6, 32:20,                  38:25, 97:22,                  112:24, 113:5,                  151:19, 172:24  <b>Sets</b> - 51:18  <b>Setting</b> - 4:22, 8:5,                  40:16  <b>Seven</b> - 72:15,                  103:18  <b>Several</b> - 13:20,                  22:20, 105:21,                  141:21  <b>Severe</b> - 105:4  <b>Share</b> - 27:16,                  100:3, 110:21  <b>Sharp</b> - 98:4  <b>Sheppard</b> - 1:21,                  24:22, 25:11  <b>Sheshatshiu</b> - 5:20  <b>Shorter</b> - 2:11  <b>Shouldn't</b> - 64:25  <b>Show</b> - 28:18,                  30:21, 41:21, 48:1,                  48:9, 49:15, 49:19,                  50:20, 50:22,                  61:17, 61:20, 75:8,                  97:18, 97:24,                  128:7, 156:24,                  157:16, 157:18,                  174:5  <b>Showed</b> - 87:17,                  102:25, 111:19  <b>Shown</b> - 157:15  <b>Shows</b> - 41:6,                  47:25, 48:1, 48:19,                  49:6, 49:7, 49:17,                  49:23, 50:6, 50:25,                  78:19, 80:17,</p>
---	---	--	--	---

<p>95:10, 97:15, 98:13  <b>Side</b> - 27:6, 103:21, 114:17, 173:3  <b>Sign</b> - 181:6  <b>Significance</b> - 3:9  <b>Significant</b> - 4:1, 33:2, 93:17, 95:6, 160:3  <b>Significantly</b> - 33:14, 34:8, 34:10  <b>Silenced</b> - 11:5  <b>Similar</b> - 34:12, 54:5, 72:19, 76:18, 116:12, 130:1, 134:16, 157:21, 180:13  <b>Similarly</b> - 100:2  <b>Simple</b> - 81:24, 112:14, 155:4  <b>Simply</b> - 66:4  <b>Sin</b> - 47:14  <b>Single</b> - 42:8, 55:23  <b>Site</b> - 23:25, 161:15  <b>Sitting</b> - 11:15  <b>Situation</b> - 50:19, 58:13, 65:11, 66:8, 89:19  <b>Situations</b> - 68:25  <b>Six</b> - 7:12, 31:12, 37:17, 38:10, 38:14  <b>Size</b> - 56:4, 78:20, 110:17, 111:2, 132:14, 157:21, 179:21  <b>Sized</b> - 76:18  <b>Sizing</b> - 131:22, 131:25  <b>Skills</b> - 55:6, 75:11  <b>Skillsets</b> - 55:13, 80:23, 147:22  <b>Slide</b> - 67:6, 67:8, 78:8, 78:17, 97:15, 97:16, 97:23, 98:21, 100:19, 102:9, 109:17, 109:19, 109:20, 121:23, 131:11, 150:7, 159:12  <b>Slides</b> - 21:17, 66:16, 90:25, 114:4, 116:3  <b>Slowly</b> - 98:8  <b>Small</b> - 16:16, 24:24, 52:23, 55:20, 55:21, 77:25, 78:20,</p>	<p>82:17, 106:11, 110:14, 110:25, 111:19, 112:12, 121:9, 141:14, 148:15, 179:16, 179:19, 179:24  <b>Smaller</b> - 16:17, 24:8  <b>Smart</b> - 94:11  <b>Social</b> - 65:18  <b>Software</b> - 147:6  <b>Solely</b> - 126:20  <b>Solicit</b> - 112:5  <b>Solicitation</b> - 23:8, 112:3  <b>Solicitations</b> - 23:5  <b>Soliciting</b> - 110:1, 181:21  <b>Solid</b> - 95:24, 96:2  <b>Solution</b> - 54:20  <b>Somewhat</b> - 29:20, 31:2, 31:15, 50:1, 79:20, 79:21, 92:18  <b>Son</b> - 17:23  <b>Sophisticated</b> - 111:7, 111:10, 172:5  <b>Sorts</b> - 78:2  <b>Sound</b> - 127:17, 127:23, 150:23  <b>Source</b> - 31:18, 32:11, 33:24, 33:25, 34:11, 37:15, 37:23, 38:15, 43:7, 46:19, 48:12, 51:1, 57:8, 85:16, 112:13, 124:17, 125:14  <b>Sources</b> - 19:9, 27:9, 29:19, 30:5, 31:23, 32:13, 33:9, 36:17, 41:9, 49:7, 98:3, 160:4  <b>Spades</b> - 64:8  <b>Span</b> - 83:17, 141:3, 141:25  <b>Spans</b> - 73:1, 73:8, 73:25, 138:7, 141:13  <b>Special</b> - 55:6, 73:17  <b>Specialist</b> - 111:4  <b>Specialists</b> - 82:19  <b>Specialty</b> - 42:5  <b>Specialties</b> - 15:4  <b>Specific</b> - 2:7, 29:7, 46:20, 95:17, 124:10, 138:14, 138:15, 151:5</p>	<p><b>Speculative</b> - 52:17  <b>Spend</b> - 62:10, 63:4  <b>Spending</b> - 91:10, 92:6, 124:23, 166:17  <b>Spends</b> - 61:1  <b>Spent</b> - 15:24, 114:15  <b>Split</b> - 101:19, 113:3, 124:15, 153:23, 154:6  <b>Staff</b> - 8:13, 8:18, 16:3  <b>Staffing</b> - 24:1, 24:3, 51:19, 72:5, 72:13, 93:1, 96:23, 105:25, 132:15, 176:14  <b>Staffs</b> - 24:11  <b>Stages</b> - 22:13  <b>Stakeholders</b> - 65:19, 97:7, 175:13, 178:21  <b>Stakeholder's</b> - 177:2  <b>Stan</b> - 115:8  <b>Stand</b> - 60:12, 102:5, 147:2  <b>Standard</b> - 14:16, 71:18, 78:21, 161:19, 174:14  <b>Standards</b> - 55:21, 55:22  <b>Standing</b> - 5:3, 5:9, 5:12, 5:18, 5:23, 12:25, 42:2, 42:7  <b>Stands</b> - 40:8, 78:19, 119:2  <b>Start</b> - 6:7, 12:18, 33:15, 48:5, 49:19, 94:9, 95:8, 134:6, 178:1, 182:5  <b>Started</b> - 10:11, 16:1, 17:1, 74:16, 82:16, 83:2, 83:16, 117:21  <b>Starting</b> - 17:8, 37:7, 96:2, 107:11, 152:13  <b>State</b> - 13:13, 23:9, 64:12, 80:10, 98:21, 100:13, 139:15  <b>Statement</b> - 26:5, 127:16</p>	<p><b>Statements</b> - 112:6  <b>States'</b> - 14:17  <b>Static</b> - 40:20  <b>Stations</b> - 17:7  <b>Status</b> - 39:13, 40:4, 42:15, 50:20, 59:13, 108:5  <b>Stay</b> - 169:6  <b>Staying</b> - 151:25  <b>Stays</b> - 50:15  <b>Steadily</b> - 98:8  <b>Steady</b> - 80:10  <b>Stem</b> - 15:12  <b>Steps</b> - 19:25  <b>Steve</b> - 6:20  <b>Stick</b> - 150:21  <b>Stocks</b> - 16:4  <b>Stop</b> - 127:23  <b>Story</b> - 58:24  <b>Straight</b> - 34:14, 44:4, 81:25  <b>Stream</b> - 146:13  <b>Streamlined</b> - 53:11  <b>Strength</b> - 181:10  <b>Stricken</b> - 25:24  <b>Strictly</b> - 154:21  <b>Strong</b> - 43:15, 56:6, 65:17, 132:15  <b>Structure</b> - 13:19, 27:13, 37:2, 51:12, 52:23, 53:15, 54:19, 69:3, 70:23, 71:2, 71:5, 71:7, 81:7, 81:10, 81:13, 89:12, 116:18, 116:20, 117:2, 122:11, 126:17, 128:9, 134:14, 140:22, 141:19, 141:20, 154:13  <b>Structured</b> - 108:10, 115:23, 133:1, 133:5, 133:7  <b>Structures</b> - 16:8, 27:7, 43:1, 52:10, 71:10, 87:25, 109:13, 117:4, 132:24, 147:25, 170:13  <b>Structuring</b> - 140:24  <b>Studied</b> - 49:22  <b>Studies</b> - 24:1  <b>Study</b> - 24:4, 75:22, 121:18, 178:25</p>	<p><b>Subjective</b> - 72:6  <b>Submarine</b> - 17:2  <b>Submission</b> - 70:16  <b>Submissions</b> - 4:23, 4:24, 9:22, 9:25  <b>Submitted</b> - 4:25  <b>Subsequently</b> - 17:3  <b>Subsidiaries</b> - 2:17, 103:17, 103:19  <b>Subsidiary</b> - 167:16  <b>Substantial</b> - 34:20, 34:22, 36:19, 36:20, 37:15, 43:13, 45:20, 46:18, 57:10, 95:11, 108:15, 142:21, 146:21  <b>Substantially</b> - 30:10, 30:22, 78:24  <b>Substitute</b> - 58:19  <b>Substituting</b> - 49:10  <b>Subtract</b> - 47:12  <b>Success</b> - 60:13  <b>Successfully</b> - 54:18  <b>Sufficient</b> - 39:11, 39:12, 90:8  <b>Suggested</b> - 90:18, 158:1  <b>Suggestion</b> - 51:22, 109:25, 167:2, 179:14  <b>Suggests</b> - 77:7  <b>Suitable</b> - 79:7  <b>Summary</b> - 97:15  <b>Sunday</b> - 134:23  <b>Supervising</b> - 151:12  <b>Supervision</b> - 10:21  <b>Supervisor</b> - 141:23, 151:15  <b>Supervisors</b> - 73:4  <b>Supervisory</b> - 78:3  <b>Supplemental</b> - 93:6  <b>Supplemented</b> - 85:12  <b>Suppliers</b> - 181:5  <b>Supplies</b> - 11:9  <b>Supply</b> - 23:5, 27:12, 51:13, 52:20, 53:16,</p>
--	--	---	---	--

<p>69:22, 70:10, 71:16, 79:13, 98:20, 100:21, 116:10, 117:18, 119:20, 125:8, 149:8, 159:23 <b>Supply's</b> - 73:18 <b>Support</b> - 39:12, 40:7, 43:22, 53:1, 54:10, 92:25, 154:9, 180:1 <b>Supported</b> - 16:18, 66:6, 107:2 <b>Supporting</b> - 116:6 <b>Suppose</b> - 65:9, 130:11 <b>Supposed</b> - 152:25 <b>Surplus</b> - 2:21 <b>Surprise</b> - 107:13, 121:14 <b>Surprised</b> - 82:7, 138:21, 145:8, 180:19 <b>Surprising</b> - 88:24, 90:12, 150:2 <b>Suspect</b> - 125:22, 175:23 <b>Suspected</b> - 30:16 <b>Suspended</b> - 31:5 <b>Sustainable</b> - 142: 20 <b>Sustained</b> - 146:19 <b>Sustaining</b> - 39:13, 40:4, 40:20, 42:3, 42:15, 42:19, 142:24 <b>Swallowing</b> - 54:14 <b>Sympathetic</b> - 135: 15 <b>Synapse</b> - 4:19, 4:21, 8:4, 9:13, 28:22, 35:6, 35:20 <b>System</b> - 5:20, 5:24, 28:4, 29:2, 30:6, 35:1, 56:23, 60:18, 61:4, 61:19, 62:13, 101:8, 104:18, 109:5, 109:11, 110:24, 158:16, 160:21, 161:13, 163:9, 163:10, 176:22 <b>Systems</b> - 104:25</p> <div style="border: 1px solid black; width: 100px; height: 15px; margin: 10px auto; text-align: center;">T</div> <p><b>Table</b> - 1:15, 84:17 <b>Tables</b> - 6:4</p>	<p><b>Tailor</b> - 150:10 <b>Tailored</b> - 150:17 <b>Taking</b> - 42:13, 90:9, 127:1, 152:9, 175:15, 176:2 <b>Target</b> - 36:25, 37:1, 37:5, 39:25, 40:11, 131:19 <b>Targeting</b> - 150:25, 151:1 <b>Targets</b> - 151:23 <b>Task</b> - 10:7, 140:8 <b>Tax</b> - 45:24, 46:4, 46:6 <b>Taxation</b> - 103:10 <b>Taxes</b> - 46:11, 46:15 <b>Taxpayers</b> - 171:9, 171:21 <b>Team</b> - 12:14, 14:19, 15:9 <b>Technical</b> - 7:18, 52:25, 73:17, 75:11, 86:5 <b>Techniques</b> - 72:1, 174:19 <b>Technological</b> - 73 :17, 92:25 <b>Telephones</b> - 137: 12 <b>Telling</b> - 149:14 <b>Temporarily</b> - 143: 8 <b>Temporary</b> - 54:19 <b>Ten</b> - 3:19, 30:16, 30:23, 30:24, 34:10, 48:3, 49:20, 76:12, 131:12, 131:15, 131:18, 131:23, 132:2, 134:6 <b>Tenaska</b> - 112:16, 112:17, 181:12 <b>Tended</b> - 141:13 <b>Term</b> - 16:4, 82:2, 85:20, 86:5, 86:13, 92:17, 137:1, 161:17 <b>Termination</b> - 143: 22 <b>Terms</b> - 57:11, 68:1, 93:25, 108:8, 125:8, 131:25, 136:16, 136:18, 137:14, 159:21, 174:17 <b>Terribly</b> - 166:9</p>	<p><b>Test</b> - 111:24, 164:12, 164:16 <b>Texas</b> - 65:4 <b>Text</b> - 158:4 <b>TFA</b> - 43:18, 44:7 <b>Thanks</b> - 159:3 <b>Theirs</b> - 157:1 <b>Themself</b> - 30:24 <b>Theodore</b> - 15:2 <b>Theoretically</b> - 103 :12, 160:12 <b>Therefore</b> - 32:16, 55:22, 89:1, 99:24, 159:18 <b>There's</b> - 11:22, 21:16, 25:3, 28:15, 35:18, 36:3, 36:6, 38:11, 39:5, 42:8, 42:20, 45:15, 56:20, 56:23, 59:17, 60:6, 60:8, 72:17, 76:21, 82:17, 83:4, 84:5, 91:9, 98:5, 101:19, 103:12, 109:3, 109:8, 110:2, 110:25, 112:4, 119:17, 125:19, 127:17, 130:16, 138:3, 138:17, 138:20, 150:20, 155:23, 156:21, 156:23, 158:17, 162:25, 163:17, 163:18, 165:20, 181:10 <b>They're</b> - 22:13, 23:11, 32:8, 32:10, 36:18, 38:22, 43:19, 43:21, 43:23, 48:15, 49:1, 49:9, 50:3, 50:6, 50:22, 55:6, 56:18, 58:9, 58:16, 58:18, 62:6, 75:20, 100:11, 111:13, 112:22, 118:12, 119:8, 120:6, 120:16, 126:4, 138:2, 147:15, 147:16, 148:8, 151:23, 169:23, 170:9, 170:21, 171:13, 175:9, 176:25 <b>They've</b> - 58:9, 172:13 <b>Third</b> - 104:2,</p>	<p>139:23 <b>Thirds</b> - 29:20 <b>Threat</b> - 147:3 <b>Threats</b> - 54:6 <b>Three</b> - 1:9, 2:6, 7:17, 14:15, 17:4, 27:8, 35:3, 49:18, 85:9, 119:19, 140:6, 174:7 <b>Tie</b> - 44:19 <b>Tied</b> - 126:20 <b>Time</b> - 11:15, 11:24, 21:23, 24:3, 28:8, 52:2, 53:22, 74:2, 75:14, 75:25, 76:14, 91:3, 113:6, 114:16, 120:18, 120:24, 123:18, 123:21, 132:8, 143:18, 145:1, 145:4, 146:7, 146:12, 147:13, 151:19, 160:13, 161:16, 170:9, 170:10 <b>Timely</b> - 10:5, 20:16 <b>Times</b> - 88:17, 88:18 <b>Timing</b> - 19:8, 182:3 <b>Title</b> - 82:21, 95:5 <b>Titles</b> - 85:10 <b>TND</b> - 106:7 <b>Today</b> - 9:10, 11:14, 14:21, 17:24, 32:8, 127:13, 172:17 <b>Today's</b> - 42:9 <b>Tolerance</b> - 42:14, 171:6 <b>Tomorrow's</b> - 42:9 <b>Took</b> - 55:13, 120:23, 139:23, 140:2, 147:23 <b>Top</b> - 60:11, 141:22 <b>Topic</b> - 21:8, 45:22, 79:5 <b>Tot</b> - 70:23 <b>Total</b> - 28:13, 28:18, 28:21, 29:21, 35:21, 37:2, 41:13, 41:15, 47:20, 49:17, 52:19, 63:5, 142:2, 142:19 <b>Tough</b> - 20:19,</p>	<p>33:5, 42:10 <b>Tougher</b> - 47:9 <b>Toward</b> - 74:24 <b>Towards</b> - 162:4 <b>Town</b> - 5:21, 83:24 <b>Trade</b> - 172:8, 172:19 <b>Trader</b> - 172:2 <b>Traders</b> - 176:20 <b>Trades</b> - 171:9 <b>Trading</b> - 23:23, 102:23, 106:10, 106:15, 106:16, 108:13, 108:17, 109:1, 111:20, 111:21, 112:12, 176:19, 180:7 <b>Traditional</b> - 34:14 <b>Training</b> - 151:15 <b>Transaction</b> - 176: 11, 176:15 <b>Transactions</b> - 14: 14, 22:6, 22:8, 110:24, 170:5, 171:3, 174:12, 176:6 <b>Transcription</b> - 1:2 1 <b>Transcripts</b> - 10:22 <b>Transfer</b> - 87:21, 90:21 <b>Transferred</b> - 87:11 , 88:1, 88:10 <b>Transferring</b> - 27:1 4, 68:5, 88:5, 88:7, 88:9, 88:22 <b>Transfers</b> - 87:20, 88:4, 88:15, 89:2 <b>Transition</b> - 90:10, 142:15, 142:25 <b>Transitioning</b> - 142 :22, 143:14 <b>Translate</b> - 28:13 <b>Transmission</b> - 2:1 4, 16:19, 22:24, 33:11, 34:4, 69:24, 113:2 <b>Transparent</b> - 68:1 0 <b>Treated</b> - 59:11 <b>Treatment</b> - 135:8, 158:24 <b>Tremendous</b> - 108: 14 <b>Trend</b> - 177:3 <b>Trouble</b> - 68:12, 108:2, 108:20,</p>
---	---	--	--	---

<p>144:18, 158:25  <b>Troubles</b> - 170:18  <b>Troublesome</b> - 68:7  <b>Troubling</b> - 61:8, 68:22, 80:25  <b>Trust</b> - 143:7  <b>T's</b> - 113:4, 113:7  <b>Tuning</b> - 83:3  <b>Turn</b> - 11:17, 12:1, 24:20, 102:18  <b>Turning</b> - 18:1, 51:10  <b>Tweak</b> - 116:14  <b>Tweaking</b> - 116:14  <b>Twenty</b> - 48:2, 49:22, 50:16  <b>Types</b> - 151:20, 176:9, 176:11, 178:3  <b>Typical</b> - 39:3, 39:25, 40:1, 52:23, 55:22, 88:15, 89:10, 93:24, 103:2  <b>Typically</b> - 14:13, 22:1, 36:22, 88:8, 98:9, 176:11  <b>Typo</b> - 24:25</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;">U</div> <p><b>Ultimate</b> - 141:19  <b>Umbrella</b> - 69:7  <b>Uncertainties</b> - 90:4, 96:12  <b>Uncertainty</b> - 75:15, 97:2, 140:24  <b>Uncomfortable</b> - 77:9  <b>Uncommon</b> - 38:23, 40:11, 40:12, 133:16, 160:24  <b>Uncontrolled</b> - 54:6, 54:7  <b>Uncovered</b> - 171:9  <b>Underlying</b> - 43:21, 70:21  <b>Understandable</b> - 56:9  <b>Understands</b> - 3:7, 151:13  <b>Understated</b> - 155:24  <b>Understood</b> - 53:21, 66:5, 85:19, 151:14  <b>Undertake</b> - 21:1  <b>Undertaken</b> - 22:3,</p>	<p>76:13, 114:8  <b>Undertook</b> - 19:5, 20:6, 21:14  <b>Undeveloped</b> - 120:23  <b>Undue</b> - 176:2  <b>Unfair</b> - 51:23, 52:1, 135:8, 178:21  <b>Unified</b> - 52:21, 55:24, 61:23, 71:7, 124:17  <b>Unintelligible</b> - 68:2  <b>Union</b> - 149:2  <b>Unit</b> - 20:9, 53:5, 148:16, 161:22  <b>United</b> - 17:3, 54:4, 64:8, 112:25  <b>Units</b> - 77:21, 138:13, 138:14, 138:15, 169:4  <b>Universal</b> - 36:15, 58:6, 100:12, 100:16  <b>University</b> - 17:17  <b>Unless</b> - 63:5, 64:12, 68:14, 138:20, 160:18  <b>Unlimited</b> - 1:20, 10:20  <b>Unquestionably</b> - 160:1  <b>Unreasonable</b> - 111:3  <b>Unregulated</b> - 22:10, 54:13, 56:7, 56:12, 57:14, 58:3, 58:4, 58:9, 58:10, 59:11, 63:17, 104:15, 105:16, 109:1, 170:22  <b>Unsound</b> - 101:3  <b>Updated</b> - 10:2  <b>Upside</b> - 104:13  <b>Urge</b> - 108:6, 108:7  <b>Used</b> - 14:13, 35:7, 36:25, 37:12, 38:24, 45:12, 46:20, 71:18, 84:16, 85:20, 95:22, 104:6, 104:17, 112:15, 134:16, 138:18, 159:12, 175:24  <b>User</b> - 154:9  <b>Uses</b> - 2:22, 59:12, 68:1</p>	<p><b>Using</b> - 37:5, 44:4, 86:4, 123:19, 179:24  <b>Utilities</b> - 13:6, 14:18, 17:4, 22:2, 22:9, 22:12, 23:9, 24:6, 24:7, 55:25, 58:15, 63:15, 75:20, 85:7, 103:16, 107:12, 120:14, 131:20, 133:14, 134:20, 153:1, 153:2, 169:25, 170:10, 172:19  <b>Utmost</b> - 10:5</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;">V</div> <p><b>Vacancies</b> - 139:20, 139:22, 139:24  <b>Vague</b> - 138:14  <b>Vale</b> - 5:16  <b>Valley</b> - 5:21  <b>Valuable</b> - 120:22  <b>Value</b> - 23:1, 45:7, 88:11, 88:12, 88:17, 88:18, 89:4, 95:11, 160:13, 178:4, 179:23, 180:4  <b>Variable</b> - 37:16  <b>Variance</b> - 82:25  <b>Variations</b> - 83:1  <b>Variety</b> - 8:2, 96:24  <b>Vary</b> - 37:16  <b>Varying</b> - 17:8  <b>Vendors</b> - 94:1  <b>Verses</b> - 73:19, 84:3, 84:4, 86:17, 93:19, 108:25  <b>Versus</b> - 33:1, 37:21, 54:13, 56:7, 146:1, 151:2, 161:8  <b>Vertically</b> - 52:24, 55:17, 55:19, 58:22, 61:14, 63:14, 65:23, 66:9, 104:16  <b>Viable</b> - 111:22  <b>Vice</b> - 1:12, 15:15, 15:16, 81:19, 82:11, 85:5, 85:10, 85:23  <b>VICKROY</b> - 15:23, 15:24, 164:11  <b>View</b> - 52:18, 60:3, 66:25, 81:12, 95:7, 96:19, 98:19, 108:12, 112:9,</p>	<p>116:19, 116:20, 127:1, 127:10, 128:11, 178:9  <b>Viewpoint</b> - 57:2  <b>Views</b> - 70:22  <b>Visible</b> - 93:3  <b>Volume</b> - 94:4  <b>Volumes</b> - 94:2  <b>Voters</b> - 66:2, 105:8</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;">W</div> <p><b>Wabush</b> - 5:21  <b>Wade</b> - 33:4  <b>Waiting</b> - 171:12  <b>Wanting</b> - 162:23  <b>Wants</b> - 42:24, 64:7, 64:23, 64:24, 66:2, 100:15, 152:8, 171:8, 172:1  <b>Warrant</b> - 90:9  <b>Wasn't</b> - 69:13, 89:25, 90:1, 135:15, 136:17, 160:21, 162:18  <b>Water</b> - 38:5, 48:11, 50:7  <b>Waters</b> - 33:5  <b>Ways</b> - 28:17, 126:12, 171:15, 175:18, 181:8  <b>Weather</b> - 105:3  <b>Website</b> - 10:2, 10:16, 10:18, 10:24, 11:2  <b>We'd</b> - 125:18  <b>Week</b> - 4:2, 156:23  <b>Weight</b> - 117:14  <b>Welcome</b> - 1:2, 6:18, 6:25, 7:6  <b>We'll</b> - 6:7, 11:12, 32:19, 86:22, 86:23, 130:15, 182:4  <b>We're</b> - 18:20, 21:22, 24:1, 26:20, 29:23, 31:17, 41:21, 50:23, 54:7, 59:19, 59:20, 64:10, 66:12, 72:12, 75:2, 75:3, 77:8, 77:13, 77:24, 80:24, 82:24, 82:25, 86:10, 91:18, 93:8, 97:3, 99:6, 99:15, 108:3, 110:7, 110:9,</p>	<p>110:12, 111:2, 111:23, 112:2, 113:18, 124:21, 130:24, 130:25, 131:7, 148:25, 153:14, 156:22, 157:22, 158:23, 159:6, 178:3  <b>Weren't</b> - 77:4  <b>We've</b> - 13:12, 13:14, 16:17, 21:20, 22:19, 22:25, 24:4, 24:5, 24:10, 47:6, 47:19, 52:1, 53:22, 54:15, 66:16, 67:22, 69:1, 71:22, 72:15, 75:19, 83:7, 83:9, 106:7, 120:12, 120:13, 127:8, 127:9, 151:18, 166:22, 173:4, 173:8, 177:2  <b>Whalen</b> - 1:6  <b>What's</b> - 39:13, 59:14, 59:15, 59:21, 67:17, 74:23, 127:11, 131:21, 143:5, 172:17, 172:24, 175:16  <b>Whereas</b> - 71:23  <b>Whichever</b> - 66:1, 172:12  <b>Whole</b> - 26:2, 38:16, 40:2, 41:12, 42:20, 50:16, 60:8, 61:17, 83:25, 90:23, 104:13, 105:13, 106:22, 107:11  <b>Wholly</b> - 133:3  <b>Who's</b> - 127:5, 139:10, 140:18, 140:22, 140:25, 161:8  <b>Who've</b> - 36:8  <b>Wide</b> - 16:21, 23:8, 152:4  <b>Widely</b> - 13:23  <b>Willing</b> - 120:8  <b>Wipe</b> - 88:20  <b>Wished</b> - 46:25  <b>Won't</b> - 58:8, 79:17, 157:2, 160:15  <b>Word</b> - 25:23, 26:3,</p>
--	---	---	--	--

<p>86:5, 93:10, 159:13  <b>Words</b> - 81:15, 150:22  <b>Worked</b> - 7:14, 13:13, 16:2, 16:7, 16:9, 16:18, 17:4, 173:9  <b>Workforce</b> - 145:19  <b>Workforces</b> - 145:18  <b>Working</b> - 53:22, 64:4, 94:15, 103:20, 111:14, 132:7, 134:21, 147:11  <b>Workload</b> - 73:25  <b>Works</b> - 124:2  <b>Worried</b> - 59:19, 59:20, 160:20  <b>Worry</b> - 62:3, 62:4, 101:15  <b>Worse</b> - 156:7, 166:15  <b>Worst</b> - 118:24  <b>Worth</b> - 60:23, 62:2, 76:1, 90:16, 95:8, 112:10, 124:23  <b>Worthwhile</b> - 94:21  <b>Wouldn't</b> - 145:24, 172:4  <b>Wow</b> - 171:25  <b>Wrestle</b> - 42:12  <b>Wrote</b> - 178:7</p> <div style="border: 1px solid black; width: 100px; margin: 10px auto; text-align: center;">Y</div> <p><b>Year</b> - 2:6, 2:10, 30:11, 31:1, 34:21, 37:12, 37:24, 38:9, 38:14, 46:16, 49:20, 69:5, 75:22, 96:22, 105:1, 124:24, 142:12, 142:19, 143:13, 143:20, 144:9, 144:23, 145:5, 151:20, 151:25  <b>Yearly</b> - 47:25  <b>Years</b> - 13:1, 13:12, 14:2, 14:22, 15:10, 15:12, 15:14, 16:9, 16:25, 30:16, 30:18, 30:21, 30:23, 34:8, 34:10, 37:25, 38:1, 41:7, 41:8, 41:13, 41:21,</p>	<p>48:2, 48:3, 49:22, 50:17, 64:6, 71:22, 72:17, 83:22, 91:11, 104:21, 180:8  <b>Yesterday</b> - 9:10  <b>You'd</b> - 91:19, 152:5, 154:15  <b>You'll</b> - 33:17, 33:22, 37:19, 38:6  <b>YOUNG</b> - 6:14, 6:15  <b>You're</b> - 18:14, 37:22, 37:24, 50:17, 61:15, 61:16, 64:7, 77:20, 80:4, 82:22, 86:4, 107:25, 115:6, 119:7, 122:13, 122:23, 129:13, 131:3, 132:20, 133:4, 133:8, 133:12, 137:1, 140:5, 140:25, 144:21, 149:23, 150:17, 155:11, 158:13, 159:21, 162:3, 164:6, 164:17, 165:5, 166:8, 167:17, 171:19, 171:20, 177:11, 177:25, 179:25  <b>You've</b> - 78:9, 109:18, 113:22, 114:7, 116:4, 122:1, 128:19, 136:25, 151:24, 152:25, 162:9, 166:23, 173:18, 175:13</p>			
---	---	--	--	--