

RÉGIE DE L'ÉNERGIE

DEMANDE CONJOINTE RELATIVE À
LA FIXATION DE TAUX DE RENDEMENT
ET DE STRUCTURES DE CAPITAL

DOSSIER : R-4156-2021 PHASE 2

RÉGISSEURS : M. JOCELIN DUMAS, président
Me LISE DUQUETTE
Mme ESTHER FALARDEAU

AUDIENCE DU 17 JUIN 2022
PAR VISIOCONFÉRENCE

VOLUME 5

CLAUDE MORIN
Sténographe officiel

COMPARUTIONS :

Me LOUIS LEGAULT
Me AMÉLIE CARDINAL
avocats de la Régie

DEMANDERESSES :

Me MARIE-PIER CLOUTIER
Me PATRICK OUELLET
avocats d'Énergir

Me ADINA GEORGESCU
avocate de Gazifère et de Intragaz

INTERVENANTS :

Me PAULE HAMELIN
avocate de l'Association des consommateurs
industriels de gaz (ACIG);

Me STEVE CADRIN
Me GAËLLE OBADIA
avocats de l'Association hôtellerie Québec et de
l'Association restauration Québec (AHQ-ARQ);

Me ANDRÉ TURMEL
avocat de la Fédération canadienne de l'entreprise
indépendante (FCEI);

Me ÉRIC McDEVITT DAVID
avocat de Option consommateurs (OC).

TABLE DES MATIÈRES

	<u>PAGE</u>
PRÉLIMINAIRES	4
DÉCISION SUR VOIR-DIRE	9
PREUVE DE L'ACIG - panel 1	
Dre SHAHRZAD RAHBAR	
EXAMINED BY Me PAULE HAMELIN	13
EXAMINED BY THE FORMATION	
PANEL 2 - ACIG	
Dr. ASA HOPKINS	
EXAMINED BY Me PAULE HAMELIN	32
CROSS-EXAMINED BY Me ADINA GEORGESCU	77
RE-EXAMINED BY Me PAULE HAMELIN	164
PANEL 3 - ACIG	
LAURENCE BOOTH	
EXAMINED BY Me PAULE HAMELIN	172

1 L'AN DEUX MILLE VINGT-DEUX (2022), ce dix-septième
2 (17e) jour du mois de juin :

3

4 PRÉLIMINAIRES

5

6 LE PRÉSIDENT :

7 Merci, Madame la Greffière. Bonjour à tous.

8 Me ÉRIC McDEVITT DAVID :

9 Si vous permettez, Monsieur le Président, j'aurais
10 juste une question d'intendance avant de débiter
11 l'audience ce matin.

12 LE PRÉSIDENT :

13 Madame la greffière allait faire le protocole
14 d'ouverture, je crois.

15 Me ÉRIC McDEVITT DAVID :

16 Ah, excusez-moi! Je suis un peu prompt ce matin.

17 LA GREFFIÈRE :

18 Audience du dix-sept (17) juin deux mille vingt-
19 deux (2022) par visioconférence. Dossier R-4156-
20 2021 Phase 2 : Demande conjointe relative à la
21 fixation de taux de rendement et de structures de
22 capital. Poursuite de l'audience.

23 LE PRÉSIDENT :

24 Merci. Alors, Maître David, vous aviez un point
25 d'intendance.

1 Me ÉRIC McDEVITT DAVID :

2 Hier, vous m'avez posé la question au niveau de
3 l'engagement 2, si la réponse fournie répondait à
4 l'engagement. Puis on aurait effectivement des
5 précisions additionnelles à demander. Donc, je ne
6 sais pas si, Madame la Greffière, il est possible
7 de mettre la pièce B-0353 à l'écran, la page 2.

8 LE PRÉSIDENT :

9 Ce n'était pas l'engagement numéro 3?

10 Me ÉRIC McDEVITT DAVID :

11 Nous, c'était l'engagement numéro 2.

12 LE PRÉSIDENT :

13 Ah, excusez-moi!

14 Me ÉRIC McDEVITT DAVID :

15 Donc, si c'est possible d'aller à la page numéro 2.
16 Merci beaucoup. Alors ce qu'on demanderait comme
17 précisions additionnelles, le tableau 1 ici en
18 haut, on a donc le résumé pour toute la clientèle
19 « secteur bâtiment » pour Montréal. Et on voit que
20 c'est divisé en trois lignes : nombre de clients,
21 volumes normalisés et revenus D normalisés. La
22 deuxième partie, c'est les nouveaux clients. Donc,
23 c'est découpé pour les nouveaux clients seulement.
24 Mais on retrouve juste : nombre de clients et
25 volume. Mais on n'a pas la ligne « revenus D

1 normalisés ». Alors, on aimerait simplement
2 qu'Énergir nous fournisse la ligne « revenus D
3 normalisés » pour la deuxième partie du tableau 1.
4 Ça, c'était la première demande de précision.

5 La deuxième demande de précision, c'est au
6 tableau 2, la prochaine page. Comme vous voyez,
7 dans la première partie du tableau, on a
8 l'information, les mêmes trois lignes : nombre de
9 clients, volumes normalisés et revenus D
10 normalisés. En bas où on a le sommaire concernant
11 les nouveaux clients, c'est décliné en nombre de
12 clients et en volumes, mais pas en revenus. Donc,
13 encore une fois, pour la partie du bas de ce
14 tableau-là qui concerne les nouveaux clients, si
15 c'est possible de nous fournir la ligne
16 « revenus ».

17 Ça serait les deux précisions
18 additionnelles qu'on vous demanderait, qu'on
19 demanderait à Énergir.

20 Me PATRICK OUELLET :

21 Donnez-moi juste une petite seconde, je vais
22 discuter avec les gens ici.

23 LE PRÉSIDENT :

24 D'accord.

25 DISCUSSION HORS DOSSIER

1 Me PATRICK OUELLET :

2 Alors, bonjour, Monsieur le Président, bonjour,
3 Mesdames les Régisseurs. Premièrement ce que
4 j'aurais à dire, c'est que ma cliente a déjà fourni
5 plus que ce qui avait été demandé dans
6 l'engagement. Comme par exemple la question des
7 revenus, ce n'était pas demandé, on est allé au-
8 delà de ce qui était demandé. Là maintenant, on
9 nous en demande encore plus. Je comprends. Ce qu'on
10 me dit, c'est que l'information qui est demandée
11 serait déjà dans l'annexe TB3 au soutien de la
12 preuve du docteur Brown. Elle l'est pour l'île de
13 Montréal, pas pour la ville de Montréal. C'est déjà
14 un très bon indicateur. Donc, on se demande si
15 c'est nécessaire de pousser plus loin étant donné
16 l'information qui est déjà au dossier.

17 Me ÉRIC McDEVITT DAVID :

18 Monsieur le Président, écoutez, je ne sais pas, je
19 n'ai pas vérifié cette annexe du rapport de
20 monsieur Brown, mais il semble y avoir une légère
21 différence entre l'île de Montréal et la région de
22 Montréal. Je pense que, pour fins de clarté, tant
23 pour Option consommateurs que pour la Régie, il me
24 semble que ce n'est pas disons un énorme calcul de
25 plus qui est demandé. Ce serait de, au fond,

1 respecter les paramètres qu'eux-mêmes avaient
2 inclus dans les tableaux.

3 Me PATRICK OUELLET :

4 Donc, on n'est pas satisfait de ce qui est sur
5 l'île de Montréal sans l'avoir regardé, c'est ça?
6 Si on insiste, on va le faire...

7 Me ÉRIC McDEVITT DAVID :

8 Maître Ouellet, je ne veux pas argumenter avec vous
9 ce matin. Je laisse ça à la discrétion de la Régie
10 pour le reste.

11 Me PATRICK OUELLET :

12 Ça va. Ce qu'on veut éviter, nous, c'est qu'il y
13 ait des demandes en cascades, qu'on va refournir
14 encore de l'information, qu'on va en redemander de
15 la nouvelle, et caetera. On pense que ce qui a déjà
16 été fourni est raisonnable, mais on laisse ça à
17 votre discrétion.

18 LE PRÉSIDENT :

19 Alors, Maître David, est-ce que vous pourriez
20 demander à votre analyste de jeter un coup d'oeil
21 sur la pièce qui nous a été mentionné par maître
22 Ouellet, qu'il vérifie si c'est satisfaisant aux
23 fins de son analyse, puis vous nous reviendrez.

24 Me ÉRIC McDEVITT DAVID :

25 D'accord. Je vais faire ça à la pause.

1 LE PRÉSIDENT :

2 Merci. Maître Ouellet, est-ce que vous avez des
3 nouvelles fraîches concernant les engagements 3 et
4 4?

5 Me PATRICK OUELLET :

6 Bon. Le 3, on pense que ce matin, probablement que,
7 à la pause, on va pouvoir le mettre dans le
8 système. En ce qui concerne l'engagement numéro 4,
9 donnez-moi juste deux petites secondes que je
10 vérifie. Donc, en ce qui concerne l'engagement 4,
11 Monsieur le Président, ça irait probablement un
12 petit peu après le lunch aujourd'hui. On va tenter
13 de le faire aujourd'hui, au plus tard cet après-
14 midi.

15 LE PRÉSIDENT :

16 Très bien. Merci. Est-ce qu'il y a d'autres
17 questions préliminaires? Ça va. Alors, avant de
18 passer au panel 1, je vais vous faire part de la
19 décision de la Régie concernant la reconnaissance
20 de statut d'expert.

21 DÉCISION SUR VOIR-DIRE

22 LE PRÉSIDENT :

23 La Régie est saisie au présent dossier de quatre
24 demandes de reconnaissance de statut d'expert.

25 Seule la demande de reconnaissance du statut de

1 témoin expert déposée pour le docteur Asa Hopkins,
2 témoin de l'ACIG, est contestée.

3 Après avoir entendu les arguments des
4 demanderesses et de l'ACIG; après avoir considéré
5 la demande de reconnaissance du statut de témoin
6 expert ainsi que le CV déposé au soutien de cette
7 dernière, la Régie est d'avis que monsieur Hopkins
8 possède l'expérience et les qualifications requises
9 pour l'éclairer dans les domaines relatifs à son
10 expertise.

11 La Régie est d'avis que ces qualifications
12 et cette expérience sont pertinentes dans le cadre
13 du présent dossier. Ce faisant, elle lui reconnaît
14 le statut de « expert on energy transition in the
15 gas industry, and business risk », tel que formulé
16 hier par l'ACIG dans son plan d'argumentation.

17 La Régie tient par ailleurs à souligner
18 qu'elle est maître de sa procédure et qu'à cet
19 effet, elle peut, si elle le juge utile pour
20 l'éclairer, reconnaître le statut d'expert à des
21 personnes qui ont des qualifications
22 complémentaires, comme c'est le cas ici pour le
23 docteur Hopkins et le docteur Booth en matière de
24 risque d'affaires.

25 De plus, la Régie juge utile de vous faire

1 part immédiatement de sa décision en regard des
2 autres demandes de reconnaissance de statut
3 d'expert.

4 La Régie juge que l'expérience de monsieur
5 Toby Brown justifie de le reconnaître à titre
6 d'expert dans l'évaluation des risques commerciaux
7 d'entreprises d'utilité publique réglementées aux
8 fins de la détermination du taux de rendement et de
9 la structure de capital.

10 La Régie reconnaît également la docteure
11 Bente Villadsen à titre d'experte dans la
12 détermination du taux de rendement et de la
13 structure de capital d'entreprises d'utilité
14 publique réglementées.

15 Finalement, la Régie reconnaît le docteur
16 Laurence Booth à titre d'« expert on rate of
17 return, capital structure and business risk ».

18 La Régie souligne que c'est la capacité de
19 ces experts à l'éclairer qui lui importe, afin
20 qu'elle puisse rendre la meilleure décision
21 possible. En outre, au terme du dossier, lors de
22 son délibéré, il lui reviendra de juger de la force
23 probante de la preuve présentée par chacun d'entre
24 eux.

25 Voilà! Nous serions prêts à entendre le

1 panel numéro 1 de l'ACIG.

2

3 PREUVE DE L'ACIG - panel 1

4

5 Me PAULE HAMELIN :

6 Bonjour, Monsieur le Président, Mesdames les
7 Régisseurs. Peut-être un petit point avant qu'on
8 assermente madame Rahbar. Je comprends donc que la
9 preuve au niveau des demanderesses serait
10 essentiellement close, sous réserve naturellement
11 des engagements qui restent à être déposés dans le
12 présent dossier?

13 LE PRÉSIDENT :

14 En effet, sous réserve des engagements.

15 Me PAULE HAMELIN :

16 Parfait. Nous avons déposé ce matin des affidavits
17 pour les panels suivants. On n'avait pas reçu
18 encore la confirmation de la réception de la Régie.
19 On pourra vérifier à la pause si... On vient de me
20 confirmer que c'est déposé. Tout à l'heure, on
21 n'avait pas eu l'accusé. Alors, je voulais juste le
22 mentionner. Donc, nous serions prêts à assermenter
23 madame Rahbar.

24

25

1 IN THE YEAR TWO THOUSAND TWENTY TWO, on this
2 seventeenth (17th) day of June, PERSONALLY CAME AND
3 APPEARED:

4
5 Dre SHAHRZAD RAHBAR, president of the Industrial
6 Gas Users Association, business address is 851,
7 Industrial Avenue, Ottawa (Ontario),

8
9 WHO, after having made a solemn affirmation, doth
10 depose and saith as follows:

11
12 EXAMINED BY Me PAULE HAMELIN :

13 So, just before you start, Dr. Rahbar, I just want
14 to make an apology to both Dr. Villadsen and Dr.
15 Hopkins, maybe it's fatigue that is... Je vais le
16 dire en français. Peut-être que c'est la fatigue
17 qui se fait sentir et non pas par manque de
18 déférence envers les... les PhD qui nous entourent
19 dans le présent dossier. C'est juste par maladresse
20 que j'ai parlé hier à madame Villadsen en disant
21 « Madame Villadsen » et « Monsieur Hopkins », et
22 non pas docteur. Alors, je m'en excuse et je viens
23 de faire la même erreur avec docteure Rahbar,
24 alors.

25 Q. [1] Dr. Rahbar, I'll let you now make your

1 presentation for IGUA. Thank you.

2 R. Bonjour, Monsieur le Président, Mesdames les
3 Régisseurs, l'ensemble des intervenants et
4 représentants des distributeurs. Je suis très
5 contente d'être parmi vous et de pouvoir partager
6 avec vous mes remarques sur ce dossier fort
7 important. Si vous me le permettez, je vais
8 continuer en anglais. It's going to be a little bit
9 easier for me and perhaps kinder to the French
10 language.

11 So, with that, I really appreciate the
12 opportunity to share with you some thoughts and
13 I'll confine my comments to some high-level
14 insights that hopefully will help you see how IGUA
15 views this very important application, and we'll
16 leave it to the experts and analysts to argue the
17 finer points.

18 So, this is an important hearing because
19 it's precedent setting in a number of ways. It's
20 got many first associated with it. It's the first
21 time energy transition climate change is cited as a
22 reason to seek higher ROE and equity thickness.
23 It's also the first time that three entities apply
24 jointly in a ROE hearing and it's again a first
25 that applicants in an ROE hearing rely solely on

1 expert evidence without filing any financial data.

2 My key point is climate change and energy
3 transition are not new, they're not shocking. It's
4 over thirty (30) years since the United Nations,
5 not being known as the fastest responding entity in
6 the globe, sounded the alarm bells on climate
7 change and asked for dramatic carbon reductions.
8 It's over twenty (20) years since Canada signed
9 onto the Kyoto Accord, it's over sixteen (16) years
10 since Quebec first introduced climate legislation
11 and almost fifteen (15) years since Quebec's been
12 part of the WCI and has SPEDE.

13 Of course, energy transition requires a lot
14 of changes. It will require a fundamental change in
15 the way we, in Canada, produce, transport and
16 consume energy. The costs are estimated to be in
17 the trillions of dollars and people, experts, agree
18 that this is going to... that this is too large a
19 dollar to be born by any single actor in the space,
20 it's going to need government investment,
21 investment... private investment, individual
22 investment including, and not limited, to
23 ratepayers and utility shareholders.

24 Much was said about how do we view this
25 change. Quebec undoubtedly is in a leadership

1 position, it acted early, it had the earliest
2 climate legislation in the whole of Canada. So, is
3 this... does this make Quebec more risky or does it
4 make it more predictable for investment knowing
5 where the ultimate destination is and having a long
6 time to contend with the destination? I contend
7 it's the second one, this base on industry
8 experience. When you know what the rules are, when
9 you know what the destination is and you have
10 enough time to adapt, you can adapt in a profitable
11 manner.

12 I don't know if this is relevant or not,
13 but I just reminded... I just checked the last
14 carbon price that had been cleared at the last WCI
15 auction, it was shy a forty dollars (40\$) and about
16 ten box (10\$) shy of what the carbon tax is. So, I
17 think acting early is a good thing and allows time
18 to... allows time for actors to react.

19 Climate change and energy transition have
20 reshaped the energy market place, have dominated
21 the energy discourse in Canada for almost thirty
22 (30) years, at least for twenty-five (25) very
23 actively.

24 The corporate owners of some of the
25 applicants in this file have successfully reacted

1 to changes in their business market place and
2 transform themselves. A quote from Enbridge Inc.'s
3 website puts it very eloquently, and I read from...
4 from that quote :

5 For more than two decades, we've been
6 deliberately positioning for energy
7 transition in a disciplined and
8 profitable manner.

9 We, closer to home, Gaz Métro, thirty (30) years
10 ago was a local gas distribution company in Quebec,
11 Énergir today in an integrated North American
12 energy company with assets in multiplicity... in a
13 range of assets, not limited to natural gas,
14 renewable power. So, it's managed to grow its asset
15 base and profitability. And neither of these have
16 required public bailout, any... any handouts from
17 anyone or required any write-offs.

18 The response from the regulated entities
19 sadly has been a bit different and a bit muted. I
20 guess reliance on a specific interpretation of the
21 regulatory compact has led to delaying profitable
22 transformation. Instead, we've seen a variety of
23 initiatives for which ratepayers have been on the
24 hook and been identified as ratepayers are going to
25 pickup these costs. Some good, some maybe not

1 optimal, bi-energy, RNG, hydrogen, without even
2 knowing where they fit. Do they solve ten percent
3 (10%) of the problem, do they get us there fifty
4 percent (50%) of the way? Absent any plan,
5 ratepayers have funded for these, and despite that,
6 despite the fact that all the new initiatives, at a
7 higher cost because are born by ratepayers, they're
8 seeking higher premium and equity thickness.

9 What we struggle with is the fact that
10 there's little analysis available on anticipated
11 load profile changes, little delineation between
12 what load is elastic, what load is inelastic. And
13 more glaringly, absence of information about what
14 is this future business model that Énergir is
15 responding to.

16 So, our problems with the current
17 application are at two levels. At a conceptual
18 level, we think equating change with risk is not
19 accurate. Risk is harm resulting from probability
20 of a negative consequence. Change harbors both
21 opportunity and risk.

22 Second problem is that it ignores the
23 utilities control and agency over its business
24 decisions, assume LDC are passive victims of change
25 and recipients of regulations that they didn't know

1 about, and exclude all mitigation action that is...
2 has been taken to date and can be taken.

3 So, seeking a higher premium and equity
4 thickness although the cost of whatever mitigation
5 action, and we don't know how impactful these are
6 going to be absent of a plan, those costs have been
7 pass to ratepayers and still the utilities seek a
8 higher premium and equity thickness. So, that's...
9 that's conceptually our biggest issue in this
10 application.

11 And specific... more, a couple of specific
12 points here: mixing the long term twenty fifty
13 (2050) carbon target with mid-term twenty thirty
14 (2030) decarbonization plan and anticipated load
15 changes over the next three to five years, I think
16 just clears, muddies the picture as oppose to allow
17 us to have a vision through time.

18 Also, equating the continued demand for
19 methane, not for home heating but in industrial
20 processes as feedback, as feedstock. The use of the
21 pipeline infrastructure, which as other people have
22 discussed, could be repurchased for other things.
23 And precisely the current business model of the
24 utility are not one and the same thing. Assuming
25 the three are one and the same thing, again, in our

1 mind, introduces a bit of lack of clarity.

2 I couldn't help reflect on the NEB decision
3 of twenty eleven (2011) when TransCanada had
4 applied for yet another rate increase to compensate
5 for the declining volumes on the system. Those of
6 us with my colour of hair will remember that the
7 NEB denied that rate increase. It fix the tolls for
8 five years, at nearly half of what TransCanada had
9 applied for, well short of their revenue
10 requirement. Of course, gave them a deferral
11 account to capture the cost, and it stipulated that
12 managing the business risk resulting from changes
13 in the market place is the business of the
14 regulated utility. It put CPL on notice for future
15 cost disallowance if they fail to manage their
16 business risk and, of course, it did increase,
17 having done all of that, it did increase their ROE.

18 So, before I... before I conclude, I just
19 want to share with you how Quebec heavy industry
20 views climate change and what we think is going to
21 happen with industrial load in the next little
22 while.

23 So, as I mentioned, IGUA members produce
24 commodities from steel, chemicals, forest products,
25 minerals and bio-based materials. They're all

1 energy intensive and trade exposed. Most have
2 commitment... have committed to net-zero by twenty
3 fifty (2050), all of them have aggressive carbon
4 reduction plans. They are also subject to carbon
5 regulation.

6 But the big shift I have seen in my members
7 is for them decarbonization is no longer a
8 regulatory imperative, something that a regulatory
9 group is supposed to handle. This is an imperative
10 that's coming down from their investors, from their
11 boards and from the CEO. So, the commitment to
12 decarbonization is harnessing amazing resources
13 from the companies, everybody is involved,
14 operations, engineering, so well beyond the
15 regulatory, it's a regulatory issue I have to live
16 with.

17 And... so, the resources are going to
18 figure out how to decarbonize, we know the demand
19 for commodities and minerals will continue to the
20 future, all the new technology that we talk about
21 will still need something mineral to go in there,
22 but how to make them. So, we're seeing the Quebec
23 facilities become some of the least carbon
24 intensive facilities in the world.

25 Couple of examples for you: recent

1 initiative, a joint initiative announced by Rio
2 Tinto to develop the globe first non emitting mine
3 in Quebec, that's a great sign. It talks to
4 availability of clean power, certainty in
5 regulation and having advanced view on what's
6 coming.

7 You got a steel plant in Contrecoeur, the
8 system that uses the latest technology in the
9 world, direct reduction of iron combined with
10 electric arc furnace. Their sister plant in
11 Ontario, earlier this year, announced one and a
12 half billion dollars for the B of investment needed
13 to adopt this technology. And it will reduce their
14 carbon emissions by over sixty percent (60 %).
15 Interestingly, it will increase their gas use. It
16 will more than double their gas use to get the
17 carbon reduction. There's no magic in there. It
18 takes coke and coal out of the system and uses gas.

19 So what do we think is happening to
20 industrial demand in the next three to five years?
21 Not much. I would say, for the existing customers,
22 it's going to be quite stable within the business
23 fluctuations, for a number of reasons. Either the
24 technology to electrify doesn't exist, or access to
25 alternative energy supply at scale is not available

1 or, the cost of replacement is prohibitive and the
2 timing require to execute these long scale projects
3 extend beyond those years.

4 Let me give you an example. Existing gas
5 boiler in an industrial facility reaching end of
6 life, they looked at electrifying, replacing it
7 with an electric boiler. All of them proven
8 existing technology for decades. The current gas
9 supplied to this boiler is a six inch pipe. HQ told
10 the facility that the reinforcement they would need
11 on the distribution system alone to feed this
12 boiler demand, if they were to replace it by an
13 electric boiler, would be four hundred (400 M\$)
14 million dollars. And there would likely be impact
15 on the transmission system and we don't know what
16 the impact on supply would be.

17 So, existing stable demand, I would say,
18 within business fluctuations from current
19 industrial gas users in the next three to five
20 years.

21 Also, potential additional demand for
22 natural gas, from industrial facilities currently
23 on coal, oil or diesel as part of their carbon
24 reduction plan. Those near gas lines will seek
25 connection, others will require a non pipe

1 alternative such as LNG or CNG.

2 I have LNG companies out of Alberta calling
3 me because they want to do business in Ontario and
4 Québec. And their value propositions are actually
5 quite interesting, being one of my members in
6 Ontario, have signed up with them, they bring the
7 regasification equipment and they bring the LNG. No
8 pipe but plants that was running on diesel now can
9 achieve their twenty thirty (2030) carbon reduction
10 target by switching to gas.

11 So, I think of the next three to five
12 years, as far as industrial demand is concerned
13 it's either going to be stable or increasing.

14 So, to wrap-up, I would say: a very
15 interesting hearing. How do we, how do we crack
16 this nut? Step by step. Our recommendations would
17 be to set the ROE for a period of time based -- a
18 short period of time, where we know what's
19 happening with demand - based on recommendation
20 from the experts. Three years sounds like a good
21 number. Is it four or five I really don't know but
22 no more than that.

23 In the medium and longer term, risks need
24 to be consider against the plan to adapt rather
25 than as a bailout strategy, and in light of more

1 detail and better method information. And companies
2 should be directed to prepare supporting evidence,
3 for a subsequent ROE hearing in three years, that
4 shows what their business transformation pathways
5 are, includes an integrated resource plan, looks at
6 the mitigation, the impact of the mitigation
7 initiatives taken to date, includes both forecast,
8 depreciation studies and some information on
9 potential stranded assets. That's the time when we
10 had, in my mind, we can have a more granular
11 conversation on whether this change actually
12 harbours risks that warrant a higher ROE and equity
13 thickness.

14 And I as mentioned in my opening remarks,
15 if after having looked at the granular data the
16 risk has gone up, they should be compensated, in
17 the absence of that I'm hard press to see what
18 we're talking about.

19 Any way, with that, I thank you and I am
20 available if there is any questions.

21 Me PAULE HAMELIN :

22 I will not have any further question for doctor
23 Rahbar. So, if they are questions for the cross-
24 examination.

25

1 Me PATRICK OUELLET :

2 If I could have perhaps a few seconds to consult
3 with my clients? Oh, je m'excuse, en français.
4 Donc, oui quelques secondes pour consulter...

5 LE PRÉSIDENT :

6 Oui, oui ça va. Il semble y avoir un petit pépin
7 technique. On voit l'image de (coupure de son). Moi
8 je ne vous vois pas. Parfait.

9 Me PATRICK OUELLET :

10 Donc, je peux tout de suite, I can already advise
11 the Board that we have no questions in cross-
12 examination for doctor Shahrzad. Thank you, Doctor.

13 LE PRÉSIDENT :

14 Merci. Pas de questions de la Régie? Madame
15 Falardeau? Maître Duquette?

16 EXAMINED BY THE FORMATION

17 Me LISE DUQUETTE :

18 Q. [2] Yes, I will have one question for you. You said
19 something, excuse my English but, if I don't recall
20 exactly but you said: "You don't have to do an...
21 you don't have to equate a risk and a change. And a
22 change might be beneficial and/or detrimental." And
23 doctor Brown, in his presentation, I don't know if
24 we need to take the presentation, but it's at page
25 4 and I will take my notes. And it might not be

1 exactly as he said it but I know it's more
2 synthetic. But it's not the way the risk is not,
3 there's no uncertainty about the way they will
4 recovered their money they invested but it is, the
5 risk is they don't know how they will do it.

6 So, in light of what you said about
7 equation, equating the risk and the change, I would
8 like to have to your though about that business
9 risk as doctor Brown's put it.

10 R. Maître Duquette, you're asking an engineer to opine
11 on business risk and I can see my experts are
12 already shuttering in their... in their shoes that
13 I may actually respond. So, let me, let me preface
14 that by saying I am not an expert by any stretch of
15 imagination on, on business risk.

16 But, they don't know how to recover it is
17 an interesting question, as I was listening to
18 doctor Brown I was fiercely emailing our analysts
19 and saying "do we know the vintage, do we know the
20 vintage of Énergir's assets". And we really didn't.
21 And of course there's no, there's nothing on file
22 to know, so I don't really know whether their
23 ability to recover is diminished or not. I don't
24 recall, at least in the past ten years that I've
25 watched the space very carefully that there have

1 being tremendous leave to construct applications.

2 So number one is I don't know how old their
3 assets are. I don't think there are too many
4 assets, other than meters, that are getting change
5 but would have forty years on them.

6 So, again for me, excuse the dumb unread
7 engineering mind, this is very difficult to
8 imagine, absent knowing what we're actually talking
9 about. And specially in view of seeing that the
10 energy majors in the world have adapted, the world
11 is going to need energy, it may not need this
12 energy but it will be another energy so how do we
13 provide it. They are adapting and BARE companies
14 are shining examples of how they have managed to
15 diversified their assets base, grown their
16 portfolio.

17 So I'm struck by what is the problem in
18 their recovery. I'm not seeing it. Again, I don't
19 want to prejudge, the data isn't there, if we have
20 the data maybe there's a risk. If there is a risk,
21 let's see it.

22 It's, hypnotically very hard for me, Maître
23 Duquette, to make anymore sensible remarks. Or any
24 remarks I made may actually not make any sense. So
25 my apologies if I didn't really answer the

1 question.

2 Q. [3] Oh no, that's fine I just wanted to have your
3 thoughts about this. So, that will be all my
4 questions. Thank you very much.

5 LE PRÉSIDENT :

6 Alors, il n'y aura pas d'autre question de la part
7 de la Régie. Maître Hamelin, je crois que vous
8 venez de m'indiquer, je pense, que vous n'aurez pas
9 de réinterrogatoire pour madame Rahbar?

10 Me PAULE HAMELIN :

11 No. I will not have any further question to doctor
12 Rahbar. Thank you.

13 LE PRÉSIDENT :

14 Alors, on peut libérer docteure Rahbar tout de
15 suite.

16 R. Merci, Mesdames et Messieurs.

17 LE PRÉSIDENT :

18 Thank you very much.

19 Me PATRICK OUELLET :

20 Et je me rends compte, Monsieur le Président, que
21 j'ai adressé la docteure par son prénom, c'était
22 vraiment, vraiment une erreur de ma part, là, donc
23 je m'en excuse.

24 Me PAULE HAMELIN :

25 J'ai fait la même chose d'ailleurs hier de mon

1 côté.

2 R. On a lighter note, I have been called much worst
3 things, so don't worry at all. Thank you... thank
4 you for noting it. Bye everyone.

5 LE PRÉSIDENT :

6 On pourrait passer tout de suite au panel numéro 2.
7 Votre micro.

8 Me PAULE HAMELIN :

9 Oui. Alors, effectivement si vous me donnez
10 quelques minutes on va juste se réarranger pour...
11 pour le docteur Hopkins.

12 LE PRÉSIDENT :

13 Oui.

14 Me PAULE HAMELIN :

15 Merci.

16 Me ÉRIC McDEVITT DAVID :

17 Monsieur le président?

18 LE PRÉSIDENT :

19 Oui?

20 Me ÉRIC McDEVITT DAVID :

21 Oui. Désolé c'est moi encore. Juste... Par
22 efficacité, pendant qu'on attend, donc j'ai
23 rediscuté de la question avec mon analyste, et il
24 me dit qu'il va se débrouiller avec l'information
25 qui se retrouve en annexe du rapport de docteur

1 Brown. Donc, la précision qui a été demandée ce
2 matin n'est pas requise. Je m'excuse pour la perte
3 de temps.

4 LE PRÉSIDENT :

5 Ça va bien, merci.

6 Me PATRICK OUELLET :

7 Merci, Maître David, on apprécie beaucoup, merci.

8 Me ÉRIC McDEVITT DAVID :

9 Merci.

10 Me PAULE HAMELIN :

11 Alors, Monsieur le Président, on va être prêt pour
12 assermenter le docteur Hopkins.

13 -----

14 PANEL 2 - ACIG

15

16 IN THE YEAR TWO THOUSAND TWENTY TWO, on this
17 seenteenth (17th) day of June, PERSONALLY CAME AND
18 APPEARED:

19

20 Dr. ASA HOPKINS, Vice President at Synapse Energy
21 Economics, 485 Massachusetts Avenue, suite 3,
22 Cambridge, Massachusetts, (USA);

23

24 WHO, after having made a solemn affirmation, doth
25 depose and saith as follows:

1 LE PRÉSIDENT :

2 Short comment: the pace of your voice was perfect.

3 R. I will endeavour to keep it up.

4 Me PAULE HAMELIN :

5 No! no!

6 R. Down.

7 Me PAULE HAMELIN :

8 So, Mister Chairman, we have... Oups, I've lost
9 everything. Ah okay. Sorry. Perfect. So, Mister
10 Chairman, we have already filed the affidavit of
11 Dr. Hopkins for the adoption of his evidence.
12 Before we go through the... his presentation, I
13 just have one or two questions to Dr. Hopkins with
14 respect to his report, if you'll allow me.

15 EXAMINED BY Me PAULE HAMELIN :

16 Q. [4] My first question to you, Dr. Hopkins, we have
17 filed the affidavit adopting your evidence, is
18 there any corrections or modifications that you
19 would like to make on your report?

20 R. Yes. There is one correction I'd like to make. On
21 page 17 of my direct evidence, line 10, I say only
22 forty percent (40%) of the assets of Chesapeake
23 Utilities, the correct number there is fifty-one
24 (51), so just simply replace forty-one (41) with
25 fifty-one (51)... forty (40) with fifty-one (51).

1 Q. [5] And we have filed your presentation as an
2 additional exhibit to this case which we see here
3 on the screen Summary of Evidence on Business risk.
4 Do you also adopt this document as part of... of
5 your evidence, written evidence, in this matter?

6 R. I do.

7 Q. [6] Okay. So, Dr. Hopkins you can proceed with your
8 presentation, on a slow pace.

9 R. Thank you. Good... I'm glad to have the whole
10 morning, so I appreciate the Régie hearing me out
11 and I'm glad to be with you here to present a
12 summary of my evidence. If we could proceed to the
13 second slide, I will give you a short overview of
14 what I intent to tell you about this morning.

15 I have left off the part where I tell you a
16 bit about my background. I'm happy to answer
17 further questions about it, but I think you all
18 know more about my background at this point than
19 most of my professional colleagues do, and I
20 haven't gone very closely, yesterday.

21 So I will begin my presentation by talking
22 through and giving you a sense of the frame of
23 the... my approach to the proceeding, then I'll lay
24 out a few principles and definitions where further
25 ways of, ways of seeing that I bring to this work.

1 And then, I will go through the utilities,
2 the distribution utilities first with respect to
3 their business risk. Short term that is volatility
4 risk and then long term that is capital recovery
5 risk and draw some conclusions about the two
6 distribution utilities.

7 I will end with a couple of slides about
8 Intragaz.

9 Madam Clerk, you can go to fourth slide to
10 the introduction. Sorry, go ahead. My approach to
11 this proceeding. So my work here is grounded in the
12 realization and the understanding that the gas
13 utility business, its finances and operations and
14 their associated risks, are shaped by the
15 regulatory and policy regime in which the utilities
16 operate.

17 I view utility regulation as itself, a
18 manifestation of policy. I have been getting one
19 who was trying to decide whether those of you
20 sitting on the Régie were policymakers or not. I
21 would answer in the affirmative. At the same time,
22 you of course work within a broader policy context
23 set for the province and for the nation.

24 So my testimony is intended to inform the
25 Régie about the business risk of the three gas

1 utilities, inform my view through this regulatory
2 and policy perspective, particularly but not
3 limited to, as it relates to greenhouse gas
4 emission mitigation and what that will mean for the
5 business risk of those utilities, which is the
6 energy transition, in the language that is common
7 in Québec.

8 In order to prepare this evidence, I've
9 evaluated the Aviseo study as well as both Dr.
10 Brown's and Dr. Villadsen's expert testimonies, and
11 I've conducted my own analysis, which is presented
12 in my report.

13 Dr. Brown's testimony compares the business
14 risk of the three Québec utilities to Dr.
15 Villadsen's US gas utility sample, and Dr.
16 Villadsen then incorporates that relative risk
17 assessment into her recommendations on ROE and
18 capital structure. And in some sense the logical
19 flow of my testimony and Dr. Booth's testimony is
20 similar, although of course we are in addition
21 responding to Dr. Brown and Dr. Villadsen in that
22 process.

23 I'll say, there's a number of things that
24 are in the Aviseo report that are not highlights of
25 Dr. Brown's testimony and to which I have not given

1 a great deal of weight to, and largely these, that
2 is because these are points that Dr. Brown
3 identifies as areas where they are not particularly
4 different between US sample and the Québec
5 utilities, and therefore you can set them aside,
6 when trying to do this comparative analysis.

7 One example being the physical impacts, the
8 weather and climate impacts of climate change on
9 utility assets is not appreciably a different risk
10 in Québec than in the US gas sample.

11 So the focus of my evidence really is on
12 the areas of potential differences from the US gas
13 sample and those are roughly summarized in two
14 categories: the regulatory and policy context and
15 the question of competition between gas and other
16 sources of energy, most particularly electricity.

17 You can go to the next slide. So at this
18 point in the proceedings we are all pretty familiar
19 with the role of business risk in a cost of capital
20 case, just to put us to, to ground us all again
21 where we are. The allowed return on equity and
22 capital structure of a utility should reflect the
23 return that investors would demand for investing in
24 a prudently run utility facing the same financial
25 and business situation as the utility, thus being a

1 fair cost of capital or a fair return.

2 The financial piece reflects overall market
3 demand for return from equity, that has an overall
4 sort of comparable level of risk as the industry,
5 the utility level comparators, so accounting for
6 the level of risk in sort of a benchmark or a proxy
7 group of regulated utilities.

8 The business risks piece is intended to
9 reflex and inform the overall setting of the return
10 by examining the specific risks or the specific
11 types of risks that a given utility faces due to
12 its particular business context, its regulatory
13 context, its customer context, its competitive
14 context.

15 And you know, prudent utility managers
16 evaluate those risks, analyse the costs that those
17 risks might impose along with the costs of efforts
18 to mitigate them and take appropriate action, you
19 know, obviously in concert with their regulators.

20 And here, I guess, I'll say that this is an
21 area of some difference between myself and Dr.
22 Brown. He laid out an analogy, and I am not going
23 be able to quote him exactly but the idea is that
24 if you imagine playing a game of cards, that
25 business risk analysis is not about the skill with

1 which the game is played, but by which cards the
2 utility has been dealt. And I guess... I would
3 broaden the story there a little bit. And say that
4 one of the characteristic of this... of this
5 structure is that the rules of the game itself are
6 potentially malleable.

7 The regulators help to set the rules of the
8 game, the utilities can act to create new cards,
9 right, but it's not a simple analysis of external
10 circumstances and something simply happening to the
11 utility, without its ability to adapt, without its
12 ability to adjust and without the active
13 partnership and engagement with its regulators, in
14 order to find an appropriate path forward.

15 So I take a somewhat broader view of this
16 business risk analysis than Dr. Brown does.

17 Next slide, please. So, just to get some
18 terminology straight, I know the question of
19 timescales and different types of risk, timescales
20 and timeframes and how close to the present will be
21 something that folks might want to talk about in
22 the course of my testimony. So, just to get some
23 definitions straight and the way that I think about
24 this.

25 So in my testimony and my evidence, I

1 described and divided it into consideration of
2 short term business risks and long term business
3 risks. And what I refer to as short term business
4 risk is essentially operational in nature. Risk
5 that the utility might receive less revenue than
6 expected or be forced to pay unexpected costs due
7 to some event happening in the world, economic
8 conditions, weather, changes in customer demand
9 from one way or another.

10 And this is manifested in the variability,
11 year-to-year variability or variability over time,
12 in the rate of return earned by the utility
13 shareholders, in reference to their allowed rate of
14 return. So this is short term in the risk. The
15 timescale on which these events occur is generally
16 short, year to year, you know, not generation to
17 generation.

18 So, what I refer to as long term business
19 risks has to do with the risks related to long-live
20 assets. The risk that the utility might be unable
21 to recover both its invested capital and earn a
22 reasonable return on that capital, this is capital
23 recovery risk.

24 We also sometimes refer to this as stranded
25 cost risk, you know a stranded cost, if the utility

1 were actually fully burdened with a stranded cost
2 that would be equivalent to not being able to
3 recover its invested capital. And just for
4 definitional sake, I think, I'll define a stranded
5 cost: it's the undepreciated value of an asset that
6 is no longer used and useful.

7 So there is two ways that capital recovery
8 risk might actually come to pass, might actually
9 happen in the real world. One is that in the event
10 that there were an asset that is no longer used and
11 useful, a regulator might say, you don't get to
12 recover that anymore. This is the regulatory risk.
13 We can touch on this again a little later but I
14 don't view this as a very material risk in a sense
15 that overwhelmingly regulators take their view of
16 the regulatory compacts pretty seriously, that if
17 the investment was prudent at the time that it was
18 made, then being able to recover it, even when it's
19 not use and useful, is accommodated basically
20 whenever possible.

21 There are some circumstances in which it
22 might not be possible, because of overall market
23 changes or other circumstantial changes and this
24 would largely manifest itself through competition.
25 The competition may limit the ability of utility to

1 even charge the rates that are sufficient to
2 recover its full cost of service.

3 I will go in a little bit more detail on
4 this piece in particular, a little bit later. So
5 you can go to the next slide, please, Madame Clerk.

6 So my last sort of introductory slide here
7 has to do with timescales of risk and return.

8 So in my evidence, I argue that the ROE and
9 capital structure should primarily reflect the risk
10 that's facing the utility during the period that
11 the ROE is in effect. I argue that given the
12 evidence that's in this proceeding, that the short
13 term risks, those volatility risks should be the
14 primary driver, the primary informant of the Régie,
15 as you consider the business risk portion of the,
16 of setting the ROE.

17 If there were in fact capital recovery
18 risks in the short term, these should also be
19 included, but nobody is claiming that there's any
20 likelihood, in the few years, that's there's any
21 capital recovery risks for any of the utilities.

22 If they were in fact present and well
23 justified capital risks, in other later periods,
24 than those could be taken into account even during
25 the immediate period. However, no such risks too my

1 mind have been sufficiently justified in this
2 proceeding, and this comes from a preview of my
3 conclusion, you might already have read it, and
4 doctor Rahbar draws on my conclusion perhaps in her
5 statement and recommendation.

6 That if, if there were further analysis
7 done to really actually analyse these risks and
8 show how they might come to pass, with what
9 likelihood and under what conditions, and if they
10 would perhaps not be mitigable through appropriate
11 regulatory and financial action, then, yes, we
12 should, we should take that into account. But the
13 question is, has that been shown here and my answer
14 is no. I think that the utilities should do that
15 analysis and come back and we can revisit these
16 questions.

17 So now I'm gonna turn and talk a little bit
18 about the short term volatility risk and what the
19 real world tell us about with respect to that.
20 Thank you, Madame Clerk, you can go on to the next.

21 A refresher, a few notes about the short
22 term risk. Volatility risk. Volatility in returns
23 is associated with risk as doctor Brown's state.
24 "Other things equal, investors prefer returns that
25 are less volatile." In general that means that

1 lower volatility investments are preferred by
2 investors and what's being preferred by investors
3 means, in practice, is that the investors are
4 willing to accept a slightly lower overall return
5 in exchange for lower volatility. So that means a
6 lower cost of capital if the volatility is lower.

7 There of course a number of different
8 kinds of regulatory tools and this is where we get
9 into the role of the regulator as a shaper of these
10 business risks. Deferral accounts, decoupling,
11 multi-year rate plans, regular recurrent frequent
12 rate cases confirm or eliminate regulatory lag and
13 thereby lower business risk by reducing that year
14 to year volatility.

15 Low volatility of returns is an indicator
16 of short regulatory lag. I heard doctor Brown
17 testified earlier in this hearing that if the
18 regulatory lag is not existent or very short, then
19 you expect the allowed and achieved ROE to be very
20 close to each other.

21 Québec's regulatory policy has in fact
22 established these kind of tools for Énergir and
23 Gazifère. And utilities, they have in fact
24 demonstrated low volatility in their returns. While
25 consistently exceeding their allowed rates of

1 return. So these tools are successful. They are
2 delivering low regulatory lag, and thus low short
3 term business risk for the utilities. You can go
4 the next slide, we will see what the actual numbers
5 show for Énergir and than Gazifère, so slide 10
6 please.

7 For Énergir, this is a plot of data that
8 was provided in a data request filed in this
9 docket. The allowed returns in blue, the achieved
10 returns in orange. We see that Énergir achieved
11 returns have ranged between nine and eleven and a
12 half percent (9-11.5%) over the course of the last
13 twenty (20) years. Overwhelmingly between nine and
14 ten a half percent (9-10.5%) for the last fifteen
15 (15) years. And if you were to calculate the
16 standard deviation of this, of this orange curve,
17 it's half a percent (0.5%). So, there's some
18 variability but it is, it is of half percent
19 (0.5%). Next slide please.

20 For Gazifère. It's a little bit noisier.
21 You can see that visually but also the calculation
22 of the standard deviation of this, of this data is,
23 it's a little bit less than point seven (0.7). So
24 yes, it's, it's almost one and a half time noisier
25 than the Énergir returns. But it still, apart from

1 few excursions resides between nine and eleven
2 percent (9-11%) through out this draft's period.
3 Next slide please.

4 So, remember that the purpose of this
5 analysis is to inform the comparative risks between
6 the proposed benchmark gas sample, or other utility
7 sample, with the Québec Utilities. So, doctor Brown
8 did a qualitative analysis. He looked at the words
9 in the 10-K filing for the descriptions of the
10 regulatory structures in which the US gas sample
11 operates. And concluded the utilities in the sample
12 have similar regulatory lag to Énergir because they
13 have similar use of deferral accounts or decoupling
14 and that sort of things.

15 If they had a similar regulatory lag, they
16 should have similar volatility in their achieved
17 returns, which they do not. They also, on average,
18 underperform their allowed ROE. Although, the focus
19 of this analysis is on, is on risk and variability
20 rather than overall level of report. I'll come back
21 in a moment, to the question of whether the gas
22 sample is a suitable one. And whether there... this
23 is possible that one of the reasons why the risk is
24 different, it's because the actual businesses that
25 the utilities are in, are different. We'll look at

1 those numbers on volatility. Next slide please.

2 So these are the allowed or the achieved
3 returns on equity, over the course of the last ten
4 (10) years for the nine utilities in the US gas
5 sample. The grey area is the range of data that we
6 were able to find again in 10-K forms for the
7 allowed rates of return. Not all companies file all
8 that information nice and neat in that sort of
9 table in their, in their 10-K file. So we can, we
10 can at least look at their achieved returns.

11 I see that they vary all over the place.
12 Some of them, some of the utilities have
13 experienced losses in a given year. Their
14 variability year to year amounts several percent
15 level, if you follow anyone of these curves across,
16 they're a handful that are relatively stable but
17 many of them jump around quite a lot. So we see the
18 standard deviation of these, that's on slide 14.
19 Next slide please.

20 The standard deviation of those currents...
21 for the nine utilities in the US gas sample. One of
22 them, Chesapeake has a standard deviation that is
23 smaller than Énergir's. The other eight are larger,
24 are larger and in many cases distinctly larger. You
25 know a good more than three percent (3 %) standard

1 deviation range in the spread of variability of
2 their achieved returns. Next slide.

3 So, what can we conclude from this? There's
4 a lower regulatory lag and lower volatility of
5 returns for Énergir and Gazifère than there is for
6 the US gas utility sample. Which indicates a lower
7 level of short term business risk. All else equal,
8 this implies that Énergir and Gazifère should have
9 a lower cost of capital than the US sample as
10 presented by the utilities' witnesses. Next slide.

11 I'll take a moment and... revisit the
12 question of the suitability of the US gas sample.
13 One option for why the volatility could be so much
14 higher, in the US gas sample, is that it includes
15 companies that have substantial business outside of
16 regulated gas distribution, and thus are simply
17 facing different risks, different business risks.
18 Or it may even be just a different class of company
19 entirely, therefore a different financial risk,
20 from Énergir or Gazifère.

21 So, a few examples : Chesapeake, fifty-one
22 percent (51 %) of its assets are in regulated gas
23 distribution. The bulk of the rest are in gas
24 transmission, which is a different business. Note
25 this is the point for which I had that correction

1 in my pre-filed testimony.

2 South Jersey Industries, slide 16 please,
3 South Jersey Industries, less than half of its
4 revenues come from its regulated gas distribution
5 utility operations.

6 New Jersey Resources that is the one of the
7 nine that was labelled as mostly regulated in Dr.
8 Villadsen testimony. Fifty-two percent (52%) of its
9 assets are in gas distribution, it also developing
10 solar generators and engaged in wholesale and
11 retail gas supply, transportation and storage.

12 Northwest Natural is today, actually pretty
13 close to a pure-play gas distribution utility.
14 However, during the analysis period covered by Dr.
15 Villadsen's work, it owned an unregulated gas
16 storage business and in twenty-seventeen (2017) it
17 took a substantial loss from its investment in
18 that, in that business. If we were to look at that
19 noisy return target that Northwest Natural took a
20 big dip in twenty seventeen (2017), and that's
21 because of this unregulated business that it was
22 involved in.

23 Similarly there's other kind of risk that
24 you might want to think about, taking account of in
25 the... in the suitability of sample. One of these

1 companies is NiSource, it had a gas-related
2 disaster, it started distribution and it blew up in
3 Massachusetts near Boston and it was basically
4 forced to sell its gas distribution business in
5 Massachusetts as a result, all during the analysis
6 period in which it is being put forward as a... as
7 a benchmark, you know, a proxy that can be use to
8 evaluate the risk of Énergir and Gazifère.

9 So, in conclusion looking at this structure
10 pieces were left with either of two options. One is
11 that the gas sample is a suitable one, but the
12 regulatory lag in practice is dramatically
13 different for the gas... US gas sample and for
14 Quebec, and thus the... you should consider a lower
15 ROE for the Quebec Utilities, or alternatively that
16 the sample itself is actually not a good proxy,
17 because the volatility in its results are not
18 because of the regulated gas distribution
19 businesses that are part of those companies, but
20 because of their unregulated actions, which in
21 that... in that conclusion would flow through to
22 question the use of those companies of proxies at
23 all and would challenge much of the test players in
24 this case.

25 So, I think, you know, I largely come down

1 on, on the willingness to be okay with the sample,
2 but... but sceptical at the very least, I conclude
3 that business risk on the short term basis for the
4 Quebec Utilities is lower than for the US gas
5 sample.

6 Now, let's make a turn to the long term,
7 that is capital recovery risk. Madame Clerk, you
8 can go for slide 18 if you like.

9 So, let's talk about that what we all
10 remember what we mean by this long term capital
11 recovery risk, the two different pathways that can
12 happen. One is essentially a regulatory risk that
13 the regulators might find. First you have to have
14 assets that were no longer used and useful, and
15 then the regulator would have to say : " We're not
16 going to let you... we're not going to develop a
17 deferral account, we're not going to do some sort
18 of other accommodation, we're not going to
19 securitise it." Whatever, you're not going to
20 recover it or recover it with some lower, some
21 lower rate of return or something like that.

22 The other potential long term risk comes
23 from competition where it might be... it might come
24 to pass, how you actually -- not actually earning
25 your rate or return is if you simply charge enough

1 money to the ratepayers to recover your full
2 revenue requirement. So, the potential things that
3 could potentially, you know, they have been
4 positive things that could lead to this kind of
5 risk and uncertainty in Quebec.

6 First, and in particular, remember we are
7 in a differential case, so the question is: what's
8 different between Quebec and elsewhere? The
9 policies and actions to reduce greenhouse gas
10 emissions can be different, and the competitive
11 position of gas versus electricity may be different
12 and those are closely related and could create some
13 sort of capital recovery risk. We will look at each
14 of those in turn. Next slide, please.

15 So, one thing that I tend to do when I'm
16 looking at policy context is to remember that there
17 are policies that can be implemented at multiple
18 levels. The national government and all governments
19 of both US and Canada have committed to net-zero
20 emissions in twenty fifty (2050) as part of their
21 filings in response to the Paris Agreement.

22 So, both US and Canadian utilities across
23 all states and provinces face national over drivers
24 to reduce emissions as part of that path. I expect
25 that the long term energy transition impacts on

1 different types of utilities are roughly comparable
2 in the two countries.

3 That said, you got to think about what
4 impacts is it likely to have on gas utilities over
5 the course of, say the next decade, recognizing
6 that we're really concerned here about what the
7 risks are in immediate term, but if you could
8 really see that a real risk was going to occur in
9 seven years out or twelve (12) year out, it would
10 be prudent and appropriate to take that into
11 account.

12 So, what's likely to happen over the course
13 of the next decade? So, I concluded in my evidence
14 that the impacts on gas utilities are likely to be
15 modest over the next decade, sales impacts rather
16 than asset level, capital recovery impact. Even the
17 sale impacts are relatively modest, there's a
18 couple of drivers for this. The technology that you
19 would need to use to compete with gas are
20 themselves... don't have a large market share in
21 many places today where there's a lot of gas. It
22 takes time for those technologies to penetrate
23 markets.

24 I know in Quebec, the electric heating
25 market is well established, but the newer

1 technologies using heat pumps, for example, that
2 are likely to be of interest to folks who are
3 electrify are not yet fully mature in term of
4 market opportunities. Their market would have grow,
5 a lot more people would have to learn how to
6 install them well and, you know, a bunch of
7 different changes need to take place.

8 Even if those new technologies did rapidly
9 become the dominant technology, the plough for
10 heating for example, that's for water heating, the
11 stock turn over time for heating equipment are
12 generally long, ten (10) years for water heating,
13 fifteen (15) or more years for space heating
14 equipment. So, the replacement timescale is muted.

15 Folks who have looked at this and tried to
16 model out what that looks like generally indicate
17 about a twenty percent (20%) sales impact by twenty
18 thirty (2030) to be on track to net-zero in twenty
19 fifty (2050). U.S. analysis point to about an
20 eighteen percent (18%) effect, Énergir's Resiliency
21 Plan, the first one, I know there's a second in the
22 record now too for twenty twenty-one (2021), point
23 to about a twenty-two percent (22%) reduction
24 sales, that implies about a twenty-two percent
25 (22%) reduction in sales to equip the buildings as

1 part of being on a policy-consistent path.

2 So, the course of reduction in gas
3 throughput is not directly causally linked to the
4 capital recovery risk because utilities can take
5 actions to mitigate the impact of sale changes on
6 capital recovery, with honestly, when necessary,
7 working with their regulators, but in some cases
8 with decoupling, for example, an automatic
9 adjustment would account for that even in three
10 years. Next slide please.

11 I'll take a moment to look at competition
12 risk. Again, the risk is not the competition might
13 lead to a reduction in sales because as we just
14 said, reduction sales alone does not create a
15 capital recovery risk. The impact would have to be
16 that if the sales reduction happened, you have to
17 raise rates enough to recover that and eventually
18 get to some point where you can't raise rates any
19 further. If you raise rates any further, sales drop
20 even faster. There's simply isn't a rate where the
21 whole revenue requirement can't be recovered and
22 you end up to earn less than your, what would
23 otherwise be your revenue requirement.

24 You simply can't do rate times volume,
25 there isn't an available product there that

1 actually works in the market place, if you don't
2 have that product to get to your revenue
3 requirement then you might fail to earn it, that
4 would show off as a capital recovery risk.

5 Regulators and utilities would almost
6 surely work together to avoid getting to this
7 point. Right? There are a lot of tools they can
8 use, and I'll talk about them in a moment, to avoid
9 getting here and... So, the question of how likely
10 is such a situation and how mitigable is it is
11 relevant. I know there's this question of, you
12 know, Dr. Brown stated and one of the members of
13 the Régie asked about this earlier: if there's not
14 actually any real chance that the... the capital
15 recovery risk would actually come to pass, right.
16 There's no particular proposal here that any...
17 that this future is actually likely to come to
18 pass. The only question is: what is... there's some
19 risk, because we don't really know what path would
20 be use, how it will be mitigated. And so, that...
21 that's a concrete risk, so I'll address that coming
22 up in a few moments.

23 I do want to remember that we're talking
24 about comparison here again between Quebec and the
25 US sample. There is no evidence in the docket here

1 about how the comparative position of electric and
2 gas actually compares between Quebec and in the
3 various jurisdictions in the US sample. Doctor
4 Brown simply asserts that because electricity is so
5 cheap in Québec, the, it must be that the
6 competition risk is greater in Québec than
7 elsewhere.

8 But I think it's important to actually do a
9 quantitative analysis of the relative competitors
10 of electrical and gas. Given the different markets,
11 given the different climate in those different
12 places, and actually understand to what extent that
13 understanding is backed-up by data.

14 I also would point out that just because
15 there is a difference in the amount of savings for
16 being, for heating with gas versus electricity in
17 different places, that doesn't necessarily mean
18 that there is a difference in a relative
19 competition risk between those places. If gas has a
20 two to one hedge over electricity in Québec, and
21 its three to one hedge over electricity in some US
22 state, changes in the price of gas by a factor of
23 fifty percent (50 %) would still leave gas with a
24 distinctive competitive advantage and not
25 necessarily lead to mass defection for example.

1 So, the how much room there is, how much
2 possibility there is in that competition equation
3 matters. Next slide please.

4 Again, now let's think about what the
5 evidence actually shows about behaviour around
6 competition in Québec. If we look back over the
7 last twenty-five (25) years, Québec customers have
8 continued to use gas, even when gas prices were
9 substantially higher, like three times higher than
10 they have been recently. I don't know if there's a
11 raise current, you know, near term spike, that is
12 not reflected here related to a global advance
13 exporting of gas to Europe and war, and all sort of
14 things. That doesn't account for that.

15 But, just look on the annual data of
16 twenty-twenty (2020). There is a point in, you
17 know... basically before fracking in the US, you
18 know, before it became a large amount of natural
19 gas export, low cost natural gas available in North
20 American, when gas cost about three times what it
21 was in the last few years.

22 If we'd look at the requests for whom
23 Énergir and Gazifère have most of their
24 infrastructure: the small pipe. They serve some
25 commercial and institutional customers. They have,

1 they showed, you know, relatively indifferent
2 behaviour in their consumption to a gas price that
3 was distinctly higher, you know, equivalent to a
4 quite large carbon price, for example, I can't
5 remember the number but you can imagine that you
6 have to pay a very large carbon price to triple the
7 cost of the deal.

8 Industrial customers, seem more sensitive,
9 yes, you watch the industrial use go down if the
10 price go up, the price comes down and industrial
11 use goes up. But again the asset risk is much lower
12 in the industrial case because the amount of assets
13 built to serve industrial customers is small
14 relative to the other classes.

15 If we look at the analysis about the bill
16 advantage of gas versus electricity. Gazifère filed
17 an analysis that showed that in the past, up to the
18 present, the customers using gas had distinctive
19 lower bills than those using electricity. The
20 updated Énergir Climate Resilience Plan that was
21 filed in this hearing, shows a continued
22 competitive advantage for gas over electricity into
23 the future, while accounting for executing the plan
24 with the use of higher cost renewable natural gas.
25 The bi-energy proposal in a residential center etc.

1 So, overall I conclude that there's likely
2 to be considerable room for gas rates to rise with
3 -- associated with falling sales - but also
4 crossing a tipping point where the utility would be
5 unable to recover its revenue requirement and you
6 get some sort of death spiral situation.

7 I agree that it is unlikely that we would,
8 Québec would find itself in that situation, you
9 know, there's basically zero chance that the
10 utilities would find themselves in that situation
11 both because the actual conditions to create that
12 situation would themselves be quite a change from
13 the status quo, it will take some time to get
14 there. And because we would, Québec and the Régie
15 and utilities would use that time, to take various
16 kind of mitigation actions.

17 Again, I care in a business risk context
18 about the actions that folks might take to address
19 risks and not just some sort of external set of
20 cards that are dealt and must be paid. Next slide.

21 So thinking about what the mitigation
22 actions are that might take place over that coming
23 timeframe as energy transition proceed.

24 The first is, the potential and the need
25 for planning. Faced with known projections forward

1 of what the changes in sales or at least the
2 changes in emissions needs to look like, utility
3 managers can mitigate their risks by developing a
4 business plan for managing the firm in the face of
5 that changing policy and competitive context.

6 Such a plan would identify and quantify
7 risks and opportunities, including when they would
8 impact the company, and what their impacts would
9 be. This kind of plan assessment would include
10 assessing the roles of the electric and gas
11 utilities. What the sales forecast would be under
12 different scenarios. What infrastructure would be
13 needed under different scenarios. What happens
14 under different gas prices forecasts for fossil
15 gas, different kinds of customer counts and
16 consumption patterns by different type of
17 customers, industrial customers might be really
18 quite different from residential customers, for
19 example. And of course, the availability and cost
20 of alternative fuels, RNG, hydrogen and other
21 things.

22 Even simply having such a plan, would
23 itself reduce uncertainty regarding the future of
24 the company business and thereby lower investor
25 risk. Investors coming to a company facing energy

1 transition might say: I'd like to understand what
2 your plan is, how are you dealing with that. And
3 company says: We don't have one. That is likely to
4 be a riskier response in term of the demanded
5 return or the willingness to invest, than for a
6 company that says: I know, here's our plan, this is
7 how we're going to adapt to that, this is how, this
8 is why your investments still works.

9 Just to clarify whether this kind of plan
10 exists or has been done. I think the seed have been
11 planted for it but it does not exist today that
12 I've been able to find. The earlier Resiliency
13 Report of Énergir starts down this path, the
14 updated one shows some analysis that indicates some
15 further work has been done. The slide, the page 33,
16 if I remember the page number right, there's a
17 chart in this, a text there about accounting for
18 reduction in sales, what is it going to rates, etc.
19 So, the ideas are there. I think we're again
20 starting down the appropriate path but we're not
21 there. Next slide please.

22 Once, of course, you have a plan there are
23 different kind of things you can do. I've
24 identified four different classes or ideas of
25 potential mitigation actions. Obviously I don't

1 trust that I know everything about managing a
2 utility. I expect that the folks in the utilities
3 when they conduct this analysis will come up with
4 other ideas. But here's a few to give you some
5 examples.

6 Firstly, there's of course to be really
7 careful about examining any choice to invest in
8 new gas infrastructure. If you're worried about
9 capital recovery risk, investing in more capital,
10 you want to be careful about that. This includes
11 understanding what is the useful life of that
12 infrastructure is likely to be, which inform the
13 appropriate depreciation rate for example, and
14 consider what the options are for non-pipeline
15 alternatives, to be able to have just less capital
16 at risk in all.

17 The second item: the utility can reevaluate
18 its depreciation approaches for each type of
19 utility's asset, including differentiating among,
20 what might be today lump together as similar kinds
21 of assets, but if they serve different types of
22 customers, then different long term usage patterns
23 for those assets, then you might need to
24 differentiate there and depreciate those of
25 different timelines to reflect their actual useful

1 life.

2 That utility could develop partnerships
3 with electric utilities to meet the electric
4 utilities winter peak needs through the gas system,
5 subject to regulatory approval of course. This, of
6 course, the bi-energy approach, this one has been
7 proposed in a number of different places in the
8 U.S. as well. But no one is as far along as Québec
9 in terms of actually proceeding toward that sort of
10 idea.

11 There's, of course, looking at low-carbon
12 fuels, understanding them better, developing them,
13 the green hydrogen, biomethane, what their cost is,
14 what their availability is, what the market is
15 going to hold for them, what customers might
16 demand, you know, maybe industrial customers would
17 have particular demands for hydrogen, for example,
18 so speaking about that from a market development
19 standpoint.

20 There's also understanding what it's going
21 to mean for physical infrastructures, hydrogen can
22 cause damage to some kind of metal pipe, so you
23 want to be careful about it, about what this is
24 going to mean for infrastructure cost. Next slide,
25 Madame Clerk, slide 24.

1 Q. [7] Madame la Greffière, peut-être aller à la page
2 24.

3 R. Okay. Thank you very much. So one of the things of
4 that I lay out about this is the question of what
5 lessons to be learned from all the utilities that
6 are perhaps a little further along this path,
7 particularly on the planning front and I think you
8 would... you know, well, you might take initial
9 actions as the bi-energy for example, without
10 necessarily having a full plan mapped out, I think
11 you have to do planning first and then revisiting
12 plan makes a lot of sense to me.

13 So Green Mountain Power, a sister utility
14 to Énergir, the leading electric utility in the
15 state of Vermont, has conducted some planning that
16 I think that Québec gas Utilities could learn from
17 not necessarily (inaudible) it's an electric
18 utility, it's in a different place, right. But in
19 terms of the kinds of things that it takes into
20 account.

21 So GMP, Green Mountain Power has produced
22 recently a couple, two different documents: a
23 Climate Plan, an Integrated Resource Plan, both of
24 these are filed with their regulator and have been
25 approved or acknowledged by the Public Utility

1 Commission in Vermont, and they take an integrated
2 view across the utility's operations and
3 particularly connecting with their financial and
4 regulatory approaches in this context of long term
5 planning.

6 I know the question of Integrated Resource
7 Planning had been mentioned a couple of times in
8 this hearing, in order to clarify the Integrated
9 Resource Planning part of this, is in fact required
10 by Vermont State Law. I talked about my role in
11 helping to, you know, resuscitate that process and
12 making it an effective one, when we were talking
13 yesterday.

14 But the Climate Plan part of this, that's
15 utility management led. The regulator didn't ask
16 for that, the legislature did not require it,
17 utility management saw the need for this kind of
18 work, and set out to do it. That is a proactive
19 utility leadership on understanding these pieces.

20 So potential lessons to draw from the
21 analysis of the GMP planning processes. First, the
22 importance of long term business planning. Second,
23 the value of taking an integrated view across the
24 whole of a utility's business including the drivers
25 and needs of various different kinds of customers.

1 And the need for the plan and the actions
2 associated to that plan to be developed within a
3 particular policy and economic context where they
4 operate.

5 You know, Vermont is not the same as the
6 New Hampshire, is not the same as Québec, is not
7 the same as Massachuset. And reflecting the
8 particular needs for climate change mitigation,
9 adaptation, associated risks, you know, Vermont
10 will experience particular kind of changes in,
11 because of climate change, and that will have
12 particular impacts on GMP's electric system assets.
13 And so it is accommodating and working with that
14 particular context in mind.

15 And finally, the importance in these
16 lessors is integrating the utility's financial and
17 regulatory positions and approach into the planning
18 process, including laying out in detail how those
19 financial aspects of the utility need to adapt as
20 the plans are implemented. Next slide, please.

21 So you know, you are aware that various
22 actions are underway in Québec, that are, you're
23 acting to mitigate these kinds of long term capital
24 recovery risks, the first obviously is the bi-
25 energy proposal, dual-fuel approach to building

1 decarbonization, in which the gas system act as a
2 sort of peaker, non wired alternative in some
3 sense, on peak days in the winter time.

4 I point out... essentially what this bi-
5 energy direction would mean, it is essentially a
6 new business model for Énergir and which in
7 addition to having normal rate paying customers, it
8 has a new customer. Its customer is Hydro-Québec
9 Distribution and it provides a new kind of service.
10 It provides a electric peak mitigation service,
11 right. And by being in this new line of business,
12 it can mitigate rate concerns from decarbonization
13 for other Énergir customers, that helps to mitigate
14 the capital recovery risk for Énergir shareholders
15 as the utility officials indicated that it does,
16 earlier in these hearings.

17 Also discussed earlier in this hearing, and
18 I admit that all I know about this is what was
19 literally been talked about in these hearings, but
20 I thought, it was relevant and interesting, so I
21 put it here. There is a potential proposal
22 mentioned by Énergir to change the protocols
23 profitability required to support new customer
24 interconnection, that would have some effect on
25 selecting which customers get some sort of

1 assistance essentially on... and how the economics
2 work of new customers interconnections.

3 This is essentially an implementation of
4 the first item on my... you know, potential actions
5 to consider list, to examining any choices to
6 invest in new gas system infrastructure and taking
7 into account the useful life of that
8 infrastructure.

9 But these risk mitigating actions are, you
10 know, present. They are being discussed in Québec
11 and can be pulled together in a more comprehensive
12 way. Next slide.

13 So again, you know, we have been talking
14 about Québec for the last little while but the real
15 question here is, how is the, how are the risks in
16 Québec different from the risk in the U.S. gas
17 sample. And so, you know, if the U.S. gas utilities
18 were engaging in all sorts of risk mitigating
19 actions, the planning in the Québec utilities work,
20 right, then that would, that would be informative.

21 In fact, if anything it's the other way
22 around. The U.S. gas sample utilities are only just
23 beginning to conduct the kind of analysis and
24 evaluating actions of the sort that I have
25 discussed and recommended. One particular example

1 of actually taking action, a state taking some
2 actions that are driven by jurisdictional policy,
3 is in Oregon where Northwest Natural is one of the
4 gas utilities. They passed a net zero requirements
5 law in a last year or two and that is spurring
6 their regulator and gas utilities in Oregon, to do
7 much more comprehensive planning about what the
8 future of their businesses looks like.

9 To my knowledge none of the U.S. gas sample
10 utilities have proposed risk-mitigating actions,
11 much less received any approval for those actions
12 on a scale or on a potential of the Énergir Hydro-
13 Québec bi-energy proposed structure. Next slide.

14 So, a note here on the question of, in the
15 long term piece around industrial customers, you
16 know, Aviseo identified potential risks around a
17 large portion of industrial customers, and what
18 that can mean. You know, we saw in the sales
19 figures that industrial customers are more price
20 sensitive, demonstrably it appears, than other
21 customer classes in terms of near term variation
22 but with respect, you know, even that, as I said,
23 is mitigated. For all the reasons, we just talked
24 about before.

25 But on the industrial customers front, in

1 the long term risk, my assessment is actually
2 rather than being a source of risk, the net risk in
3 the context of decarbonization, industrial
4 customers are likely to be a source of opportunity
5 on that for the gas utilities, they're less likely
6 to electrify than other rate classes, Dr. Rahbar
7 describe it up as an amazing cost for...
8 potentially for a customer to electrify their
9 operations. And they're more likely, therefore, to
10 be demanding biomethane and hydrogen delivered by
11 pipe, as part of their approach towards net zero by
12 twenty fifty (2050).

13 Industrial customers who are now using
14 liquid petroleum or perhaps coal or other fuels,
15 may find it advantageous to connect to pipelines
16 first to access to natural gas but in a longer term
17 to access low-carbon gases, again hydrogen or
18 biomethane.

19 And, you know, a little more speculatively,
20 there is a potential opportunity if folks running
21 those facilities are trying to capture the CO2,
22 that has to be sequestered as part of their
23 approach towards net zero, there is of course a
24 pipeline need for the CO2. It is another potential
25 business area to be... to investigate on that front

1 (inaudible) more speculative. You can go to 29, if
2 you would like.

3 So a few concluding items with respect to
4 industrial gas distribution utilities. On this
5 short term volatility risk, the analysis of the
6 actual numbers shows that there's less, less
7 volatility related risk for the Québec utilities
8 than for the U.S. gas sample.

9 With respects to the long term capital
10 recovery risk, particularly with respect to the
11 potential to take various different kind of
12 planning and mitigating actions, that would be
13 identified in that planning process, you must
14 really, have a lower long term capital recovery
15 risk, after taking in those kinds of... doing that
16 kind of planning and settings those kinds of
17 actions in motion than today's U.S. gas sample
18 does, where the big U.S. gas utilities are not
19 taking any of these kind of actions or doing any of
20 that kind of planning.

21 The low short term risk that is much more
22 backed-up by evidence or analysis in this
23 proceeding and who's timeframe aligns with the
24 timescale over the next few years should be given
25 primary weight in evaluating what the approved

1 appropriate allowed ROE is.

2 And then, I would recommend that on that
3 long term risk piece, that in order to really
4 understand what's going on, that the utilities
5 should complete comprehensive business plan and
6 risk assessments before they come back to the Régie
7 in a few years, and we can have a more
8 comprehensive and informed discussion about what
9 that long term future looks like.

10 I'll note here that Énergir and Gazifère
11 may face different long term risks due to their
12 customer composition, in particular, which could be
13 identified in their detailed company specific
14 analysis.

15 With respect to the short term risk, I
16 don't see a great deal of difference, the
17 difference to standard deviation of 0.5 and a
18 standard deviation of 0.7, when they're both really
19 stable and both achieved their allowed ROE year in
20 and year out, doesn't seem to be particularly
21 different, even though I recognize that Gazifère is
22 smaller, but that doesn't seem to have resulted in
23 dramatically different variability because of these
24 different kind of things to reduce regulatory lag.

25 So, we can spend the last couple of moments

1 here on Intragaz which is in an entirely different
2 boat, from my perspective. So, we can go to slide
3 31. Thank you. So, Intragaz, there are no direct
4 peers to use as some sort of comparison sample, you
5 know. There aren't regulated gas storage only
6 publicly traded companies, right, that you can go
7 out and, you know, pull them down for some sort of
8 sample and figure out what their cost of capital
9 is.

10 So, we had to start from principles and
11 think about what risks does this company faces. But
12 we can't... we don't have a sample to compare, we
13 don't have any particular metrics to compare.

14 I will say that there's a history of
15 coupling Intragaz and Énergir, it may makes sense
16 for some reasons, but from a business risk
17 perspective, I see them as really quite different.

18 Intragaz has one customer, Énergir. Énergir
19 has a large and diverse customer base. So, the
20 question of size and serving different customers is
21 really quite different for the two of them.

22 Intragaz's customer is a rate-regulated
23 utility which cannot take advantage as sole buyer
24 to mess with what it pays to Intragaz. And in fact,
25 he partly owns Intragaz. But Énergir has customers

1 who are households and businesses, you know, we
2 discussed that.

3 Intragaz has competitors, there are other
4 storage and pipeline providers who can help... who
5 can help Énergir meet its needs to reliably supply
6 customers.

7 Énergir faces competition from different
8 fuels, from electricity, and others fuels to meet
9 its customer needs. So, they really are
10 fundamentally different businesses and we shouldn't
11 expect their business risk to necessary line up.
12 Next slide, please.

13 So, the only appreciable business risk that
14 I identified is that if Énergie will somehow
15 decide, well, could decide, that the appropriate
16 way of managing its system is to purchase other
17 resources to help meet its... meet their needs
18 rather than to buy storage from Intragaz.

19 So, of course, the timeframe for our
20 interest is the next decade or so, for which the
21 ROE would be set and for which we have a reasonable
22 level of visibility about how... what the future
23 might hold.

24 Over the course of that decade,
25 policy-driven changes in the gas system will likely

1 have little effect on Intragaz, to the extent that
2 Énergir is using RNG as required by Quebec policy
3 up to ten percent (10%) in twenty thirty (2030) and
4 more after that most likely. Biomethane is...

5 biomethane, it's stored in a storage facility just
6 as well as fossil methane, it's the same chemical.

7 Énergir's load shape may become more peaky
8 as its winter peak day demands remain while
9 electrification reduces demand on warmer days, this
10 would be an effect of the bi-energy approach,
11 higher rate approach.

12 And a peakier load would actually improve
13 the competitiveness position of local storage
14 relative to pipeline capacity. If you're trying to
15 think about different options for... for meeting a
16 peak, a winter peak, local storage with
17 relatively... that's just trying to serve needs on
18 a few coldest days is a pretty different and more
19 attractive proposal than, you know, paying for
20 capacity that you then have to hold during
21 sixty-five (65) days a year to only use on the
22 coldest days, instead the storage has a compelling
23 peak here that demand has been more compelling with
24 business risk for storage.

25 So, in conclusion, from my perspective

1 Intragaz faces very low business risk and should...
2 the proportion of its allowed return on equity
3 should reflect that low risk. I also think that
4 Intragaz should do long term planning obviously
5 closely in concert with Énergir about what Énergir
6 thinks its future would look like and how it will
7 use... how it will need storage. It might be that
8 the way that you use storage is different in the
9 future and Intragaz should be making investments or
10 otherwise changing its systems to try to match
11 that.

12 That concludes my testimony.

13 Me PAULE HAMELIN :

14 So, Mister Chairman, I will not have any further
15 questions for Mr. Hopkins, so he's available for
16 cross examination.

17 LE PRÉSIDENT :

18 D'accord, mais on va prendre une pause de quinze
19 (15) minutes avant de passer aux questions. Donc,
20 on se reverrait... on se revoit à dix heures
21 cinquante-cinq (10 h 55). Merci.

22 Me PAULE HAMELIN :

23 Parfait. Merci. So, Mr. Hopkins, we'll take a break
24 for fifteen (15) minutes

25 R. Okay. Thank you.

1 SUSPENSION DE L'AUDIENCE

2 -----

3 REPRISE DE L'AUDIENCE

4

5 LE PRÉSIDENT :

6 Rebonjour. Alors, est-ce qu'on a un

7 contre-interrogatoire des demanderesses?

8 Me PATRICK OUELLET :

9 Oui. Ce sera maître Georgescu qui procédera au

10 contre-interrogatoire du docteur Hopkins.

11 LE PRÉSIDENT :

12 D'accord.

13 CROSS-EXAMINED BY Me ADINA GEORGESCU:

14 Bonjour, Monsieur le Président. Bonjour, Mesdames

15 les Régisseurs. C'est un plaisir d'être devant vous

16 ce matin à nouveau. Je ne sais pas si maître David

17 vous aviez quelque chose à... à nous partager, je

18 vois votre caméra ouverte, avant qu'on débute le

19 contre-interrogatoire?

20 ME ÉRIC McDEVITT DAVID :

21 Non non non, je suis juste ici pour surveiller la

22 bonne... la bonne marche du contre-interrogatoire.

23 Me ADINA GEORGESCU :

24 Bon. D'accord.

25 Q. [8] Alors, good morning, Dr. Hopkins.

1 R. Good morning.

2 Q. [9] It's a pleasure to speak to you again this
3 morning. So, I will... I will be cross examining
4 you today. I'll have a few questions on the
5 testimony that you just... that you just made. So,
6 to start with, I'd like to take you to your
7 response to IR... the IR that the Régie submitted
8 to you, which is Exhibit C-ACIG-0048.

9 Madame la Greffière, est-ce qu'il serait
10 possible de mettre à l'écran la réponse du docteur
11 Hopkins à la DDR de la Régie, C-ACIG-0048, s'il
12 vous plaît. Merci beaucoup. Puis, si c'est possible
13 de descendre à la page 3. Peut-être un petit peu
14 plus bas. Oui, juste au-dessus de Gazifère. C'est
15 parfait comme ça. Merci beaucoup.

16 So, Dr. Hopkins, I'm referring you to the
17 passage that is right above the title "Gazifère"
18 where you say... where you say... So, the Régie was
19 asking you here to comment on whether or not,
20 according to you, the business risk of Quebec
21 Utilities increased, diminished or was maintained
22 since the Régie's last decisions on the rate of
23 return for these Utilities. And your conclusion for
24 all three Quebec Utilities is formulated as
25 follows, and I'm reading just the one for Énergir,

1 but the others are the same or they're drafted the
2 same. So:

3 On balance, and informed by both the
4 lack of evidence on long term risk and
5 his preference for highly weighted
6 short term risk in the context of this
7 proceeding, with an expectation for a
8 return to the Régie with better long
9 term analysis in a few years, Dr.
10 Hopkins would say that Énergir's
11 relevant business risk is lower today
12 than it was in 2011.

13 Do I understand correctly that your position to
14 give higher weight to short term risk is based on
15 your personal preference and not on a regulatory
16 principle for instance or a specialized literature
17 or a regulator's decision?

18 R. It's based on my understanding of being able to
19 ground regulatory decision making in -- I
20 understand -- that are more concrete that are
21 better known. The short term risk is much better
22 quantify, much better analyse in this proceeding,
23 than long term risk and so I've given, given more
24 weight to that portion of the evidence that is
25 better established in the record and less weight to

1 that which is less so.

2 In addition, the timeframe on which the
3 long term risk, the capital covering risk might be
4 experienced, is, is much longer and is further out
5 in the future and more uncertain. And so, it may,
6 it is appropriate in my view to ground the analysis
7 in that part of the evidence, again, which is more
8 certain.

9 Q. [10] But isn't the evaluation of business risk
10 based on determining the level of uncertainty?

11 R. So, we have a, we are going to get ourselves in a
12 little bit of (inaudible) conversation here. I want
13 be careful about words. So, there's uncertainty
14 about whether certain adverse things might come to
15 pass. That's risk. And then there's uncertainty
16 about how well we even know about those things.
17 It's an uncertainty about risk. Right? And if we're
18 trying to weigh different kinds of risk, different
19 kinds of uncertainty, and combine them together in
20 some overall assessment. If we are more certain
21 about some kinds of risk, less certain about other
22 kinds of risk, I imagine that both of those are
23 risk about uncertainty, I makes sense to me, and I
24 think it's justified to give more weight to that
25 evidence which is more certain, which is a bit of

1 less uncertain.

2 Q. [11] So your position here, when you mentioned here
3 that you have a preference for highly weighing
4 short term risk, it's really based on the fact that
5 you consider you have more elements in your
6 possession to be able to assess short term risk and
7 you will not assess long term risk because you
8 consider that you don't have sufficient information
9 to do so. Despite the fact that maybe there's no
10 regulatory principle giving more weight to short
11 term risk than the long term risk?

12 R. I wrote there in that text that the lack of
13 evidence on long term risk is part of my assessment
14 about weighing the short term piece more heavily.
15 The underlying regulatory principle is really one
16 of the... giving more weight to those things which
17 are more certain. And in addition, you're drawing
18 an analogy from the financial constructive present
19 value to discount rate that we can measure, it's a
20 little bits stretch as a metaphor, I don't know,
21 but if there's something that is a way out in the
22 future, and the future is less well known than the
23 present, and we would want to give some...
24 appropriately give some discount to potential
25 things that might happen in the future. Simply

1 because the future is more uncertain than the --
2 further out you go in the future the more uncertain
3 it is. We think about a proposed timescale of
4 thirty (30) or forty (40) years, for example.

5 If we were trying to make an assessment in
6 a proceeding like this in nineteen eighty-two
7 (1982) or nineteen ninety-two (1992) and trying to
8 say what is the risk profile going to look like in
9 twenty twenty-two (2022), thirty (30) or forty (40)
10 years in the future? With the help of hindsight how
11 much in twenty twenty-two (2022) would we have
12 gotten, right? How well, how well would we have
13 understood what risks that we were facing from a
14 pre internet age, you know, etc. The level of
15 changes in the economy, the level of changes in
16 technology are substantial. So, taking that, we
17 need to look, give some, some greater weight to
18 those pieces again which are better known and more
19 likely to be assessable in the near term.

20 Q. [12] So, so you said a little bit earlier that you
21 based, you based your position on the regulatory
22 principle that you need to give more weight to what
23 is, that you have more evidence to determine. So
24 you're going to give, there's a regulatory
25 principle according to you that says that you

1 should give more weight to short term risk because
2 it is easier to assess or it is more... it's easier
3 to assess, it's the best way to say it. Having more
4 information about it. Because it's short term.

5 Can you direct me to any reference or any
6 specialized literature that states that specific
7 regulatory principle that you're referring to?

8 R. I don't have a particular citation for you, no.

9 Q. [13] Thank you. Merci, Madame la Greffière, vous
10 pouvez retirer la pièce. Doctor Brown testified a
11 few days ago to the effect that investors assess
12 long term business risk to decide whether or not
13 they will invest in a gas distribution utility and
14 that this long term risk is the economic life of
15 the assets, so we're talking thirty (30), forty
16 (40) years. Am I correct in saying that according
17 to you investors would rather look at short term
18 risk when deciding to invest?

19 R. I think investors look at both short and long term
20 risks. And I think that they weigh how well they
21 understand those risks when they're making that
22 decision. They understand that if they look at the
23 recent returns of a gas utility that they are very
24 likely in the next couple of years to return their
25 allowed rate of return because there's a great deal

1 of regulatory structure incident around that,
2 (inaudible).

3 They would also look and see if, yes there
4 is some sort of risks associated with the energy
5 transition. And they would see that, you know,
6 changes of the business model are going to be
7 likely compare to relative, to other companies that
8 are not affected by energy transition, that they
9 might be choosing to -- considering to invest in.
10 So they are going to weigh how much they know about
11 the different kinds of utilities, they actually
12 have a very comparable weighing to the one that I
13 was just describing is appropriate for the
14 regulator to weigh.

15 How well do they know what the risks are
16 going to be in the future, and how well do they
17 know what the near term risk is going to be when
18 determining an overall assessment about their
19 investment decisions.

20 Q. [14] So what you're saying is that long term risk
21 is a relevant element to look at, and investors
22 will look at it. Is that correct?

23 R. They will look at it and they will, they will try
24 to get the best information they can about it. To
25 the extent that the information is available that

1 will help them better understand that risk and be
2 able to take it into account in making their
3 decisions.

4 Q. [15] But they study - in your previous answers
5 relating to the weight that you give the short term
6 risk, it is your opinion that they will more likely
7 put more weight on short term risk because it is
8 easier to assess. Is that correct?

9 R. Because the information they have available to
10 them, is, give them much better information about
11 the near term risk. And they will, they will look
12 at those long term risks and, and give it... work
13 the best they can with the information they have to
14 the extent that -- the extent of the lack of
15 information is itself presenting a kind of a risk
16 to them. Then they would take that into account. I
17 don't think that you would want to say that the
18 utilities could earn a higher rate of return simply
19 because they're risky because they failed to plan.
20 I don't think that's something that the utilities
21 are claiming in this case. A utility that is
22 failing to look ahead I think will also be less
23 attractive to investors.

24 Q. [16] So the answer to my question, your answer to
25 my question is yes, investors would be more at ease

1 to look at short term risk because it is easier to
2 assess. Is that correct?

3 R. Easier to assess is not my, is not my -- I don't
4 think that's the reason why. I think that the, that
5 the investors would look at all the evidences that
6 they have about what the risks are, you know, in
7 their investments are over different timescales.
8 And take into account their own time preference and
9 their own timeframe for investing, etc. And weigh
10 those different... what they know about those
11 different risks appropriately.

12 If they see that there is a long term
13 capital recovery risk, then they would, then they
14 would take that into account.

15 Q. [17] Okay. Thank you. I will bring you now to your
16 report, your direct testimony. On page 5, Q and A
17 11 if... Madame la Greffière, est-ce que vous
18 pourriez s'il vous plaît mettre à l'écran la pièce
19 C-ACIG-0028 s'il vous plaît.

20 LA GREFFIÈRE :

21 Quelle page, s'il vous plaît?

22 Me ADINA GEORGESCU :

23 À la page 8, s'il vous plaît. Excusez-moi, j'ai dit
24 question et réponse 11, mais c'est en fait question
25 et réponse 18. It's actually Q and A 18.

1 Q. [18] So at Q and A 11, you categorized the
2 potential business risks a utility faces into two
3 categories: short term risk and long term risk that
4 you have just spoken about. But at Q and A 18, you
5 mention here that :

6 The allowed return on equity should
7 most directly reflect the risks
8 regarding return on invested capital
9 in the period until the next time the
10 return on equity is set, with less
11 weight given to risks that extend
12 further out in time. Thus, short term
13 risks should be the primary driver for
14 the allowed return.

15 Do you, I understand that you don't mention any
16 kind of specialized literature or decision to
17 support this position in your direct testimony. Is
18 that correct?

19 R. Correct.

20 Q. [19] So, this is essentially your opinion? It is...
21 you bring forward this particular assessment, that
22 short term risk should be the primary driver for
23 the allowed return, is that correct?

24 R. Yes, inform by all what we've just been talking
25 about.

1 Q. [20] Are you aware of any specialized literature or
2 decisions that would disagree with your position?

3 R. Nothing in particular.

4 Q. [21] So, I'd like to refer you to one of the
5 exhibits that we just filed. Madame la Greffière,
6 est-ce qu'il serait possible de mettre à l'écran la
7 pièce qui vient d'être déposée. Je suis désolée, je
8 n'ai pas la cote de la Régie, j'ai seulement la
9 cote des demanderesses, EGI-35.

10 Parfait. Alors, est-ce que ce serait
11 possible d'aller à la page de la pièce, 495, s'il
12 vous plaît, au bas de la page. En fait, il n'y a
13 pas énormément de pages, donc, ça va être assez
14 facile à trouver. Voilà, juste au bas de la page.
15 Non, non, non, on remonte, s'il vous plaît. Oui. Au
16 bas de la première page de texte. Voilà. Merci.
17 Vous pouvez la descendre un tout petit peu. Merci
18 beaucoup. Et est-ce que c'est possible peut-être de
19 l'agrandir un peu? Oui, super. Merci beaucoup.

20 So, I'm referring you here to an article
21 that was written by Kathleen McShane and Michael
22 Cleland, with respect to the fair return and they
23 indicate here, under chapter 3, The Fair Return and
24 The Cost of Capital.

25 The fair return represents a real cost

1 to the utility, no less real than the
2 cost the utility incurs to pay wages
3 or acquire materials and supplies.
4 Investors require a return on the
5 capital they commit to finance utility
6 assets for two basic reasons.
7 1. Committing funds to a long term
8 investment means investors are
9 deferring current consumption for the
10 opportunity to enhance future
11 consumption. The return investors
12 demand on the capital committed
13 represents the compensation they
14 require to put off current consumption
15 to a later date.

16 So what the authors are saying here essentially is
17 that investors look before committing their funds
18 to long term investment risks, rather than short
19 term investment risks.

20 Were you aware of this article?

21 R. I have not read this article.

22 Q. [22] I will refer you to...

23 Me PAULE HAMELIN :

24 Pardon, j'ai une objection, parce que vous
25 référez... sorry, I will say that in English, you

1 just indicated that the author refer to... sorry,
2 just give me a second, est-ce qu'on peut juste
3 baisser, encore. Can I ask you to rephrase your
4 question again, because I'm not sure I got it
5 right.

6 Me ADINA GEORGESCU :

7 Well, I just asked, I just asked Dr. Hopkins if he
8 was aware of this article and the position that is
9 referred to here, to the effect that according to
10 these authors, investors, before committing their
11 funds, look at long term risk for their
12 investments. That is the essential principal type
13 of risk that is considered. So I just asked Dr.
14 Hopkins if he was aware of this article. This is
15 not a trick question.

16 Me PAULE HAMELIN :

17 No, your question was your interpretation of what
18 the article said, not if he was aware of the
19 article. If he was aware of the article, that's a
20 question. Your interpretation of the article is
21 something else.

22 Me ADINA GEORGESCU :

23 So I asked Dr. Hopkins if he was aware of this
24 article and I think the answer was no.

25 Q. [23] So I will go now to a decision from the

1 Régie...

2 R. I'm sorry. I just want to clarify...

3 Q. [24] Yes.

4 R. ... for the record that I do not necessarily agree
5 with your assumption of the characterization of
6 this text, I simply answered your question, which
7 is that I had not previously read it.

8 Q. [25] I understand, that's fine. My initial question
9 was whether or not you were aware of any literature
10 that possibly goes against your opinion that short
11 term risk should have more weight in the
12 determination or the assessment of business risk
13 than long term risk? So I just wanted to know if,
14 for instance, you were aware of this particular
15 piece of literature that does not share your
16 opinion.

17 So I will go now to a decision from the
18 Régie de l'énergie that we filed a little bit
19 earlier, which is D-96-31. And that is... Madame,
20 la cote est EGI-37 et je m'excuse, à nouveau, je
21 n'ai pas la cote de la Régie, encore. On me dit que
22 c'est B-0361. Merci beaucoup et ça sera à la page
23 17, s'il vous plaît. Voilà.

24 So this is a decision from the Régie, from
25 ninety-six (96), nineteen ninety-six (1996) that

1 looked, amongst other things, at the determination
2 of the rate of return and capital structure and
3 obviously there is a discussion here about long
4 term, short term risk and long term risk and for
5 the long term risk portion here, what is
6 highlighted, it is in French, but I will translate
7 it in English.

8 In the long term, it is more the
9 companies ability to remain
10 competitive in its market and to
11 ensure that its forty (40)-year
12 facilities and long term investments
13 are profitable.

14 In this decision, the Régie considers long term
15 risks on this basis. Were you aware of this
16 decision?

17 R. I have not read this decision, I have read other
18 more recent Régie's decisions on business risk.

19 Q. [26] Thank you. And just as a final reference,
20 Madame la Greffière, est-ce que je peux vous
21 demander, s'il vous plaît, d'aller à la décision,
22 pièce... excusez-moi, juste un petit instant, c'est
23 la pièce C-ACIG-0079, c'est la décision D-2011-182.
24 Merci beaucoup. Et ce sera à la page 12. En fait,
25 je vais peut-être vous référer davantage au

1 paragraphe, c'est le paragraphe 232.

2 So, here this is a... this is an Énergir
3 former decision that looked at the rate of return
4 amongst other things. And here the Régie says :

5 The Régie understands that investors
6 regard risk as consisting in the
7 uncertainty of realizing a return on
8 their capital within a given horizon
9 and of recovering their capital.

10 And if we go a little further down at paragraph
11 234:

12 In the Régie's view, Gaz Métro
13 bondholders and -- Gaz Métro being
14 Énergir today -- bondholders and
15 unitholders' perceptions of long term
16 risk are very similar today to what
17 they were in 2009. The credit-rating
18 agencies do not report any
19 materialization of capital recovery
20 risk in the case of regulated
21 businesses in Quebec.

22 So, in this particular decision, as you can see,
23 the Régie is determining that investor risk is the
24 uncertainty over an investment horizon, and in the
25 Régie's view this equates to long term risk. So,

1 were you aware...

2 Me PAULE HAMELIN :

3 Again... again, I object to your characterization,
4 because when I read it:

5 Gaz Métro bondholders and unitholders'
6 perceptions of long term risk.

7 So, it's their perceptions.

8 Me ADINA GEORGESCU :

9 Yes. But we're referring to long term risk
10 nonetheless, but I think we can have a debate on
11 what the decision really says. My question to Dr.
12 Hopkins is whether or not he was aware of this
13 decision and has he read it?

14 R. Yes, I have read this decision. This portion of
15 this decision.

16 Q. [27] And you did not consider this as being
17 relevant in your assessment?

18 R. I don't view that this disagrees with my
19 assessment. The... My understanding is that the
20 Régie weighs short term and long term risk, it
21 weighs the evidence that is presented with respect
22 to those different kind of risks.

23 Elsewhere in this decision there is
24 discussion of changes in competitiveness, there's
25 discussion of deferral accounts, there's discussion

1 of many of the same kind of things that are present
2 in the current docket. And the Régie is taking all
3 of those different pieces into account thinking
4 about the weight of the evidence before it,
5 including the bit that you just described.

6 But I don't think that is inconsistent
7 with... with what I have said in terms of the
8 weighing given to different timeframes for risk and
9 the uncertainty that we need to take... to keep
10 into account with respect to whether certain kinds
11 of risks are more or less certain and should be
12 given different kinds of weight.

13 Q. [28] So, you're reading of... of the Régie's
14 decisions are that the Régie does not necessary put
15 more weight on long term risk, is that... is that
16 correct?

17 R. The Régie evaluates all the different kinds of
18 risks on various different timescales. I think the
19 Régie recognize that the long term is a succession
20 of short terms. I think the Régie looks carefully
21 at all... at everything that's before it and makes
22 appropriate decisions.

23 Q. [29] Thank you. I will move on now to again your
24 direct testimony at question 25.

25 R. Yes.

1 Q. [30] So, here you compared Énergir and Gazifère's
2 achieved and allowed returns on equity. Do I
3 understand correctly that you consider this element
4 as an important factor for your recommendation?

5 R. The most important aspect of this for my
6 recommendation is the volatility in the achieved
7 return. That needs to be taken... you need to see
8 the allowed return along with that gives some
9 explanatory information. If you look at the
10 Gazifère one, if the clerk will scroll down, you'll
11 see that some portion of the volatility of Gazifère
12 returns in the twenty-twelve (2012),
13 twenty-thirteen (2013) timeframe is related to the
14 allowed return falling during that timeframe before
15 returning to its present level, rather than the
16 volatility necessarily has to do with the
17 operational risk of some sort that the utility
18 faced during that time period. Its return dipped
19 but it wasn't... it wasn't that it failed to earn
20 its allowed return, I think investors would care
21 about that kind of thing.

22 But to simply answer your question is that
23 the important aspect of the data presented here,
24 the most important aspect for the evaluation of
25 risk is the volatility of the orange Achieved line

1 relative to the Allowed blue line.

2 Q. [31] Understood. So, you are looking at achieved
3 and allowed returns on equity as part of your
4 assessment and you consider this as a factor in
5 your recommendation? It's a...

6 R. Yes.

7 Q. [32] ... yes or no question. Okay. Perfect. Thank
8 you. At question 34, going a little further down,
9 you say that both Énergir and Gazifère have earned
10 stable returns for their equity investors, that
11 both have consistently achieved returns in excess
12 of their allowed returns, and that therefore
13 neither utility is facing any identified
14 utility-specific short term challenges to earning
15 its return.

16 And then at question 35, you conclude that
17 both utilities have low business risk over the
18 short term, and therefore that their allowed return
19 on equity should be relatively low.

20 Do you have any reference to specialize
21 literature or decision that you can reference to
22 support your position that historic achievement or
23 excess of the allowed ROE justifies a lower ROE?

24 R. Again, the critical piece here is the volatility in
25 light of the... in light of the allowed return, and

1 the conception that the... that lower volatility is
2 indicative of lower risk, it's indicative of lower
3 regulatory lag, and therefore, you know, close to
4 the implication for the cost of capital.

5 Q. [33] Understood. But that... that's still is a...
6 there's a direct correlation between whether or not
7 the businesses have met or exceeded their ROEs and
8 your looking at historical data with respect to
9 that achievement or excess of ROEs in order to
10 determine volatility. And according to you, if
11 there is achievement or excess of historical ROEs,
12 that's an indication that... that the businesses
13 should have a lower ROE going forward because there
14 is limited risk. Is that a correct assessment?

15 R. I don't think I would have strung it all together
16 in quite that way. We... as an indicator of whether
17 the regulatory lag is low, and therefore that the
18 year to year volatility going forward, on a forward
19 looking basis, is likely to be low. Are the
20 regulatory structures established to limit
21 volatility working? That's a relevant question to
22 investors and the evidence here is that yes,
23 historically they have been working, they haven't
24 been any particular changes either than
25 strengthening those regulatory structures, and

1 therefore investors would see that they have
2 relative assurance on a forward going basis that
3 those kind of structures and therefore the lower
4 volatility will continue into the future.

5 Q. [34] So, you're looking at the historical in order
6 to determine what will happen forward looking. Is
7 that correct?

8 R. Looking at the historical in order to inform
9 assessment of the future, same as any investor
10 would.

11 Q. [35] Understood. So, are you basing yourself on
12 any... any regulatory principle or decision to use
13 this approach in... in your assessment of business
14 risk?

15 R. The general... I don't have a particular citation.
16 I'm relying on the same... the same knowledge of
17 how volatility informs investor perceptions as Dr.
18 Brown is, on this area he and I have different
19 literature and have different experiences, but I
20 agree with him on the statement that lower
21 volatility implies lower business risk.

22 Q. [36] You are referring here not to lower volatility
23 in your... in your... in the excerpt of your
24 evidence, you are referring to the... the
25 achievement or excess of the return on equity in

1 order to come to the conclusion that the historical
2 achievement or excess of the ROE, in order to come
3 to the conclusion that allowed ROE for the future
4 should be lower. So, with respect to that specific
5 principle, I'm asking if you have any reference to
6 base yourself on.

7 R. I am not... I am not propounding the principle
8 you're trying to put into my mouth. The first...
9 the first clause after the word « no » in answer
10 34, it says :

11 Both have earned stable returns for
12 their equity investors.

13 That's the primary aspect grounding my analysis.
14 The fact that they have also exceeded the allowed
15 return in that context, if they were stable and
16 sometime above and sometime below the allowed
17 return, my conclusions would be the same. If they
18 were stable and always two points below the allowed
19 return, my conclusion would be the same. It's not
20 the question of the absolute value of the... of
21 return relative to the achieved return, it's a
22 question of that volatility.

23 Q. [37] Understood. So, you are looking at the
24 historical performance of the ROE for that
25 assessment?

1 R. The volatility of the achieved return informs
2 assessment of what the regulatory structure is and
3 whether the low regulatory lag that is correlate in
4 and the attention of that regulatory structure,
5 whether that is working. And if an investor says:
6 is that regulatory structure likely to change? How
7 do I... how do I evaluate the risk that's coming
8 down... you know, coming likely in the future, let
9 me look at the regulatory structure that exists,
10 let me see if it's working, is it likely to change
11 and then I can build on that historical assessment
12 in order to evaluate whether the... whether I think
13 that there's a particular short term risk that I'm
14 really facing making this investment.

15 Q. [38] Understood. So, are you aware that in the
16 twenty twenty-three (2023) generic cost of capital
17 Alberta Utilities Commission's decision that was
18 rendered on March thirty-first (31st) this year, at
19 paragraph 41, the Commission quote :

20 Considers that historical earnings
21 above or below the approved ROEs do
22 not help determine what the ROE for a
23 future test period should be.

24 R. I haven't read that decision.

25

1 Me PAULE HAMELIN :

2 Monsieur le Président, si on réfère à une... if we
3 refer to a decision it would be important that
4 we... we have a copy of that.

5 Me ADINA GEORGESCU :

6 La décision pourra être déposée si nécessaire, mais
7 comme le passage est très très court et qu'il était
8 en plus en anglais, nous n'avons pas considéré
9 nécessaire de... de le déposer pour le montrer à
10 l'écran. Donc, si... Monsieur le Président, si vous
11 souhaitez que la décision soit déposée nous le
12 ferons.

13 LE PRÉSIDENT :

14 Bien, ce serait préférable, effectivement.

15 Me ADINA GEORGESCU :

16 Parfait. Nous allons effectuer le dépôt.

17 Me PAULE HAMELIN :

18 Parce qu'on ne voit pas... on ne voit pas le
19 contexte, etc., alors on peut juste...

20 Me ADINA GEORGESCU :

21 However, I do understand from Dr. Hopkins that he
22 was not aware of this decision.

23 Q. [39] Is that correct? That was your answer?

24 R. Correct. Also...

25 Q. [40] Yes.

1 R. ... that decision doesn't have any bearing on the
2 point that I was just making in my testimony. The
3 quote that you just read to me it's tangential not
4 central to the analysis that I presented.

5 Q. [41] I'm moving on to Exhibit EGI-34. Je suis
6 désolée, Madame la Greffière, j'essaie de récu...
7 B-0358, on me dit pour la cote de la Régie. Donc,
8 ça sera à la page 578 de l'extrait, s'il vous
9 plaît. Voilà, juste un peu plus bas.

10 So, I'm referring you here to The Process
11 of Ratemaking, which is a piece of specialized
12 literature by Leonard Saul Goodman. On page 578, he
13 talks about "past excess earnings excluded". It is
14 indicated here that:

15 Under the rulings of the Supreme
16 Court, past excess earnings cannot be
17 used to sustain an otherwise
18 inadequate rate for the future. The
19 regulated company is entitled to the
20 opportunity to earn a fair return in
21 the future period... An agency may not
22 revisit an approved past rate, whether
23 the rate in the past is now considered
24 too high or too low. When the agency
25 authorizes the filing of a rate, the

1 filing has future legal effect.

2 Were you aware of this piece of literature?

3 R. I don't recall that I've read this.

4 Q. [42] Thank you. Nous pouvons enlever la pièce,
5 Madame la Greffière. Merci beaucoup. I will go back
6 now to your evidence. Madame la Greffière si c'est
7 possible de revenir au direct testimony. Merci. À
8 la question 36. So Q and A 36. You state here that:

9 ...the drivers for long term risks for
10 the Québec Utilities

11 at Q and A 36

12 are associated with policies and
13 actions to reduce the provinces
14 greenhouse gas emissions. Combined
15 with a competitive position of gas
16 compare to electricity.

17 At question, Q and A 37, you answered the following
18 question:

19 Do the utilities in the U.S. gas
20 utility sample analysed by Dr. Brown
21 face similar risks?

22 Your answer is:

23 Yes, they do. Both the United States
24 and Canada have stated their
25 intentions to reach net zero

1 greenhouse gas emissions by 2050.

2 You then go on to say:

3 The utilities in the U.S. gas utility
4 sample will all be subject to federal
5 actions that will encourage
6 electrification in buildings and the
7 use of low-carbon fuels in
8 hard-to-electrify end uses in both
9 buildings and industry.

10 Are you aware that the Québec Utilities are
11 currently faced with specific limitations on the
12 use of traditional natural gas?

13 R. What do you mean by specific limitations?

14 Q. [43] Are you aware, for instance, that the city of
15 Montréal has adopted a by-law that is currently in
16 force and that prohibits the use of traditional
17 natural gas in buildings?

18 R. I've heard about it, heard and talked about it in
19 the course of the hearing in the last few days. I
20 haven't review the by-law.

21 Q. [44] Are you aware that the Québec Utilities are
22 subject to a regulation that imposes on them, since
23 twenty-twenty (2020), the obligation to provide a
24 percentage of renewable natural gas every year,
25 which will reach five percent (5 %) in twenty

1 twenty-five (2025) and is intended to reach ten
2 percent (10 %) by twenty thirty (2030)?

3 Me PAULE HAMELIN :

4 Je vais m'objecter encore une fois à la question
5 parce qu'on vient de dire que la réglementation les
6 oblige à dix pour cent (10 %). Est-ce que c'est ce
7 que vous avez dit?

8 Me ADINA GEORGESCU :

9 Non, j'ai dit que « is intended to reach ».

10 Me PAULE HAMELIN :

11 Mais, il n'y a pas de réglementation qui vient dire
12 dix pour cent (10 %) pour l'instant.

13 Me ADINA GEORGESCU :

14 Il y a un règlement qui dit cinq pour cent (5 %) en
15 vingt vingt-cinq (2025) et il y a une intention,
16 which is why I used is "intended to reach".

17 Q. [45] Let me clarify Doctor Hopkins so that there's
18 no confusion. There is a regulation that is in
19 force currently that imposes an obligation that
20 will reach five percent (5 %) of renewable natural
21 gas in twenty twenty-five (2025). The government
22 has announced its intention to bring that
23 percentage up to ten percent (10 %) by twenty
24 thirty (2030). So just to be clear, the ten percent
25 (10 %) is not an obligation as of yet. But the

1 government has announced its intention to bring it
2 up to ten percent (10 %) by twenty thirty (2030).
3 Right now, the obligation, which is going to be
4 applicable until twenty twenty-five (2025) is
5 progressively going up to five percent (5 %) of
6 renewable gas. Were you aware of this?

7 R. Yes.

8 Q. [46] Are you aware that the Québec Utilities are
9 also subject to a regulation that prohibits, as of
10 December thirty first (31st) twenty twenty-three
11 (2023), the replacement of heating oil equipment
12 with any fossil fuel including traditional natural
13 gas?

14 R. I think I've seen something about that in passing
15 but I'm not closely familiar with it.

16 Q. [47] Are you aware the Québec Utilities are subject
17 to carbon pricing obligations?

18 R. Yes.

19 Q. [48] Are you aware of any similar obligations,
20 federal or states specific, falling on the
21 utilities for doctor Villadsen's US sample?

22 R. I'm not aware of any specific policies of those, of
23 those sorts, for the US sample.

24 Q. [49] So is it fair to say that currently, there are
25 no specific obligations that the utilities in

1 doctor Villadsen's US sample are subject to and
2 that impose a move towards green energy, today?

3 R. In terms of items with specific regulatory force,
4 the Oregon Climate Law...

5 Q. [50] I'm talking about concrete impact. Current and
6 concrete impact.

7 R. Current concrete impact...

8 Me PAULE HAMELIN :

9 Encore une fois, sorry, objection. Are you
10 referring impact and regulation as two different
11 things?

12 Me ADINA GEORGESCU :

13 Well, regulations are obligations that have current
14 impact, I'm talking about current impacts as well.

15 Me PAULE HAMELIN :

16 So, just... I think you should rephrase your
17 question.

18 Me ADINA GEORGESCU :

19 I think, I think we're not going to have a legal
20 debate on whether a policy has immediate, immediate
21 obligations that are imposed on whoever might be
22 concern by them. But, I will rephrase my question
23 or reiterate it.

24 Q. [51] Is it fair to say that currently, there are no
25 specific obligations that the utilities in doctor

1 Villadsen's US sample are subject to, and that
2 impose a move towards green energy?

3 R. I think it depends a little bit on the definitions
4 of a lot of those words. I've heard through this
5 proceeding, utility folks and others have maybe
6 argument that knowing where you're going, needs to
7 be taken into account in the present. For example,
8 Oregon's requirement of net zero by twenty fifty
9 (2050) or the New Jersey Energy Master Plan or
10 Maryland's requirement of zero emission in twenty
11 forty-five (2045) they are state level, admittedly
12 not gas utilities specific, but requirements that
13 will have deep obligations and requirements coming
14 for the gas utility.

15 They have implications for those utilities
16 as they think about their capital planning, as they
17 think about how they go about their operations.

18 Do those requirements have specific
19 reporting obligations or specific obligations that
20 require a specific utility to do a specific thing,
21 in a specific year, no they do not. But they ground
22 and shape policy context in which those utilities,
23 which are members of the gas utility sample,
24 operate.

25 Q. [52] So you agree with me that the utilities in the

1 US sample are not subject right now to the similar
2 type of restrictions and obligations that I just
3 mentioned that the Québec Utilities are already
4 confronting with?

5 R. The form of the policies in which they operate are
6 different than the Québec one.

7 Q. [53] I am talking about legislative or regulatory
8 obligations that are of immediate application. I'm
9 not talking about policy or governmental
10 intentions.

11 R. Again the question was there a statutory
12 requirement that something happen in the future
13 whether that has immediate application I think
14 maybe that's just a semantic question that we'll
15 have to deal with. The utilities folks are arguing
16 that knowing where you're going to go, these long
17 term capital questions has immediate application.
18 And so, logically that would seem to flow the same
19 in the US sample.

20 Is there a carbon price implemented today
21 in any of the US gas several jurisdictions, no.

22 Q. [54] Any restriction on the use of fossil fuels the
23 same as the example that I just gave you for the
24 Québec Utilities?

25 R. Again, not that I'm aware. That doesn't mean

1 another jurisdiction in the United States might not
2 have pass a by-law of one of those sorts. But again
3 the application may be different. The application
4 for long term energy transition and thus, capital
5 recovery risk maybe less different.

6 Q. [55] But you haven't looked into it to compare to
7 the situation, the current situation, real
8 situation, that the Québec Utilities are faced
9 with, today. You haven't done that research for the
10 US sample?

11 R. I have... I'm aware in a general sense of the
12 direction as I said of where these different states
13 are going, the laws that are in effect in different
14 places, my colleagues and I have done surveys of
15 local policies and other things in different
16 places. In those contexts I have not come across
17 specific examples that are relevant, that are
18 identify specifically to the US gas sample
19 utilities.

20 Q. [56] Thank you. I would refer you now to your
21 question and answer 37 that is already there. Line
22 22, you say:

23 While governmental actions turn to
24 electrification and use of the low-
25 carbon fuels will cause transformation

1 in gas utilities on both sides of the
2 border, the impacts on regulated gas
3 distribution businesses will be modest
4 in both Québec and the United States
5 over the next decade.

6 Do you based yourself on any specific study or
7 analysis to make this assertion?

8 R. Well, that... the following question, question 38,
9 is the other side of the logic around that next
10 decade piece including citations to both Énergir's
11 Climate Resiliency Plan and to an assessment of
12 what it will take to achieve US nationally
13 determine contribution.

14 Q. [57] But, but my question was whether or not you
15 looked at any type of analysis, or any type of
16 study that would inform you, and allow you to make
17 the assertion that "on both side of the boarder the
18 impacts on regulated gas distribution businesses
19 will be modest over the next decade".

20 R. I think that the studies that I've cited count as a
21 level of analysis particularly the US one.

22 Q. [58] Are you referring to the Long Term Strategy of
23 the United States? The one that's cited in your
24 footnote 12?

25 R. I'm referring to exhibit ASH-5.

1 Q. [59] Yes, that's the one. So it's the Long Term
2 Strategy of the United States, exhibit ASH-5 which
3 is cited in your footnote 12. It's on page...

4 R. ASH-5 is a working paper by scientists based at the
5 University of Maryland and other jurisdictions
6 entitled: Charting an Ambitious US NDC, a 51 %
7 Reduction by 2030. It is not the item cited in
8 footnote 12.

9 Q. [60] Well, in footnote 12 you are referring to
10 exhibit ASH-5. And footnote 12 if I am not mistaken
11 is...

12 R. I would like to make a correction to my testimony,
13 thank you for finding a typo. My footnote 12 should
14 refer to exhibit ASH-3, the Long Term Strategy of
15 United States. Apologies, to all. Typo in the
16 footnote, footnote 12, exhibit ASH-3 is the Long
17 Term Strategy of the United States.

18 Q. [61] O.K. So you cite, I'm sorry I just wanna make
19 the correction so that we all talk about the same
20 thing. You seem to cite the Long Term Strategy of
21 the United States in support of this paragraph and,
22 and the previous sentence that says:

23 The utilities in the U.S. gas utility
24 sample will all be subject to federal
25 actions that will encourage

1 electrification in buildings and the
2 use of low-carbon fuels in
3 hard-to-electrify end uses in both
4 buildings and industry.

5 There's footnote 12, with your reference to the
6 Long Term Strategy in the United States. And then,
7 the next sentence is the one that I was referring
8 to which is, Madame la Greffière si ça serait
9 possible juste de baisser un petit peu la page pour
10 qu'on voit le début de la prochaine. Merci.

11 While these pathways will cause
12 transformation in gas utilities on
13 both sides of the border, the impacts
14 on regulated gas distribution
15 businesses will be modest in both
16 Quebec and the United States over the
17 next decade.

18 And my question to you is, do you have any study,
19 or any analysis, to support that last sentence
20 referring to the impact on both sides of the border
21 for the next decade?

22 R. My Q and A 38 is an explicit expression of my
23 answering that question. Why do you say the impacts
24 of the next decade, it will be modest in both
25 places? And my answer runs from lines 5 to 25. It

1 cites both Énergir Climate Resiliency Plan and the
2 analysis, Exhibit ASH-5, conducted by researchers
3 in the United States, about what... beginning to
4 twenty-thirty (2030) in line with the U.S. Paris
5 agreement commitments would entail.

6 Q. [62] So ASH-5 is an American study, to my
7 understanding, is that correct?

8 R. Correct.

9 Q. [63] Does it pertain to...

10 R. That covers one side of the border.

11 Q. [64] Right, so...

12 R. Énergir...

13 Q. [65] Just a second, just a second, if you don't
14 mind,. I just want to finish my question. Does that
15 study pertain to Canada?

16 R. No.

17 Q. [66] Does that study pertain to Québec, in any way?

18 R. No.

19 Q. [67] So technically, the study that you are
20 referring to, that would illustrate, in any way,
21 the situation in Québec, is the Énergir document
22 that you are referring to in your question and
23 answer 38?

24 R. That is the most relevant document I could find
25 that is directly related to the question of gas

1 utilities in Canada, as it has been develop by one
2 of them.

3 Q. [68] Gas utilities in Canada, which are reflected
4 simply by...

5 R. That are in Québec.

6 Q. [69] So you have not done any, you have not found
7 any other analysis or any other study with
8 reference to the reality in Canada or in Québec,
9 with respect to the future of gas utilities over
10 the next decade?

11 R. I did not rely on any other study besides the
12 analysis of, in this respect, other than the
13 analysis presented by Énergir in their own study.

14 Q. [70] Understood, thank you. I will bring you now to
15 your page 4 of your direct testimony, which I think
16 is Q and A 9. On va juste remonter, Madame la
17 Greffière, oui, parfait, merci.

18 Maybe just... Monsieur le Président, je
19 m'excuse, je viens de voir l'heure, I am trying to
20 be mindful of the time, je suis en train de
21 commencer une nouvelle série de questions et je
22 vois qu'il est déjà midi moins dix (11 h 50). Est-
23 ce que vous souhaitez que l'on s'arrête pour la
24 pause du dîner ou est-ce que je continue?

25

1 LE PRÉSIDENT :

2 Bien, vous pensez en avoir pour combien de temps,
3 environ?

4 Me ADINA GEORGESCU :

5 Je vous dirais que j'en ai probablement pour encore
6 une demi-heure à quarante minutes (40 min), sinon,
7 peut-être quarante-cinq (45). Trente (30) à
8 quarante-cinq minutes (45 min).

9 LE PRÉSIDENT :

10 Oui, dans ce cas-là, on va prendre la pause tout de
11 suite.

12 Me ADINA GEORGESCU :

13 Parfait.

14 Q. [71] So, Dr. Hopkins, I apologize, before starting
15 my next line of questions, we are going to take the
16 lunch break.

17 R. Okay.

18 Q. [72] Thank you.

19 R. Thanks for translating.

20 Me PAULE HAMELIN :

21 In the meantime, Dr. Hopkins, Maître Georgescu has
22 indicated that she has thirty (30) to forty-five
23 (45 min) to go with her questions. So we will take
24 the lunch break and Mr. Chairman will indicate at
25 which time we will be reconvening.

1 LE PRÉSIDENT :

2 On se revoit à treize heures (13 h 00), donc, at
3 one o'clock (1:00) we will be back.

4 Me ADINA GEORGESCU :

5 Thank you.

6 Me PAULE HAMELIN :

7 Merci beaucoup.

8 LE PRÉSIDENT :

9 Merci.

10 SUSPENSION DE L'AUDIENCE

11 -----

12 REPRISE DE L'AUDIENCE

13 LE PRÉSIDENT :

14 Bonjour. Alors, nous sommes prêts à poursuivre avec
15 maître Georgescu.

16 Me PAULE HAMELIN :

17 Avec votre permission, Monsieur le Président...

18 LE PRÉSIDENT :

19 Oui.

20 Me PAULE HAMELIN :

21 Je ne sais pas si tout le monde est là. Alors, I
22 usually do not make those type of comments but in
23 all fairness to the witness, I just want to draw
24 the Régie's attention to two things.

25 My colleague referred the witness to a

1 decision from the Régie, the... I think it is
2 B-0361, a decision from the Régie in ninety-six
3 (96) and Me Georgescu referred the witness to the
4 evidence of the utility and not to the Board's
5 findings.

6 So I would suggest that in all fairness to
7 the witness, we make sure that we give the time,
8 and in fact, it was a French decision, so we give
9 the time to the witness and unfortunately, I was
10 not, I took the time during the break to read the
11 decision, so I just want to make sure that for the
12 rest, the remainder of the cross-examination, we
13 give sufficient time so we can look at the
14 documents.

15 I will need to review the transcripts and
16 because I think that there was another comment
17 pertaining to the City of Montreal, indicating that
18 there was a by-law banning gas natural, so I think
19 it was what I have heard and I think that the
20 situation is... was not correctly, not correctly
21 informing the witness. So I just want to make sure
22 that we cross-examine on the principles of fairness
23 to the witness.

24 Me ADINA GEORGESCU :

25 Mr. Chairman, if you do not mind, I'd like to

1 respond to my colleague's comments. Regarding the
2 decision D-96-31 that was presented to the witness,
3 the objective was essentially to see if he had
4 already seen it. And I think that was, that point
5 was made and he answered that he had not. The
6 content is more legal than anything else and if you
7 want to have a debate on what the Régie said in
8 that decision, we can have that in pleadings, later
9 on in the process. I think that is definitely an
10 opportunity that we will have.

11 With respect to the by-law that was adopted
12 and that restricts the use of natural gas, that is
13 part of the evidence in the file. It has been
14 mentioned and discussed by the experts of the three
15 utilities for the past four days. It has been
16 brought up in the Aviseo report. Some I am very
17 confused as to, as to what the issue is, with
18 respect to that.

19 If you want to... if you want us to file
20 that specific by-law once again, we shall, but the
21 idea was simply to know if Dr. Hopkins was aware of
22 the fact that there is a by-law adopted by the City
23 of Montreal, with respect to the banning of the use
24 of natural gas in buildings, a by-law that is
25 already in force and that will progressively have

1 an amplified effect over the next few years.

2 So again, I am not sure exactly what the
3 issue is, here. So those are my comments for the
4 time being and I invite my colleague, if she has
5 any issues with the questions that are being
6 formulated to the witness, to object when the
7 questions are submitted and I will reformulate or
8 will provide the necessary information.

9 Me PAULE HAMELIN :

10 I will surely do, if I have the time to read the
11 decisions.

12 LE PRÉSIDENT :

13 Bien, si vous me permettez ce court commentaire,
14 là, je pense que le point ici, c'est tout
15 simplement de s'assurer, même pour les questions
16 simples, de s'assurer de bien décrire le contexte,
17 là, qui entoure les pièces auxquelles vous faites
18 référence, pour s'assurer que le témoin puisse
19 répondre adéquatement.

20 Me ADINA GEORGESCU :

21 Tout à fait, Monsieur le Président, c'est bien
22 noté.

23 Q. [73] So, if there are no further comments, I will
24 continue with the questions that we still had. So
25 hello, again, Dr. Hopkins.

1 R. Good afternoon.

2 Q. [74] Let me lead you to your direct testimony. I
3 think we had it on screen right before the break.
4 Madame la Greffière, je ne sais pas si ça serait
5 possible de remettre à l'écran la pièce C-ACIG-
6 0028, s'il vous plaît. Merci. Et c'est à la page 4,
7 à la ligne 5. Juste un instant, je vais aller
8 chercher l'extrait exact, parce qu'il semble que ce
9 ne soit pas la bonne page. Excusez-moi, c'est à la
10 question 9, c'est la mauvaise... je vous ai donné
11 la mauvaise page, je m'en excuse. Parfait. À la fin
12 de la réponse. Parfait. Merci beaucoup.

13 So, Dr. Hopkins, here essentially you...
14 you mention that -- first bullet from the top --
15 Both the Aviseo report and Dr. Brown's
16 testimony failed to sufficiently
17 consider the business opportunities
18 associated with the decarbonization
19 energy transition or the impact of
20 mitigating actions that prudently run
21 utilities... that prudently run
22 utilities would take to adapt to that
23 transition.

24 Can you refer me to any regulatory principle, or
25 literature, or articles, or any kind of source that

1 would support the position that the mitigation of
2 risks or the taking into consideration of business
3 opportunities are a factor to consider in assessing
4 business risk for the determination of the rate of
5 return?

6 R. I don't have any particular citation for you.

7 Q. [75] Are you aware of any Régie decisions that
8 would support this principle that mitigation
9 measures and business opportunities are a factor to
10 consider to determine the rate of return?

11 R. On the mitigation front in reviewing the Régie's
12 past rate of return orders, there's discussion of
13 the Régie accounting for... you know, considering
14 evidence regarding the... their use of various
15 deferral accounts and other such things, you know,
16 that are used to mitigate short term business risk
17 and accounting for the existence of those
18 mechanisms in setting the rate of return.

19 Q. [76] Do you agree that the business opportunities
20 that you are referring to also bring their own set
21 of uncertainty and risks?

22 R. They do. This is why it's important to do the
23 analysis and to actually look carefully at the
24 future and understand what those risks would be,
25 how the risks and opportunities play out over the

1 courses of the full energy transition.

2 Q. [77] So, do you agree that mitigation measures or
3 business opportunities remain uncertain solutions
4 that may or may not be effective in reducing the
5 risk? Is that a fair assessment?

6 R. The form that different mitigating actions might
7 take and, you know, is... remains uncertain and...
8 but would be much more certain if there were
9 analysis conducted that indicate when that certain
10 things might happen and which type of actions might
11 be more relevant or not, and I'm not sure... I'm
12 not sure I quite got your question there, so feel
13 free to come back to it.

14 Q. [78] Well, I will actually, because I didn't ask
15 about the form of the solutions or whether or not
16 they can be investigated or analysed and whether or
17 not we can develop hypothesis about how they should
18 be implemented. I asked about whether or not they
19 would lead to a successful solution to palliate the
20 risks that come with energy transition.

21 So, my question to you is : do you agree
22 that mitigation measures or business opportunities
23 still remain uncertain solutions? We don't know if
24 they're going to be successful or not, even if they
25 are looked into to, even if they are implemented.

1 Do you agree with that assessment?

2 R. I agree that the elimination of risk is not
3 possible.

4 Q. [79] Thank you. On page 3 of your report...
5 Actually, no, it's on the same... it's the same
6 question, Q and A 9. You mention, and I just want
7 to... my reference to the pages were not... were
8 not... they're mistaken on my notes, so I just want
9 to find the right excerpt.

10 So, Madame la Greffière, si vous pouviez
11 simplement... Oui, c'est parfait. Donc, peut-être
12 redescendre la page pour qu'on voit le... le début
13 de la prochaine. Super. On peut s'arrêter là.

14 So, it's the second bullet in response to
15 question 9 :

16 The evidence presented by Aviseo
17 report and in Dr. Brown's testimony is
18 insufficient to evaluate the long term
19 business risk associated with stranded
20 assets and competition with
21 electricity, including the risks that
22 could be associated with the
23 decarbonization energy transition.

24 Do you agree that energy transition increases
25 business risk for the utilities?

1 R. Energy transition provides a changing baseline, a
2 changing set of circumstances in which the
3 utilities will need to do their work. The utility
4 business, the fundamental of their business
5 investing capital, recovering that capital with a
6 return will be different as the energy transition
7 proceeds and it will take careful management by the
8 utility and actions by regulators in order to... in
9 order to navigate that transition.

10 That means, yes, the future is different
11 from the past. In terms of the actual likelihood
12 of, you know, the fundamental level, business risk
13 is the evaluation of a likelihood of unexpected
14 negative results from investors' standpoint. And
15 whether the actual likelihood of that outcome
16 occurring is any lower or higher going forward in
17 the long term is uncertain as this point, because
18 the analysis for the Quebec utilities has not been
19 conducted. And so I can't say whether the... that
20 transition will increase the Utilities business
21 risk.

22 Q. [80] So, you mention that energy transition will
23 trigger changes and that the Utilities will have to
24 adapt to those changes, but that to you does not
25 cause uncertainty, is that what I have to

1 understand from your statement?

2 R. The overall construct, you know, the overall
3 utility within its regulatory context that actually
4 finally in the end pays a dividend of some amount
5 or earn a return and that pays that dividend to his
6 shareholders. Actually, mapping the changes in the
7 business environment, the change in the way the
8 utility may operate actually to... will the return
9 be any different? That connection hasn't been made.

10 Q. [81] But I'm coming back to your initial statement.
11 You... you mention that energy transition does
12 trigger a change in paradigm, we're no longer in
13 the same situation that we were in the past, and
14 that is going to bring the Utilities to have to
15 adapt, and to you that doesn't pose a certain level
16 of risk that the utilities are going to have to
17 adjust their business model in order to respond to
18 this energy transition that they're now facing and
19 that they were not facing in the past?

20 R. I'm not... I'm not saying that there isn't a risk.
21 The question is : is there... is there a risk
22 that's different from... in some sort of
23 quantitated fashion different from the risk they
24 face today. And also remember the particular
25 context here of the question comparison with the US

1 gas sample and whether the energy transition is any
2 different for the Quebec Utilities than it is for
3 the US gas sample. They face, as we discussed
4 before, a comparable energy transition challenge
5 and so, to the extent that they are a reasonable
6 proxy, that is already being priced into their cost
7 of capital and therefore would be priced over again
8 to the Québec Utilities cost of capital.

9 Q. [82] But my question was not a question by which we
10 were comparing the two at this point. It was a
11 general question of whether or not energy
12 transition regardless of whether we're in Canada or
13 whether we're in the States, brings an additional
14 set of challenges, risks and uncertainties. And
15 you, yourself mentioned earlier that yes there's a
16 change in paradigm and yes they will have to be
17 adjustments make by the utilities whether we're in
18 Canada whether we're in the States. The same
19 reaction is going to have to apply. And that
20 normally according to what you, yourself mentioned
21 a little earlier, leads to a certain level of
22 uncertainty.

23 And my question to you is doesn't that lead
24 also to a higher level of business risk and
25 obviously reasonably and logically speaking would

1 also lead to an increase ROE for the utilities? You
2 don't agree with that assessment?

3 R. Again, I think that, you know, in the context of
4 how the ROE... how their business risks analysis
5 feed in to the ROE discussion in which there is a
6 adder generally in the Régie's formulation there is
7 a adder for business risk, an adjuster from the
8 reference utility level of risk. So I don't think
9 that in this context it's, it is... Looking at this
10 entirely in isolation is not necessarily the right
11 context we need to be looking at that comparative
12 assessment.

13 If the overall ROE of gas utilities is
14 higher because of a overall business risk facing,
15 or perceive business risk by investors, that they
16 see and they think the gas utilities face a risk
17 going forward because of the energy transition,
18 that would be priced into the outcome of doctor
19 Villadsen's or doctor Booth's analysis rather than
20 -- because it's not a distinct risk associate with
21 a particular utility as it's the policy context,
22 and my estimation between the two countries is
23 comparable.

24 So to the extent that there is such a risk
25 investors, utilities managers etc. are able to

1 understand that risk. If people think that it will
2 not actually be mitigated in some fashion and want
3 to carry that risk forward into their assessment of
4 overall risk, that would be priced into the market
5 assessment of those utilities as it stands today.

6 Q. [83] Okay. Madame la Greffière est-ce que ça serait
7 possible de mettre à l'écran, s'il vous plaît, la
8 pièce EGI-36, B-0360 s'il vous plaît.

9 So, I'd like to refer you to an exhibit.
10 This is, this is actually a document that you
11 mentioned in your resume. It is an analysis that
12 Synapse, and you yourself, prepared for the Natural
13 Resources Defence Council with respect to Gas
14 Regulation for Decarbonized New York. And I'd like
15 to refer to the page before last.

16 So you were mentioning earlier that the
17 analysis cannot be made at a high level and we
18 can't necessarily conclude automatically that if
19 there is energy transition and there's heighten
20 risk that necessarily leads to an increase business
21 risk which would trigger a heighten ROE.

22 However, if we look in the analysis that
23 you submitted to the Natural Resources Defence
24 Council of the state of New York, you mentioned
25 here, at point 8.3, on Return on equity that:

1 The risks to the existing gas utility
2 business model from the policy-driven
3 changes and the urgent need to address
4 climate change are only going to grow.
5 New business models are likely to be
6 risky as well, if only due to their
7 novelty. In a typical utility
8 regulatory construct, investors have
9 the opportunity to earn a return
10 commensurate with the risk of their
11 investment. This would imply that the
12 allowed return on equity (ROE) for gas
13 utilities might need to be higher.

14 So, I'll ask my question again. I'm a little
15 confused. You seem to say in this particular report
16 that energy transition leads to uncertainty, leads
17 to a new business model for utilities because they
18 need to adjust to this new reality, it could lead
19 to an increase ROE but when I ask you the question
20 if that is the case, you tell me that: "No, we have
21 to evaluate the situation specifically for these
22 specific utilities in this present case and it's
23 not a general rule".

24 I'm a little confused as to exactly what
25 you mean. So, is it or is it not an additional

1 risk? Energy transition, does it constitute an
2 additional business risk that could lead to an
3 increase ROE as you mentioned in this report to New
4 York state?

5 R. Managing energy transition well will be a challenge
6 for utilities and for their regulators. And that
7 may well mean a riskier future. Again I'll come
8 back however to the question, you know, you point
9 out to this file in New York. The, the question
10 here, particularly with respects to the business
11 risk analysis in this context, has to do with
12 differential risks, particular risks, claimed
13 particular risks that Aviseo identified and that
14 doctor Brown discussed related to energy transition
15 in Québec. The claim that those are distinct and
16 different form risks experienced by the reference
17 utilities in the US gas sample.

18 To the extent that, at this point,
19 investors are looking at short term returns, long
20 term returns, investors overall in public markets
21 are considering the risk associated with energy
22 transition and it is present, that risk is already
23 present in the benchmark gas utilities risk...
24 returns, rather than something that would be
25 identified in a utility specific, jurisdiction

1 specific business risk analysis presented in this
2 case.

3 If the Québec utilities want to show that
4 they're, that they face unique and different risks
5 they should quantify those in the context of a plan
6 and come back and show how that actually plays out
7 as I recommend.

8 Q. [84] But in your, in your report to the state of
9 New York, you don't mention mitigation, you don't
10 mention the fact that the utilities should put in
11 place different measures before the business risk
12 is assess to be increased leading to an increased
13 ROE.

14 Your statement is broad and general and
15 doesn't state that you need to analyse each
16 situation based on the measures that should be
17 applied. Your statement is general and says that
18 cause to effect, energy transition leads to a new
19 paradigm which leads to new business models which
20 essentially leads to increase business risk which
21 lead to an increased ROE.

22 So I have to say I'm still confused as to
23 why here you're making that type of general
24 statement but in our case you want to restrict it
25 to the specific of, of our particular jurisdiction

1 and the mitigation measures that you seem to want
2 to impose on the Utilities. I'm, I'm still
3 confused.

4 R. I'm not sure what's the question there.

5 Q. [85] There is not... there's no question. I'm
6 asking, I'm asking you again is your statement in
7 this report to the, to the state of New York, a
8 statement that could be applicable here in the
9 present case. Do you agree with the statement that
10 you made in this report to the state of New York?

11 R. I agree with what's written for the state of New
12 York. We produce that report that we, that we, we
13 produced it for a client who then filed it in the
14 state of New York. Just to context of what this is.
15 There's a lot of other stuff, there's a lot of
16 other stuff in this report. You picked a particular
17 portion of it. Even just above what you're reading
18 this here. There's a call for regulators to worry,
19 to think through what competition between electric
20 and gas look like. And to manage that competition
21 well. This is, this is one, this is one component
22 of a larger picture, as has been identified in that
23 process. If you let me finish I'll let you go.

24 Q. [86] Sure, absolutely. I'm not gonna interrupt you.

25 R. The reason that I keep coming back to the question

1 of whether there is something unique and different
2 about Quebec is because that's the logical
3 structure that the utilities' case relies upon with
4 respect to establishing a process, and it's a
5 standard process, for figuring out how to assess an
6 ROE. To the extent that... that we went back and
7 forth on long term and short term before, to the
8 extent that investors are looking carefully at the
9 risks of the utilities that they're investing in.
10 If the energy transition applies generally, which I
11 believe it does, then they are looking at the
12 appropriate weight that they feel is appropriate
13 between short term and long term risks in
14 establishing the cost of capital that they're
15 willing to... that they demand in order to invest
16 in those utilities.

17 If the... maybe in the future they will
18 demand a higher ROE and that will show up in
19 analysis like Dr. Villadsen and Dr. Booth, because
20 maybe there will be a greater distinction between
21 the ROEs in gas utilities and electric utilities,
22 because the risks to one will be different from the
23 other and we'll see that in the analysis.

24 In the meantime, we have what we have, what
25 I've written, my colleagues and I have written in

1 this report to New York, I think it's true, and I
2 also think that it should be considered in the
3 context of the overall report and the various
4 recommendations that are present in it.

5 I also want to be very clear that I am not
6 making or intending to make any prescriptive
7 statement about, you know, imposing, as you said,
8 any solution or mitigating action on the management
9 of a Quebec company. I'm a consultant to and I'm a
10 outside intervener in a regulatory proceeding. I'm
11 not in the position to impose anything on anyone.
12 I'm identifying options of the kind of things that
13 I'm thinking of, to help the Régie understand what
14 those kind of mitigating actions might look like.

15 Q. [87] Understood. So, look, I don't want to have a
16 debate with you on this and I just want to... I
17 just want to say that you're not making the nuances
18 that you're making now during your... your
19 explanation in this excerpt from the report that
20 various things should be taken into consideration
21 and how the investors consider business risk and
22 the challenges that... that utilities are faced
23 with due to energy transition, but leaving that
24 aside, I just want to ask you...

25

1 Me PAULE HAMELIN :

2 Écoutez, je vais m'objecter. I will object. Maître
3 Georgescu could plead this point, but if she has a
4 question she can put that to the question, I don't
5 think that she should be putting her views as to
6 her interpretation. I think the witness has
7 answered.

8 Me ADINA GEORGESCU :

9 So, I will get to the question.

10 Q. [88] So, I just have one last question for you on
11 this particular report. Did you perform any
12 quantitative analysis before making this statement
13 to the New York state in your report? The one that
14 we see at 8.3?

15 R. No. This is a general statement derive from
16 principles rather than a specific analysis of a...
17 of a particular utility.

18 Q. [89] Understood. Thank you. So, I will bring you
19 now to Q and A 40 in your direct evidence. Merci,
20 Madame la Greffière. So, the question here is :

21 You stated earlier that the cost of
22 capital for the Quebec utilities
23 should be informed by the level of
24 business risk facing a utility that is
25 taking all prudent measures to

1 mitigate risk.

2 The first essential step is for the
3 utility to develop a business plan for
4 managing the firm in the changing
5 public policy and competitive context
6 in which it operates.

7 Do you base yourself on any specific study or,
8 again, articles, source of any sorts, to support
9 your position that a business plan is required to
10 inform the regulator on long term business risk
11 when determining the rate of return?

12 R. There is a non sequitur in that question.

13 Q. Sorry? I'm sorry, I didn't catch that.

14 R. There is a non sequitur in that question. My
15 recommendation is not in this context, as written
16 here, is not that the utility needs to develop a
17 business plan for the purpose of use in a ROE
18 proceeding, but that the company should develop a
19 business plan in general about managing this and
20 that would then be an input into whatever
21 proceedings might come to the Régie. The particular
22 context in the recommendation that I've made is
23 that should then inform the analysis, that should
24 then should inform the next ROE proceeding, but
25 clearly a utility isn't going to do planing for the

1 purpose of one -- a comprehensive planing of the
2 sort that I've described for the purpose of using
3 it in, you know, in one cost of capital proceeding,
4 but rather to use it to inform their overall
5 business management.

6 Q. [90] So, in short, there is no specific requirement
7 for a business... a business plan to be provided in
8 order to assess long term business risk when
9 determining the rate of return?

10 R. There is no specific requirement. If a utility
11 wants to claim that they are brand new risks, that
12 are new and different, and need to be accounted
13 for, backing that claim up with analysis that shows
14 what those risks are, how they might come to pass,
15 how they might be mitigate, etc., seems to me to be
16 valuable information to provide to the regulator to
17 understand the claimed new risk.

18 Q. [91] Are you aware of any other utility that
19 provided a business risk (sic) in order to allow
20 the regulator to assess business risk in... for the
21 purpose of determination, for the purpose of the
22 determination of the rate of return?

23 R. I'm aware of other utilities doing analysis of this
24 sort, and again the... doing that analysis is not
25 done solely for the purpose of use in a cost of

1 capital aspect of a rate case, but I am not aware
2 of those analysis actually being, you know, filed
3 and use as evidence in an ROE proceeding, no.

4 Q. [92] Thank you. Going back now just a few
5 questions, a few pages, from your direct testimony,
6 Q and A 37. Madame la Greffière, si... si pouvez
7 revenir un petit peu en arrière. Merci. Just a
8 second. I apologize, it's actually Q and A 40 at
9 the... on the next page.

10 So, you mentioned that the business plan,
11 that you recommend that the utilities, provide,
12 should contain mitigation actions such as the ones
13 that you list here. So, you list here:

14 Detailed and careful examination of
15 any choice to invest in new gas system
16 infrastructure with appropriate
17 depreciation rate and the options for
18 non-pipeline alternatives to reduce
19 and eliminate the need for a rate
20 based utility infrastructure
21 investments, reevaluation of
22 depreciation approaches for each type
23 of utility assets...

24 I'm sorry, I'm going to summarize because I don't
25 want to read all of this -- developing partnerships

1 with electric utilities to meet winter peak needs
2 through the gas systems subject to regulatory
3 approval, evaluation of low-carbon fuels such as
4 green hydrogen or biomethane, including costs and
5 availability as well as impact on pipeline
6 performance and leakage.

7 So, regarding the first bullet, which
8 refers to investments, are you aware that the Régie
9 must approve all investments that the utilities in
10 Quebec make with respect to their assets?

11 R. I'm not aware of the specific processes that are
12 used, it would seem unlikely to me that the Régie
13 individually approves each new service line, for
14 example. My understanding of common fact of this,
15 is that there are rules and regulations regarding
16 expansion to new services for example. New
17 infrastructure on a largest scale doesn't worry me
18 all, that would come for the Régie to be considered
19 and approved.

20 Q. [93] So essentially you're not, you're not you're
21 not aware of the details, of how it works?

22 R. Every jurisdiction has its own thresholds and rules
23 and regulations. I haven't reviewed the Québécois
24 structure in detail.

25 Q. [94] Okay. For the section bullet, relating to

1 depreciation, are you aware that the Régie must
2 approve all depreciation rates of the utilities
3 assets?

4 R. I'm not aware of that in particular but again it
5 doesn't surprised me at all that the Régie would,
6 would, would care about that. That's a standard
7 component of rate cases, it's a derivation of the
8 revenue requirement.

9 Q. [95] With respect to partnership with electricity,
10 you mentioned it yourself earlier and it is in your
11 evidence, but I will ask the question again,
12 nonetheless. Are you aware that the Régie rendered
13 a decision allowing Hydro-Québec and Énergir to
14 deploy a partnership between gas and electricity in
15 Québec?

16 R. Yes.

17 Q. [96] Are you aware that both Énergir and Gazifère
18 are developing various renewable gas production
19 projects?

20 R. In a general basis yes, I've seen in the... a two
21 page facts sheet kind of, summary of what they're
22 up to, (inaudible) in English. Is a summary of
23 information, but, yes, I heard the president of, of
24 Gazifère talk about is desire to, to do, to develop
25 RNG in his testimony earlier this week, I'm aware

1 that they're active in this area.

2 Q. [97] Are you aware that Énergir and Gazifère are
3 also working on green hydrogen production projects?

4 R. Yes. I'd seen, studied the summary labo information
5 to that effect.

6 Q. [98] Are you aware that Intragaz is conducting a
7 resilience study to determine the impact of the
8 injection of green hydrogen in its facility?

9 Me PAULE HAMELIN :

10 Je vais m'objecter, juste... Excusez-moi est-ce que
11 vous... Est-ce que vous avez produit cette... Parce
12 que j'ai posé des questions justement là-dessus il
13 me semble. Have you filed this...

14 Me ADINA GEORGESCU :

15 Je sais pas à quoi vous faites référence, Maître
16 Hamelin. Je, je, j'ai de la difficulté...

17 Me PAULE HAMELIN :

18 J'ai mal compris votre question. Je pensais que
19 vous aviez parlé d'Intragaz.

20 Me ADINA GEORGESCU :

21 Oui. J'ai parlé d'Intragaz. J'ai demandé au témoin
22 s'il était au courant de, du plan de résilience
23 d'Intragaz qui porte sur l'hydrogène vert.

24 Me PAULE HAMELIN :

25 En fait je voulais dire Gazifère, je m'excuse.

1 Alors je, je ferme mon micro.

2 Me ADINA GEORGESCU :

3 Q. [99] So I will just repeat my question Dr. Hopkins.

4 Are you aware that Intragaz is conducting a
5 resilience study to determine the impact of the
6 injection of green hydrogen in its facility?

7 R. I was not aware of that. Seems like a good idea.

8 Q. [100] Do you agree with me that the actions that I
9 just mentioned, that are taken already by the
10 Québec Utilities and that you suggest be part of
11 the business plan are already taken by the
12 utilities?

13 R. Which one in particular, sorry, you went through a
14 list of four and then... when you say these
15 things... Which one exactly?

16 Q. [101] So, I'm referring to the bi-energy
17 electricity and gas project that Énergir is, is
18 managing right now. I'm talking about the RNG
19 production projects. I'm talking about the green
20 hydrogen production projects. And I'm talking about
21 the resilience study for Intragaz, for instance, on
22 the capacity of its infrastructure of its, of its
23 infrastructure to receive green hydrogen.

24 Do you agree that, that these are items
25 that, that are already done by the utilities and

1 that you recommend be included in a business plan?

2 R. I recommend activities of those sorts should be
3 part of an overall comprehensive picture. And that
4 overall comprehensive picture would inform the
5 selection... those are those actions as they stand
6 to that. We're talking about an energy transition
7 over multiple decades. Further planning...

8 Q. [102] Understood.

9 R. ... those plans, those plans will continue and need
10 evaluation and expansion or change. Other things
11 may be required. But, yes, I agree that those
12 actions would be appropriate to include and are
13 good first steps in the kind of process that I'm
14 talking about here. And are already serving to, to
15 help to mitigate risk for the utilities.

16 Q. [103] Is it fair to say that there is no guarantee
17 that these new measures that should be detailed in
18 the business plan will successfully be implanted or
19 work?

20 R. Yes. There's no guarantee about the future. That's
21 why I recommend a planning process revision and
22 revisitation that came from the process that I
23 recommended to the state of Colorado.

24 Q. [104] Do you agree that the mitigation measures or
25 business opportunities remain uncertain that they

1 may or may not be effective in reducing risk?

2 R. They may not be... yeah... individual action,
3 individual program may not have the intended
4 effects in reducing risk, which is again why a
5 revisitation or a regular process to think through
6 what the risks are and what... with better
7 information every time you come back is
8 appropriate.

9 Q. [105] So, I'd like to take you now to your Q and A
10 again. Madame la Greffière, si on peut juste
11 remonter à la question 10 s'il vous plaît. C'est à
12 la toute fin de la réponse, Madame la Greffière, si
13 vous permettez.

14 So, in Q and A 10, at the very end of the
15 paragraph. Not very end, the middle of the
16 paragraph, line 4 you say « This plan... », you're
17 referring to the business plan:

18 ... should then inform analysis of,
19 and selection of, different mitigating
20 actions. With such a plan in place,
21 the Régie would be able to adequately
22 evaluate the long term risk faced by a
23 prudent utility management in each
24 utility's situation, for inclusion in
25 an assessment of the appropriate

1 return on equity.

2 So, my understanding is that your position in the
3 present case is that the Régie should determine the
4 rate of return without considering the long term
5 risks that the utilities in Québec are facing
6 today. Is that correct?

7 R. I think that the Régie should give a predominant
8 weight to the nearer term, to more certain risks if
9 that makes any, if that phraseology makes sense.
10 And give little weight, if any, to the claims of a
11 particularized risk for, over the long term for
12 capital recovery.

13 Q. [106] Little rate, sorry. Little weight or any is
14 it, is it little or is it any? Is your position
15 that the Régie should not be assessing a long term
16 risk?

17 R. I think the Régie should look and see what it's got
18 in this case. In my estimation there's not as much
19 here as there could or should be. That doesn't
20 mean there's nothing. I think, you know, the Régie
21 historically has looked at competition risk, for
22 example, which is a manifestation of a long term
23 capital recovery risk, in its determination. And
24 so, the question of whether, whether things are
25 different this time, is to my mind unsettled

1 because of the, the lack of sufficient evidence to,
2 to, to settle it. But the Régie should continue to
3 give weight to the short and long term risks as it
4 sees fit. I see that the evidence is much stronger
5 about what the short term risk is and so I would
6 recommend that it would be put, put more weight
7 there, but obviously the final determination is up
8 to them.

9 Q. [107] I would like to bring you now to Q and A 41
10 of your direct testimony. Madame la Greffière, si
11 on pouvait aller à la question-réponse 41, s'il
12 vous plaît.

13 You see here that :

14 The prudent gas utility manager has an
15 obligation to shareholders to align
16 the utility's financial approach to
17 the reality of the market and policy
18 context in which it operates, and to
19 consider all of the implications of
20 potential actions.

21 You answered, in response to the IR that the Régie
22 addressed to you, at question 10.1, and I am going
23 to ask Madame la Greffière to put it up. Madame la
24 Greffière, si c'était possible de mettre,
25 d'afficher à l'écran, la pièce C-ACIG-0049, s'il

1 planning activities for compliance
2 with an ambitious state climate
3 policy, Northwest Natural, in Oregon.

4 Do you consider the utilities in the U.S. sample to
5 be imprudent?

6 R. I have no... I don't know enough about their
7 individual particular situations to make that
8 determination. I think they should be doing good
9 planning.

10 Q. [109] But they don't appear to have a business plan
11 like the one you recommend, and you are making the
12 assessment that a prudent manager would have a
13 business plan. So my question is this: on the basis
14 of the fact that they do not have a business plan,
15 does that make them imprudent?

16 R. If I had the full picture of what was going on in
17 each of those cases, I could opine on that topic.
18 At some point, moving into the energy transition
19 without a plan, I expect that if utilities truly
20 are going deeper and deeper into the energy
21 transition without a plan, I expect that the
22 question of prudence of their actions to become a
23 more and more pressing question.

24 Q. [110] Did you... sorry, go ahead.

25 R. Whether the, whether you know, whether is... you

1 know, absent, you know, a rate case or a particular
2 context in which to, to make the evaluation,
3 looking closely, you know, at this, at this point
4 in the energy transition, as to whether you know
5 exactly what planning processes have been
6 undertaken.

7 Again, utilities maybe, maybe are doing
8 these plans internally, they have not filed them, I
9 am talking about publicly filed things that I am
10 aware of.

11 Q. [111] Understood. So I am just going to complete my
12 question : did you research at all to find out if
13 there was anything that was submitted by the
14 utilities in the U.S. sample in terms of a business
15 plan?

16 R. I put in here, in this response, what I am aware
17 of. The... I am not aware of other planning that
18 those utilities may be conducting or may have
19 filed.

20 Q. [112] Understood. Madame la Greffière, je vous
21 demanderais, s'il vous plaît, si c'est possible de
22 revenir au direct testimony.

23 R. Let me make something clear about that. Could you
24 please put that, that question back on the screen
25 and scroll up to the actual question I was asked?

1 Okay.

2 The... could you, I think there is a second
3 portion to that question, because there's a
4 question about what the policy context is. I just
5 want to make something, make sure that my
6 understanding is clear, could you scroll down a
7 little bit, because I want to see what...there's
8 like a 10.2, or a 10.1.2 or something. Can you
9 scroll down a little further. Yes :

10 In each case, please identify the
11 public policies relevant.

12 So the... yes, okay, I think my understanding, that
13 is why I wanted to double check how that question
14 was phrased, thank you very much for allowing me to
15 make sure my answer was as a correct example as it
16 could be.

17 Q. [113] Thank you, so, Madame la Greffière, est-ce
18 que ça serait possible de retourner au rapport du
19 docteur Hopkins? Merci. À la question 48. So in Q
20 and A 48, you say :

21 To the extent of the utilities in the
22 U.S. gas sample are not taking the
23 available actions that investors might
24 expect regarding risks associated with
25 climate change mitigation policies,

1 they are not an appropriate proxy to
2 use to estimate the cost of capital
3 for a utility that has a plan and is
4 taking prudent actions.

5 Do I understand correctly that you do not consider
6 the U.S. sample to be a valid proxy? I do believe
7 you also mention that in your testimony earlier
8 today? Is that correct?

9 R. The structure of these cases is, you know, over
10 time they are coming more and more... they are
11 going to become more and more difficult. There are
12 very few companies that you could find that are
13 publicly traded companies that are pure LDCs, gas
14 LDCs. Many of the companies that I identified and
15 talked about in my direct, that are in the sample,
16 are engaged in other lines of business as well.

17 And it is not that this is a selection of
18 nine (9) out of..., you know, the best nine (9) out
19 of a hundred (100) options. It is... these are the
20 nine (9) you got, right?

21 And so, it's more the question of dealing
22 with the level of information that we have. If you
23 try to make a restriction to only the sort of, the
24 purest best analogs, you might end up with a sample
25 that only had a handful of utilities in it, even

1 fewer than nine (9), which would, which would start
2 to draw big challenges about trying to find a
3 range. A range when you have only two or three or
4 four options, is challenging.

5 So this whole construct of how these ROEs
6 are being decided, is having a sort of a crisis of
7 data availability, "a crisis availability" is a
8 strong word but a slow, a slow challenge building
9 to the methodology.

10 So in that context, it makes sense to me to
11 include companies that are perhaps not perfects
12 analogs, as long as you are aware of what you are
13 doing and you account for that, in how you use the
14 sample.

15 Q. [114] So I am not sure that answers my question. Do
16 you consider this U.S. sample as a valid proxy or
17 not?

18 R. I think when viewed with the full information about
19 what the sample is or isn't, then the Régie can use
20 it and take it into account along with other
21 evidence of other samples and all the other pieces
22 that come together with that. But I think the Régie
23 should be informed about challenges associated with
24 the sample.

25 Q. [115] I understand, but I'm not asking you what the

1 Régie may or may not do with the sample, I'm asking
2 you if you consider the sample as a valid proxy?

3 R. I think if I were using the sample, I would go
4 ahead and use it, but I would... but I would allow
5 and account for the fact that businesses involved
6 in that are in... are not perfect proxies for the
7 utilities that may be involved in bolder and
8 riskier lines of business, etc. And would account
9 for that in how I was thinking about ROE in the
10 business risk.

11 Q. [116] It is my understanding from your report and
12 your testimony that you used the sample to assess
13 short term risk for the purpose of your
14 recommendations to the Régie, is that correct?

15 R. I evaluated the sample and one of the outcomes of
16 that evaluation as I described in my direct this
17 morning, is the clear impact of unregulated
18 activities and other things that are not great
19 proxies on the results of that analysis. And so,
20 that actually... using that sample and evaluating
21 it informs my assessment about whether and how to
22 give weight to the US sample.

23 Q. [117] So, your recommendations for the purpose of
24 your report and for the purpose of this file were
25 based on your evaluation and your assessment of the

1 US sample as a benchmark, is that correct?

2 R. My evaluation of the US sample and how it compares
3 with Quebec without necessarily assuming... it is
4 the proposed benchmark by Dr. Villadsen, and so I
5 wanted to evaluate its suitability as a benchmark
6 as well as working forward from that assumption, if
7 it is a reasonable benchmark, then what does that
8 imply.

9 So, there's two steps just as Dr. Brown had
10 two steps to his analysis about whether it's a...
11 whether it's a reasonable proxy, and to the extent
12 that it is, how it can inform the assessment of
13 business risk.

14 Q. [118] I understand, but my question was more
15 precise than that. You made recommendations for...
16 regarding short term risk based on your comparison
17 between the Quebec Utilities and Dr. Villadsen's US
18 sample. So, I will reiterate my question : did you
19 use Dr. Villadsen's US sample for the purpose of
20 your recommendations in the present file?

21 Me PAULE HAMELIN:

22 Je vais m'objecter. I object to the question. I
23 think that the witness has answered the question in
24 this two steps process that he has done. So...

25

1 Me ADINA GEORGESCU:

2 I disagree and that's why I asked my question
3 again, but I will leave it up to Mister Chairman to
4 decide.

5 LE PRÉSIDENT :

6 Bien, écoutez, il me semble que vous avez répété la
7 question déjà à deux, trois reprises. Dr. Hopkins a
8 répondu. Là, après ça c'est une question
9 d'appréciation. Vous aurez l'occasion d'y revenir
10 en argumentation si la... pour nous expliquer en
11 quoi la réponse vous convenait ou ne vous convenait
12 pas.

13 Me ADINA GEORGESCU :

14 Entendu. Merci, Monsieur le Président. Et juste
15 pour vous laisser savoir, j'en ai pour encore
16 peut-être cinq minutes de questions, j'ai presque
17 terminé.

18 Q. [119] So, moving on to the next question, Dr.
19 Hopkins. So, I won't go back to the exhibit, the IR
20 from Dr. Brown to you, question 10.1, because we
21 just just looked at it and it's the same... the
22 same exact excerpt where you mentioned that the
23 only utility you were aware of in the US sample
24 that has begun planning activities for compliance
25 with an ambitious state climate policy is Northwest

1 Natural. But regarding...

2 Me PAULE HAMELIN :

3 Who has started making or has made a plan?

4 Me ADINA GEORGESCU :

5 That it began planning activities for compliance
6 with an ambitious state climate policy.

7 Me PAULE HAMELIN :

8 You should go back to the... to the IRs.

9 Me ADINA GEORGESCU :

10 So, I will read again from the answer that Dr.
11 Hopkins gave :

12 I'm aware of one of the companies in
13 the US gas sample that has begun
14 planning activities for compliance
15 with a ambitious state climate policy.

16 Me PAULE HAMELIN:

17 Thank you.

18 Me ADINA GEORGESCU :

19 Q. [120] Do you agree that the regulator has set an
20 ROE for this utility in the past despite the
21 absence of a business plan?

22 R. I imagine the regulator must have set an ROE. What
23 the... there are resource planing requirements in
24 Oregon. Oregon has a recurring process for
25 integrated resource planning for each of its gas

1 utilities. In fact, our firm has just been hired
2 to... to help the regulator in Oregon with its
3 evaluation of Northwest Natural next integrated
4 resource plan. So, ask me in a few years, and I'll
5 all know this process intimately.

6 But the... so, well, I haven't been
7 involved in specific processes in Oregon, I'm sure
8 that had to set an ROE because that's a key part of
9 any rate case. I'm sure that they've evaluated
10 plans from Northwest Natural. I also think that if
11 I don't know what the timing has been, but that in
12 Oregon law, the changes of the planning context for
13 the Oregon utilities is recent. So, whether they
14 have set an ROE since that law passed and have
15 wanted to take the planning into account since
16 then, I don't know, it seems a little unlikely
17 given the timeframe.

18 So, I think the role of that kind of future
19 looking planning in an ROE case in the particular
20 context of energy transition, I think is still an
21 open question in Oregon.

22 Q. [121] Well... I wasn't referring to the integrated
23 resource plan which appears to be a statutory
24 obligation for Northwest Natural to file. I'm
25 talking about a business plan such as the one that

1 you recommend and your answer to IR 10.1 says that
2 even Northwest Natural did not file a similar
3 business plan.

4 So, my question to you is : do you agree
5 that the regulator in Oregon had to set an ROE
6 despite the fact that Northwest Natural did not
7 file a business plan for the purposes of
8 determining that ROE in the past? Do you agree with
9 that?

10 R. So, I think the question of... the need to do this
11 kind of forward looking comprehensive business
12 planning is driven by, the root cause of that is
13 the need to mitigate greenhouse gas emissions and
14 to meet ambitious climate goals. So, the... to the
15 extent that that policy environment has changed
16 since the last time Northwest Natural had a rate
17 risk, and I unders... I do not know when the last
18 time where Northwest Natural had a rate case and
19 when the ROE was set and what the issues were with
20 respect to business risk. But I just think we
21 can't.. I don't know, but given the context of the
22 timing of policy change in Oregon, I would not have
23 expected these issues to be at issue in a rate case
24 where the ROE was addressed in the past. And so,
25 the question of how Oregon will deal with that in

1 the future, I think it's still an open question. I
2 think... I think we are in a sort of a... a moment
3 of transition about how the regulators in Oregon
4 will think about the climate law, which they are
5 required to take into account in many different
6 cases, including integrated resource planning, but
7 also other cases, how they will bring that to bear
8 the next time the question of risk and ROE comes up
9 in Oregon.

10 Q. [122] Thank you. My last question, and it's more a
11 question of clarification, I'd like to bring you to
12 your presentation of... of this morning. Your
13 PowerPoint at page 9. Madame la Greffière, est-ce
14 qu'il serait possible d'afficher la présentation du
15 Dr. Hopkins de ce matin, s'il vous plaît? Merci
16 beaucoup. C'est à la page 9. Merci.

17 So in the first, in the first bullet on
18 this, on this page, I see you're quoting a sentence
19 from Q and A 11 from doctor Brown's direct
20 testimony. You say:

21 Volatility in returns is associated
22 with risk, and "Other things equal,
23 investors prefer returns that are less
24 volatile".

25 And that is the quote from doctor Brown's

1 testimony. I would like to go to that specific
2 answer that doctor Brown gave, to see the rest of
3 the paragraph, if possible, so Madame la Greffière,
4 est-ce que ça serait possible de mettre à l'écran
5 le témoignage du docteur Brown. Et je vais vous
6 donner la cote dans un instant. B-0027. C'est à la
7 question 11. Merci.

8 So, you quoted the first sentence of his
9 answer: « Other things equal, investors prefer
10 returns that are less volatile ». The second
11 sentence says:

12 Thus, if investors expect returns to
13 be volatile, and specifically if
14 movements in achieved return are
15 correlated with returns from the
16 market generally so that the
17 volatility cannot be diversified away,
18 the cost of capital increases and the
19 allowed return needs to be higher.

20 Do you agree with this second sentence?

21 R. Pardon me. I'll just re-read.

22 Q. [123] Sure. Take your time.

23 R. Yes, I do. I think that's a general precinct.

24 Q. [124] Okay. So, I would like to now go back to your
25 presentation. Madame la Greffière, si c'était

1 possible de retourner, de retourner à la
2 présentation du docteur Hopkins. Merci.

3 I'd like to take you then to slides 10, 11
4 and 13 of your presentation, so we can take them
5 one by one. Ten. I'm gonna let you take a look at
6 them, take the time you need.

7 R. I'm familiar with them.

8 Q. [125] Eleven. We can go just to make sure that
9 you've seen them and you have the context for the
10 question. Eleven, and thirteen. So these slides
11 essentially show return volatility. So my question
12 is: do these charts show movements in achieved
13 return that are correlated with the returns from
14 the market generally so that the volatility cannot
15 be diversified away? Or do these charts show total
16 volatility?

17 R. These charts show a total volatility.

18 Q. [126] Thank you. Monsieur le Président si vous me
19 donnez juste deux petites minutes pour voir avec
20 mes collègues si j'ai d'autres questions. Je vais
21 pouvoir vous revenir, puis sinon je vais avoir
22 terminé mon contre-interrogatoire.

23 LE PRÉSIDENT :

24 Alors on vous attend pour quelques minutes.

25

1 Me ADINA GEORGESCU:

2 Q. [127] Merci beaucoup. Doctor Hopkins, I'll be back
3 in a second to see if I have any further questions.

4 R. [128] I'll be here.

5 PAUSE

6 Me ADINA GEORGESCU :

7 Alors je suis de retour, Monsieur le Président.

8 Excusez-moi, donc je n'aurai pas d'autres
9 questions. Merci beaucoup.

10 Thank you very much Doctor Hopkins.

11 R. That is a pleasure.

12 Q. [129] Same here.

13 LE PRÉSIDENT :

14 Merci, alors Maître Legault? Pas de question de la
15 Régie. Merci. Madame Falardeau? Alors ça va
16 compléter...

17 Me PAULE HAMELIN :

18 Monsieur le Président j'aurais peut-être juste
19 deux, trois questions en ré-interrogatoire si vous
20 le me permettez.

21 LE PRÉSIDENT :

22 Oui. J'allais vous poser, j'allais vous le
23 demander. Alors allez-y.

24 RE-EXAMINED BY Me PAULE HAMELIN:

25 Q. [130] Doctor Hopkins, I wish to refer you to

1 decision D-2011-182. It is exhibit C-ACIG-0079. So
2 I'll ask... Madame la Greffière, si vous pouvez
3 mettre la décision à l'écran. C-ACIG-0079 autour du
4 paragraphe 232.

5 So my colleague asked you questions
6 specifically to paragraph 232 and to paragraph 235.
7 Do you have any other comments with respect to,
8 because she didn't read 233. Do you have any
9 comments to make with respect to paragraph 233?

10 R. Only that the Régie in addition to considering the
11 items of risk that, that she asked about also
12 considered other things like the consistency of
13 returns realizing its authorized ROE that's
14 consistent with a short term more volatility risk
15 piece that I identified as being part of what the
16 overall assessment should be. And the
17 competitiveness piece which is again consistent
18 with how I've composed my analysis.

19 So the, the questions... it looks like the
20 Régie was considering many of the aspects that I
21 highlighted in my testimony as it was making its
22 decision.

23 Q. [131] Thank you. Have you read doctor Booth's
24 report?

25 R. I read, I read an early draft of it, earlier draft

1 of it. I don't know if I read it in its, in its
2 final form. Mister Booth writes lot of words.

3 Q. [132] Are you aware of any Canadian precedents
4 cited by doctor Booth referring to the questions of
5 the risk horizon in an ROE case?

6 R. I don't remember that particular citation from
7 doctor Booth's testimony. I'm sure he can highlight
8 relevant pieces at that point. I'm not as familiar
9 with the Canadian, the various Canadian regulatory
10 precedents.

11 Q. [133] You were asked if you have any, if you have
12 seen any mitigation plan in the context of an ROE
13 case. Are you aware of any utility claiming energy
14 transition as a business risk in an US
15 jurisdiction?

16 R. I haven't, I haven't seen that come up in any cases
17 that I've been involved in. Most of the cases are
18 in... you know, there's a sort of... the state of
19 the conversation on energy transition is at the
20 level of regulatory... regulators wanting to get an
21 handle on this issue in opening generalized dockets
22 on the question. And so the analysis and the
23 presentation are in that context. And the, the
24 particular questions of, you know, that energy
25 transition causes a particular risk, which then

1 should be reflective in so many points on an ROE, I
2 haven't seen that in any, in any case in the US.

3 Q. [134] Thank you. Mister Chairman, this will be
4 ending my questions, so no further questions to, to
5 doctor Hopkins.

6 LE PRÉSIDENT :

7 Alors on va pouvoir libérer docteur Hopkins. Thank
8 you very much, Dr. Hopkins, for your availability.
9 You are now free.

10 R. Thank you very much, it has been a pleasure.

11 Me PAULE HAMELIN:

12 Thank you.

13 Me PATRICK OUELLET :

14 Donc, j'aurais une petite question d'intendance si
15 vous me permettez, Monsieur le Président.

16 LE PRÉSIDENT :

17 Oui.

18 Me PATRICK OUELLET :

19 Pour l'interrogatoire en chef du docteur Booth, et
20 j'imagine que vous allez prendre le reste de...

21 Est-ce que vous avez une idée de combien de temps
22 ça va durer, pour savoir si je contre-interroge
23 aujourd'hui ou non, tout simplement? Parce qu'il
24 est quand même rendu quatorze heures quinze
25 (14 h 15).

1 LE PRÉSIDENT :

2 Oui. Allez-y, Maître Hamelin!

3 Me PAULE HAMELIN :

4 Bien, écoutez, c'est sûr qu'il est déjà deux heures
5 quinze (2 h 15). On peut commencer. Mais ça a été
6 effectivement une longue semaine. Je veux juste
7 souligner que mon collègue va avoir eu sa
8 présentation. Nous, on a essayé de le faire selon
9 les règles habituelles. Ça a été déposé hier.
10 Alors, juste soulever le fait que mon collègue va
11 avoir la chance de passer tout le week-end à penser
12 à son contre-interrogatoire du docteur Booth alors
13 qu'on a eu à peu près comme... bien, j'ai eu une
14 heure et, une soirée disons, si je peux dire, de
15 notre côté. Mais on est à la disponibilité de la
16 Régie. Je pense que ça a été une longue semaine
17 pour tous. Il est disponible, mais on est prêt à
18 commencer.

19 LE PRÉSIDENT :

20 Oui, on serait prêt à poursuivre avec la
21 présentation du docteur Booth.

22 Me PAULE HAMELIN :

23 Parfait.

24 LE PRÉSIDENT :

25 Et il continuera lundi matin. Je voulais juste

1 vérifier avec vous, Maître Hamelin. Est-ce que vous
2 avez eu l'occasion de prendre connaissance de la
3 réponse à l'engagement numéro 3?

4 Me PAULE HAMELIN :

5 Pas encore. Je m'excuse. Ça va à un rythme assez
6 rapide. Alors, on va naturellement prendre
7 connaissance en fin de semaine sûrement et on va
8 être en mesure de revenir à la Régie. Est-ce que
9 c'est trop tard si... Je sais que mes analystes
10 travaillent, regardent le document présentement. Je
11 vais essayer de vous revenir avant la fin de la
12 journée. Je vois maître Duquette...

13 LE PRÉSIDENT :

14 Oui, ça va. Donc, pour docteur Booth, on aurait
15 besoin de combien de temps? Est-ce qu'on ferait ça
16 tout d'un bloc dès cet après-midi ou...

17 Me PAULE HAMELIN :

18 J'ai l'impression qu'on ne fera pas tout un bloc
19 parce qu'il en avait... On a déposé la
20 présentation. Je pense que ça a presque cinquante-
21 neuf (59) pages. On peut peut-être commencer et je
22 pense qu'il y a des aspects qu'on pourrait faire
23 dans le cadre de sa présentation. Et il pourrait
24 peut-être nous indiquer à peu près où il serait
25 prêt à... On pourrait le faire par blocs. Alors, on

1 pourrait peut-être commencer par un premier bloc.
2 Si vous me permettez, je pourrais peut-être prendre
3 juste quelques minutes avant qu'il commence pour
4 voir à peu près, juste m'assurer où est-ce qu'on
5 pourrait arrêter. De sorte qu'on pourrait
6 certainement aller jusqu'à trois heures (3 h) si ça
7 vous convient ou bien si vous préférez qu'on le
8 fasse tous... Mais c'est quand même... On est à la
9 disposition de la Régie. Ma préférence, ce serait
10 de pouvoir en faire une partie.

11 LE PRÉSIDENT :

12 Oui. Disons jusqu'autour de quinze heures (15 h),
13 un petit peu plus.

14 Me PAULE HAMELIN :

15 Parfait.

16 LE PRÉSIDENT :

17 Autour de ça. C'est ça. Alors, on prendrait une
18 pause de dix minutes, jusqu'à quatorze heures
19 trente (14 h 30). Vous aurez l'occasion de discuter
20 avec docteur Booth.

21 Me PAULE HAMELIN :

22 Parfait.

23 LE PRÉSIDENT :

24 Très bien. Merci.

25

1 Me PAULE HAMELIN :

2 Merci.

3 SUSPENSION DE L'AUDIENCE

4

5 REPRISE DE L'AUDIENCE

6 LE PRÉSIDENT :

7 Alors, nous sommes prêts à passer au panel numéro 3
8 de l'ACIG.

9 Me PAULE HAMELIN :

10 Parfait. Alors, quant au panel... for panel number
11 3, we have already filed an affidavit from Dr.
12 Booth with respect to his evidence and all of the
13 IRs. So, it's already adopted. I'll ask à madame la
14 greffière d'assermenter le témoin.

15

16 PANEL 3 - ACIG

17 IN THE YEAR TWO THOUSAND TWENTY TWO, on this
18 seventeenth (17th) day of June, PERSONALLY CAME AND
19 APPEARED:

20

21 LAURENCE BOOTH, professor of finance, CIT Chair in
22 Structured Finance, Rotman School of Management,
23 University of Toronto, 105, St. George Street,
24 Toronto (Ontario);

25

1 WHO, after having made a solemn affirmation, doth
2 depose and saith as follows:

3

4 EXAMINED BY Me PAULE HAMELIN:

5 Q. [135] So, Dr. Booth, as I was indicating, we
6 have... we have already file an affidavit adopting
7 your evidence, your written evidence, in this file.
8 Do you have any corrections or modifications that
9 you would like to make to the... to your written
10 evidence?

11 R. I have two corrections that I'll cover in my direct
12 presentation, because they're part of the material
13 I took direct from my testimony that are correct.

14 Q. [136] Okay. And I don't know if it's only me, but I
15 see just a portion of... of your face, Dr. Booth.
16 Would it be possible just to move your camera a
17 little bit?

18 R. Is that better?

19 Q. Yes. Is it okay with... with the Board?

20 LE PRÉSIDENT :

21 Oui, ça va.

22 Me PAULE HAMELIN :

23 Okay.

24 LE PRÉSIDENT :

25 Merci.

1 Me PAULE HAMELIN :

2 Parfait.

3 Q. [137] And just before you, we see on the screen
4 your presentation, this was file as C-ACIG-0087. Do
5 you also adopt this presentation as part of your
6 written testimony in this file?

7 R. I do.

8 Q. [138] Okay. So, I'll let you make your presentation
9 and my understanding is that you will be doing the
10 first portion of your presentation up and until the
11 capital structure segment, so I'll let you go.

12 R. Okay. Now, the person that's in charge of
13 transmission of the overheads, is that Ms. St-Cyr,
14 Nathalie? Is that right?

15 LA GREFFIÈRE :

16 Yes, that's right.

17 R. Okay. So, Nathalie, when I say : can you change the
18 overhead, please change the overhead, and if I need
19 the overhead expanded, there's some of my pictures
20 if you click on them, you could just pull the
21 handles and make the picture bigger. I don't think
22 that affects us today, but it might affect us on
23 Monday. Okay?

24 LA GREFFIÈRE :

25 Okay. No problem.

1 Me PAULE HAMELIN :

2 And Madame St-Cyr, I think that Dr. Booth prefer to
3 say Nathalie because he has a hard time saying
4 St-Cyr, and so it's not as of disrespect to you,
5 okay.

6 LA GREFFIÈRE :

7 That's very fine with me.

8 R. I can say, but I prefer to call her Nathalie, if
9 that is acceptable to her. Okay. This is just
10 oversee the title page Fair Return and Capital
11 Structure for the Quebec Utilities. And first of
12 all... next slide please, Nathalie.

13 So, I've not appeared before the Régie, I
14 think since two thousand and fourteen (2014), eight
15 years ago, and I'm not familiar with the members of
16 the panel, so I thought it was appropriate just to
17 remind them of my CV. As I said, I'm a professor of
18 Finance and I hold a CIT Chair in Structured
19 Finance at the Rotman School.

20 I was the finance area coordinator there
21 for twenty-one (21) years during which time I was
22 awarded the Financial Post Leader in management
23 Education award and I've published over a hundred
24 refereed articles, mainly journal articles and
25 three leading text books.

1 My first professional work was in nineteen
2 eighty-two eighty-three (1982-1983) where I was
3 asked to do some reports for the Ontario Securities
4 Commission. At the time, we were deregulating the
5 investment banking business, and in fact the
6 chartered banking business as well. So, I wrote a
7 series of reports for the OSC because the
8 investment banks were under the control of the
9 provincial government, provincial regulation, the
10 OSC regulations.

11 Then, in nineteen eighty-five eighty-six
12 (1985-1986), I did my first rate of return
13 testimony before the CRTC on Bell Canada, and
14 subsequently with my late colleague, Professor
15 Michael Berkowitz, we appeared in almost every
16 regulatory body in Canada including cases before
17 the Régie. And I was trying to remember when I
18 first appeared before the Régie and I suspect it
19 was in the late nineteen nineties (1990s) with my
20 late colleague Professor Michael Berkowitz, but
21 unfortunately I don't have any records of that.

22 But as part of this, we both appeared
23 before the National Energy Board in nineteen
24 ninety-four (1994) when they had the landmark
25 hearing into setting an automatic ROE adjustment

1 mechanism.

2 And individually, I appeared on behalf of
3 the Canadian Association of Petroleum Producers in
4 another landmark case which was the two thousand
5 and eleven (2011) case on whether or not its assets
6 were stranded and whether or not it was facing the
7 really serious risk of stranded assets where some
8 parties suggested that the Northern Ontario line
9 basically should be written off. So, that was two
10 landmark cases before the National Energy Board.

11 In addition a lot of the things that I say,
12 in many ways are basic finance issues, and I've
13 appeared before the Tax Court of Canada on a couple
14 of occasions as well as several civil cases to
15 explain what, in many ways, are really fundamental
16 things in finance.

17 And most recently with my colleague,
18 Professor Eric Kirzner, we've appeared in a number
19 of indigenous land claim cases in Ontario and right
20 away across Canada, and we've appeared on behalf of
21 the Department of Justice dealing with questions
22 that go back to the seventeen nineties (1790s) in
23 terms of the purchase of land on behalf, from
24 Indians, the Indigenous Bands and on other cases
25 where the Crown has not fulfilled some of its

1 responsibilities toward our Indigenous People.

2 So, that's just to give you a background
3 of... of what I do. I mainly teach corporate
4 finance, but I do lots of other things apart from
5 advising boards in terms of rate of return
6 regulation. And in that case, I've appeared as a
7 board witness also as an intervener witness on
8 multiple occasions over the last -- I hate to say
9 -- but over the last thirty-seven (37) years. Next
10 slide please, Nathalie.

11 Okay. Now, when I look at my testimony, I
12 have my core testimony, which is broken out into
13 these six sections and I have a number of
14 appendices and what I put in appendices tends to be
15 the more technical material, and I think I probably
16 made a mistake in this hearing, which is I
17 should've put the business risk appendix right in
18 the core of my testimony rather than including it
19 as Appendix F. But in this presentation, I'm going
20 to give an overview of everything that I
21 essentially cover or all the core material that I
22 covered in my testimony. Next slide please,
23 Nathalie.

24 So, what are the key issues and
25 recommendations, what's the big picture the Régie

1 has to deal with. And that's fundamentally from my
2 reading of the file: has the business risk of any
3 of the Quebec gas utilities increased since their
4 last hearings? And I was involved in all three of
5 the last hearings, the two thousand and eleven
6 (2011) Gaz Métro hearing, the two thousand and ten
7 (2010), I think it was Gazifère hearing, and the
8 Intragaz hearing, as well as subsequent
9 Hydro-Québec distribution and transmission
10 hearings.

11 Why is the business risk important? It's
12 because most regulators set the common equity ratio
13 based upon the underlying business risk. The
14 National Energy Board has a specific policy. First
15 of all, they assess the business risk and then if
16 the business risk is changed, they change the
17 financial risk, which is they change the debt
18 equity ratio.

19 So, for example, in the landmark nineteen
20 ninety-four (1994) decision, they set the gas
21 transmission pipelines at a thirty percent (30%)
22 common equity ratio, they were holdbacks for a long
23 term contract, they then set the oil pipelines of
24 forty-five percent (45%) because their common
25 carriers not back for a long term contract. And

1 what was then called Vancouver Westcoast
2 Transmission, the pipeline from western Alberta
3 down to Vancouver, they gave us thirty-five percent
4 (35%) common equity ratio because they have a lot
5 of feeder pipelines as well as mainline pipelines.

6 So, business risks is really fundamental to
7 determining the common equity ratio. And then, it's
8 a question of what are reasonable common equity
9 ratios. And then, from those common equity ratios,
10 what is a fair and reasonable rate of return.

11 So the logic of most hearings, is first of
12 all business risk, then the common equity ratio,
13 and then assessing a fair rate of return. And in
14 fact I've been involved in some hearings which are
15 not a rate of return hearing it's strictly business
16 risk and common equity ratio hearing. The Ontario
17 Energy Board had a couple of those in the two
18 thousand and ten (2010) for Union Gas and Enbridge
19 Gas Distribution. So the question was: what it is
20 their business risk, has it changed, do they
21 deserve a change in a common equity ratio. And
22 obviously I was involved in most of those hearings.

23 What are my recommendations? My best
24 recommendation for the last two decades has been
25 that gas distributors, a fair rate of return should

1 be based upon a thirty-five percent (35 %) common
2 equity ratio. And for the last ten years also, my
3 recommendation has been a 7.5 % return on equity.
4 And I'll explain, probably on Monday, why my return
5 on equity ratio hasn't materially changed over the
6 last ten years. But that's my best recommendation.

7 For Énergir I'm proposing 7.5 % return on
8 equity, and I'm proposing the continuation of the
9 current capital structure. It's a basic example of
10 if it works why change it? And here, Énergir is got
11 a 38.5 % common equity and 7.5 % deemed. And I've
12 be listening to the discussion on the deemed
13 preferred shares. The fact of that they're deemed,
14 means to say they don't exist. They exist in terms
15 of setting the revenue requirement, but they do not
16 exist in terms of having a prior charge over the
17 common equity holders. Normally we look at
18 preferred shares as having a preferred dividend
19 over the common shares. A preferred plan in case of
20 liquidation and as a result the absence of voting
21 rights. In the case of deeming neither of those
22 exist. There is no preference in terms of the
23 dividend, since they don't really exist. And
24 there's no preference in terms of a claim on the
25 resources of Énergir should it get into financial

1 difficulty. So really it is 46% common equity,
2 where part of that 46% of common equity, 38.5% gets
3 the common allowed return and 7.5% gets a deemed
4 preferred component which last time, I seem to
5 remember, was a five percent (5 %) rate of return.

6 But, unlike doctor Villadsen, I do not
7 believe that it consists of 60% common of 40% debt,
8 because they don't exist. And they're not imposing
9 any risk. That ratio does apply to some types of
10 preferred shares based upon a specific
11 characteristics of preferred shares that are stowed
12 into the capital market. And as a result, there is
13 a preferential dividend over the common shares. And
14 there is a preferential claim in bankruptcy. But
15 the mere act of deeming them doesn't make them
16 equivalent to preferred shares. So, in my view, a
17 46% equity component, 11% more than I would
18 normally recommend is an adjustment for the higher
19 risk of Énergir. And then, given the higher risk
20 reflected in the 38.5 and 7.5, I think they deserve
21 a 7.5% ROE.

22 In terms of Gazifère, I will talk a little
23 bit about its risk, but I'm recommending a 40%
24 common equity ratio which is slightly more than a
25 gas distributor regulated by the Alberta Utilities

1 Commission. A significantly smaller utility
2 regulated by the Alberta Utilities Commission. And
3 a 7.65% ROE. So I'm recommending a marginal higher
4 ROE and 5% more common equity ratio than I
5 recommend for a typical gas distribution utility.

6 The Intragaz, I went back to what I said
7 eight, nine years ago at the Intragaz hearing. And
8 what we have to remember about Intragaz is that it
9 got a ten years contract with Énergir and Énergir
10 owns 50% of Intragaz. So if you give Intragaz a
11 higher ROE essentially that goes back to Énergir,
12 50% of it to Énergir. And Énergir controls to great
13 extent the risk of Intragaz.

14 As a contractual arrangement, I see very
15 very little risk attached to Intragaz. The only
16 risk is that Énergir doesn't fulfill its contract.
17 This is very similar to ATCO Pipelines out in
18 Alberta where their revenue requirement is included
19 in the revenue requirement of TransCanada
20 Pipelines. And the only serious risk is whether
21 they fulfill the contract. I remember asking ATCO
22 Pipelines a question: what would you do if you don't
23 get paid on your contract? And they say
24 immediately: we would sue TransCanada.

25 So the question here is, is there any

1 material risk attached to Intragaz and my answer is
2 no. At least under the ten years of the contractual
3 arrangement. But, I'm mindful of the fact that
4 Énergir wanted Intragaz integrated within his rate
5 base. As far as I can see it is integrated into his
6 rate base. So I have no problem allowing Intragaz
7 the same financial parameters as Énergir. I do not
8 see it as a freestanding independent company. It's
9 basically integrated with his only customer which
10 is Énergir. So I have, I know that the Régie has
11 regulated on the past on an avoided cost basis, but
12 I have no material problems with, with it being
13 integrated within, within Énergir.

14 Q. [139] Just, just before you go, Doctor Booth. Have
15 you considered the, the decision or recommendation
16 of Dr. Hopkins with respect to Intragaz?

17 R. I have.

18 Q. [140] And what's your position with respect to
19 that?

20 R. I don't see that has being a material problem
21 treating them as being integrated with, with
22 Énergir. And this is exactly the same conclusions
23 that I came to eight years ago when I provided
24 testimony on Intragaz. The only customer is
25 Énergir.

1 And talking about trying to generate
2 additional customers, I don't think is reasonable.
3 I can understand the Régie's point of view that you
4 shouldn't get charged more than the avoided cost,
5 which was the situation the Régie basically had
6 eight, nine years ago. But, as I said, I have no
7 problem treating it as integrated within Énergir
8 because as far as I'm concerned it essentially is
9 integrated within Énergir.

10 The only problem is the 50% minority
11 ownership. Otherwise I'm sure Énergir would have
12 100% acquired the company and ask for it to be
13 integrated within Énergir's rate base. Much the
14 same that Union Gas, their storage operations where
15 basically integrated with Union Gas. And except the
16 fact that Union Gas could actually market the
17 services of his gas storage to other customers
18 whereas Intragaz has no other customers.

19 So, where I have a substantial difference
20 with Asa's comments. In a deep sense it is lower
21 risk. But in a practical sense, I just don't see
22 it.

23 Now, I do say that this is a very strange
24 hearing. Normally, when I look at a hearing, I get
25 five hundred (500) to a thousand (1000) pages of

1 filing by the company. And included within those
2 filings, there would be a hundred pages from an
3 expert witness. In this case, I do not see all of
4 the filings. I do not see the forecast for the
5 revenue requirement over the next three years, the
6 test years or the next five years. I do not see the
7 forecasting costs. I do not see all of the
8 discussion of the embedded debt cost. I do not see
9 all of the things that I normally see in a rate
10 hearing, all I see is evidences presented by
11 witnesses on behalf of the Québec Utilities. And,
12 they say things very similar to what I've heard in
13 other hearings. Which is not quite the disguise
14 falling but there are all sorts of qualitative risk
15 factors out there.

16 And I heard this most recently in two
17 thousand and eleven (2011) from doctor Morin when
18 he provided testimony. I hear it in most rate
19 cases, there are qualitative discussions attached
20 to increasing risk. But when the rubber meets the
21 road, is when these qualitative factors actually
22 materialize and they are risks born by the common
23 shareholders.

24 And in thirty-seven (37) years, thirty (30)
25 whatever it is of years of testifying, invariably

1 when these risks materialize, they get reallocated
2 to ratepayers, they are not risks that are born by
3 shareholders. And that is a regulatory compact in
4 Canada.

5 So I was listening to the cross-examination
6 of Dr. Hopkins and I was waiting for him to say:
7 yes, these risks may exist, but are they actually
8 born by the shareholders? They may be born by the
9 shareholders in the United States, but they are
10 generally not born by the shareholders in Canada.
11 And I will get to that when I discuss further about
12 business risk.

13 And there's a link that's missing and the
14 link is that even if these risks do materialize,
15 how do they actually affect the utility which is to
16 say: if we get a dropping load and if, in fact, we
17 get a drop in the number of customers attached to
18 Énergir system, then this is a predictable
19 forecasting risk that Énergir deals with in a rate
20 hearing.

21 And the question is: can Énergir deal with
22 this in a normal regulatory framework and is the
23 regulator going to protect Énergir in a way that it
24 has protected Énergir for the last thirty (30)
25 years? And in fact, every regulator in Canada has

1 protected Canadian regulated utilities for as long
2 as I have been testifying.

3 So the only way that these risks can
4 materialize is first of all, that the regulator
5 decides to hold the utility at risk, for these
6 risks which I have yet to see, and secondly, do
7 they actually demonstrate a loss in customers and
8 their inability to rebalance load and to change
9 rates to accommodate a reduction in the number of
10 people using gas in Québec.

11 And incidently, I have no problem that
12 there are increased risks out there. The critical
13 thing is not that the risks exist, but the risks
14 actually affect the utility.

15 So, if you can change the slide, please,
16 Nathalie?

17 Now, part of my introduction here came from
18 the fact that I had some very good questions from
19 the Régie. So I am starting out basically
20 highlighting my answers to the Régie because there
21 were very appropriate questions. And one of the
22 questions, was: there's all these utilities and
23 they average the rate of return and the average to
24 common equity ratio and essentially the Régie ask
25 what do I think about this?

1 Well, I think it is very bad and it is very
2 misleading to just average a number of utilities
3 and say: that is the average common equity ratio
4 and the average return on equity for a Canadian gas
5 distributor.

6 And what I have got here, I got four big
7 black arrows for the utilities they are always
8 regarded as being the main utilities in Canada. I
9 do not regard Liberty Utilities Gas New Brunswick
10 as being a major utility. I testified in that
11 hearing last year, it's got forty-nine million
12 dollars (\$49 M) in revenues. It is a tiny little
13 utility. Not only is it a tiny little utility, it
14 is an immature utility. Both Liberty and Heritage
15 Gas in New Brunswick were trying to build a brand
16 new gas network in a province that didn't use gas.
17 And the reason for that, was the discoveries of
18 offshore gas and oil fields off the, off the
19 Maritimes and a desire to provide them with natural
20 gas, a cheaper form of fuel for the residential and
21 industries than fuel oil.

22 So Liberty Utilities, fifty million dollars
23 (\$50 M), annual throughput five million gigajoules
24 (5 M Gjs). Heritage Gas, a little bit bigger but
25 less customers, because of the mix between

1 industrial and residential customers.

2 So those are two of what we call greenfield
3 utilities. Tiny utilities that haven't even really
4 built out their gas network to reach the stage of
5 being close to sort of an established utility.

6 And then a little bit bigger than them, we
7 got AltaGas utilities which incidentally, is not
8 AltaGas in the samples of companies that people
9 look at, because that used to belong to AltaGas
10 but it was spun off and is no longer owned by
11 AltaGas, so it is a little bit misleading, but
12 AltaGas Utilities is regulated by the Alberta
13 Utility Commission and again, is a tiny little
14 utility. His customers will spread out
15 geographically in Alberta and as a result of that,
16 the AUC gives them a slightly bigger bump in their
17 combined equity ratio.

18 And then bumping up a little bit more, we
19 got Pacific Northern Gas and Gazifère. Pacific
20 Northern Gas, was always regarded as one of the
21 riskiest utilities in Canada, mainly because it
22 lost seventy percent (70 %) of his load when
23 Methanex closed his doors and as a result, they
24 were load rebalancing problems out in north east
25 British Columbia. And Gazifère I've always regarded

1 as being integrated with Enbridge gas, it is part
2 of the Enbridge gas system. So they all got special
3 cases.

4 And then we got to four big utilities and
5 Énergir is not a small utility. Its annual
6 revenues, one and a half billion (1.5 B), FortisBC
7 Energy, one point three billion (1.3 B), ATCO Gas,
8 eight hundred and twenty-four million (824 M).

9 And then the giant, Enbridge Gas, five
10 billion dollars (\$5 B) in revenues and Enbridge Gas
11 basically swallowed up all of the gas utilities in
12 Ontario. We used to have Union Gas until four, five
13 years ago. We used to have Central Gas Ontario,
14 dealing with all those northern Ontario industrial
15 plants with heavy industrial load, and I think I
16 compared Énergir or Gaz Métro with Central Gas
17 Ontario in previous hearings, because of its heavy
18 industrial load.

19 But those are the benchmarks I have used
20 in, traditionally, looking at Énergir, not adding
21 in these tiny little utilities that are greenfield
22 utilities and certainly not splitting Pacific Gas,
23 Pacific Northern Gas, which is already a tiny
24 utility into three different tinier utilities. It
25 over represents the average in terms of companies

1 that I do not think are representative of Énergir.

2 So Nathalie, can you change the next
3 overhead, please?

4 So what do I think is representative and
5 useful for a business risk analysis of Énergir?
6 I've always looked at the four big, almost province
7 wide, utilities and the critical one ultimately is
8 the competitive nature of natural gas as a fuel.
9 And if... because if natural gas is not
10 competitive, it will not be flow through the pipes
11 and you'll have problem recovering obviously the
12 revenue requirement.

13 This was data put together for the BCUC's
14 ongoing hearing and it was put together last fall
15 for FortisBC Energy. This is the sort of
16 information that I expected Énergir to provide, an
17 assessment of his own business risk and ultimately,
18 this is only information that can come from
19 Énergir. You cannot ask witnesses to deep dive into
20 the utility in terms of coming up with
21 competitiveness of natural gas in different areas
22 and forecast and how this is going to affect their
23 revenue requirement.

24 So fundamentally, this is what Énergir
25 should have provided, but regardless, it was

1 provided by FortisBC Energy and as a lot of the
2 material provided by the utilities, it is not quite
3 what it seems to be.

4 So Nathalie, can you click on the overhead
5 and grab one of the handles to expand it, so we can
6 see some of the numbers, a bit clearer?

7 Okay, so what we have got here, is for
8 example in Vancouver, we've got Fortis Energy BC is
9 looking at it, and the cost advantage, and it's got
10 electricity, fifty-five percent (55%) increase over
11 gas. Now fifty-five per cent (55%) is a little bit
12 unrealistic way of representing it.

13 What it really means, is that heating with
14 electricity is twice as expensive as heating with
15 gas and I think it is misleading, for Fortis Energy
16 BC that doing it this way is a little bit
17 misleading. What you're really saying is
18 electricity is twice as expensive.

19 When you look at ATCO, you've got the same
20 sort of analysis twenty-six... on a unit basis
21 twenty-six percent (26%) cost is for gas,
22 seventy-four percent (74%) is for electricity. So,
23 what they're really saying is electricity is three
24 times as expensive as heating with gas in Alberta,
25 which is not really surprising because the

1 transmission and the distribution cost attached to
2 natural gas in Alberta is obviously very very low.
3 So, even though the electricity is more expansive,
4 natural gas is incredibly cheap in Alberta because
5 that's predominantly where a lot of the gas comes
6 from.

7 But when you look at ATCO gas, electricity
8 is three times more expansive than... than gas. You
9 look at Ontario and you got thirty-four percent
10 (34%) to sixty-six percent (66%), it's a little bit
11 better than out in Vancouver, but basically you're
12 looking at twice the cost of heating with
13 electricity than gas.

14 And then you get to Montreal, and people in
15 Quebec are incredibly lucky, they got very cheap
16 power costs, thankfully because of all of the...
17 the big dams coming down from the James Basin. BC's
18 got some of that, BC Hydro got lower cost as well,
19 but not as much as Quebec. And the only other
20 province would be Manitoba, where Manitoba Hydro
21 also got very cheap hydro power. But in Ontario, we
22 got some cheap hydro, but we got lot of nuclear
23 plants and it's struggling to... to provide
24 electricity.

25 So, when you look at Montreal, you got

1 seventy-four percent (74%) cost for natural gas,
2 twenty-six percent (26%) cost for electricity, so
3 you've got a thirty percent (30%), thirty-five
4 percent (35%) cost advantage for natural gas over
5 electricity. In the sense that currently
6 electricity costs thirty to thirty-five percent (30
7 to 35%) more than the natural gas for a residential
8 user.

9 And this, as I say, is what... is provided
10 before the BC Utilities Commission right now, but
11 that is the underlying business risk, it comes from
12 the competitiveness of the fuel that you're
13 transporting. And Énergir does not have the huge
14 advantage that ATCO Gas has, all the significant
15 advantage that Fortis Energy BC and Enbridge Gas
16 have, but it's a question of how much cheaper this
17 gas have to be relative to electricity. And right
18 now, natural gas has a competitive advantage in
19 Montreal, but it's clearly going to erode as you
20 start getting bigger carbon taxes and that's going
21 to reflect on his cost comparison.

22 But that's how I start when I look at these
23 utilities. I say we got these big four utilities
24 that are good bases for comparison, forget about
25 these smaller utilities, they're not in the same

1 bucket as the four big utilities, and of these four
2 big utilities I would rate ATCO Gas is probably the
3 lowest risk on clear competitive reasons, but
4 Enbridge is the primary utility in Canada, it is
5 huge in size gives it so many advantages that
6 you've got, Enbridge is probably the lowest risk
7 closely followed by ATCO Gas. Then you got BC,
8 Fortis Energy BC, and then you got Énergir.

9 This is my risk ranking that I've been
10 explaining for at least the last fifteen (15)
11 years. Next slide please, Nathalie.

12 So, in terms of that average that was put
13 before the Régie, my view would be the correct
14 average is ATCO Gas, FortisBC Energy and Enbridge.
15 So, as of twenty twenty (2020), that means the
16 average ROE was eight point five three percent
17 (8.53%) and Énergir allowed eight point nine
18 percent (8.9%). So, it's thirty seven (37) basis
19 points more, slightly more than the risk premium
20 that the Régie allowed back in two thousand and
21 eleven (2011). And then we look at the common
22 equity ratio of thirty-seven point two percent
23 (37.2%) allowed common equity for those three
24 utilities, and as I said the Régie allows Énergir a
25 thirty-eight point five (38.5) and a deem seven

1 point five (7.5). So, that's basically forty-six
2 percent (46%) equity and I judge is the equity
3 ratio where you really adjust for the differential
4 risk of the utilities.

5 And incidently the AUC said you can't use
6 US as a comparative because they treat the common
7 equity ratio differently from the way that we do it
8 in Canada.

9 So, that's just to highlight other
10 regulatory decisions. Now, I agree with Dr.
11 Villadsen that it's the job of the expert witness
12 to provide their recommendations, but it is also
13 the job of the expert witness to provide some
14 insight as to what other Canadian regulators are
15 doing at the current point in time, because they're
16 looking at the same evidence and coming to the same
17 sort of conclusions. Okay, Nathalie, the next
18 slide, please.

19 The other part to the existing decisions is
20 what are the last decisions, and the last decisions
21 in a litigated hearing where there was intervener
22 witnesses and there were company witnesses, was
23 last year in the New Brunswick Utilities Board,
24 Energy and Utilities Board to do with the former
25 Enbridge Gas New Brunswick or Liberty Utilities New

1 Brunswick.

2 And their decision, which was made last
3 year based upon last year's information when
4 interest rates were lower than now, but regardless
5 that was actually a long term decision, because
6 there wasn't sort of an expectation that in two to
7 three years they'll have another hearing. The
8 previous hearing for Liberty Utilities New
9 Brunswick was ten years ago, so there was every
10 expectation that that would be parameters for a
11 reasonably long period of time. Well, they said...
12 their decision, which I admit, I'll let the Régie
13 know, this under appeal. So, Liberty Utilities
14 doesn't like this decision, so they've appealed it
15 but the decision was a risk-free rate of three
16 point zero seven percent (3.07%), a market risk
17 premium of six point two three percent (6.23%), a
18 Beta of point five five (0.55) and so a utility
19 risk premium of three point four three percent
20 (3.43%), flotation costs of half a percent (0.5%)
21 and a generic ROE of seven percent (7%). And I say
22 there a generic ROE, this is not the ROE for
23 Liberty Utilities, this is what they thought a
24 generic utility should be.

25 And as I said, my recommendation for

1 Énergir is a generic rate of return recommendation.
2 I put the risk adjustment in the forty-six percent
3 (46%) equity ratio. The last year, New Brunswick,
4 in a decision that came out late last year, I think
5 it was in December, seven percent (7%) generic, and
6 then they allowed one point five percent (1.5%)
7 specific additional risk premium for Liberty
8 Utilities New Brunswick for an eight point five
9 percent (8.5%) allowed ROE and they allowed them a
10 forty-five percent (45%) common equity ratio. So,
11 they allowed them significantly more common equity
12 than the Alberta Utilities Commission allows, which
13 is thirty-seven percent (37%), but they allowed the
14 same ROE of eight point five percent (8.5%).

15 The AUC confirmed its parameters in March
16 of this year, that was sort of a written input, it
17 wasn't an oral hearing. I don't know whether I
18 could describe it as a litigated decision because
19 clearly there was input from a variety of partners,
20 but there wasn't a normal cross-examination you'd
21 expect in a litigated hearing. But they confirmed
22 eight point five percent (8.5%) ROE on thirty-seven
23 percent (37%) common equity versus my generic
24 recommendation seven point five percent (7.5%) ROE
25 on thirty-five percent (35%) common equity. So,

1 next slide please, Nathalie.

2 So, now we talk about business risk and I
3 listened to the cross-examination of Dr. Hopkins.
4 First of all, we have to define risk. Risk, if you
5 look in the dictionary, is the probability of
6 incurring harm, so it's a combination of the
7 probability of it happening and the amount of the
8 harm. And in finance, we treat harm as losing
9 money. So, that is what risk is, it's the
10 probability of losing a certain amount of money.

11 Now, the first time I started emphasizing
12 this it was in the Mackenzie Valley Pipeline
13 hearing before the NEB in two thousand and five
14 (2005), and that was when they had backstops for
15 the pipelines from all of the major shippers that
16 were less than the economic horizon for the
17 pipeline. So, if I seem to remember correctly, it
18 was sort of something like twenty (20) years of
19 fixed contracts and a pipeline had twenty-five (25)
20 years to depreciate. So, there was the problem of
21 what do you do with the lack of shippers for the
22 last five years. So, we were talking about data's
23 being the long run risk, which is the long run risk
24 of the return of capital, the recovery of capital.

25 And the short run risk is the return on

1 capital. Now, in that case, it was a fully cost of
2 service pipeline. So, literally there was no short
3 term risk whatsoever. Everything was be recovered
4 by the tolls. And the only risk was long term risk.
5 So that's when I started putting into my business
6 risk assessment, short run versus long run.

7 Short run, this is quantitative. It's the
8 ability to earn the allowed return. The only short
9 term risk if you don't earn a fair returned. So,
10 that is a quantifiable risk. It is not generally
11 assess by external witnesses on behalf of the
12 utility. They would much prefer to talk into
13 qualitative terms rather than look at the actual
14 risk which is failing to earn the allowed ROE.

15 This is not just my assessment, this is
16 also the assessment of the Bond Rating Agencies.
17 Moody's specifically puts twenty-five (25%) of
18 their credit rating on the ability to earn the
19 allowed rate of return. Because it does assess the
20 amount of losses that the utility could be exposed
21 to in the short term. So that is the short term
22 risk and that's the ability to earn the allowed
23 ROE.

24 And incidently Moody's also assess is
25 twenty-five percent (25%) risk as a quality of

1 regulation. So the fact is, when we look at the
2 risk, from the point of view of the bondholders, at
3 least fifty percent (50%) of that risk is not the
4 business risk, it's the risk of the regulators.
5 It's the risk of the regulators basically suddenly
6 exposing the utility to risk.

7 And so that's where Canada is traditionally
8 different from the United States. Canadian
9 regulators by in large, do not put their utilities
10 at risk. And that's reflected in their bond
11 ratings. And specifically Moody's has fifty percent
12 (50%) allowance for that.

13 Long term risk, no question that if supply
14 and demand doesn't exist, then the viability of the
15 commodity that is being transported, that's really
16 a reflection of that long run risk. And that it is
17 where we look at depreciation. If a utility thinks
18 that there's a fundamental shift in the risk of the
19 assets being stranded, we expect the utility to
20 come forward with a depreciation study and say that
21 we will recover that, those assets, over a shorter
22 period of time, to make sure that there's no
23 assets, at the end of the period, when this risk
24 materializes, that they actually get stranded and
25 the utility suffers it.

1 earn his allowed ROE. There's nothing wrong with
2 that. That's what we want to see as long as it
3 means that the cost are also reduced and overall
4 rates are lower. So there's nothing wrong with
5 incentive regulation and giving the utility an
6 incentive to earn a little bit more.

7 Once before the OEB, one of the
8 Commissioners specifically ask me: Why should we
9 give them an incentive to act efficiently? And I
10 said: Well, you hope that they'll be efficient, but
11 if you give them a little bit of an incentive where
12 they get to keep a little bit of the gains, then
13 that little bit of incentive some how seems to end
14 up generating cost efficiencies. And that's what we
15 seem to see with Énergir.

16 So, Énergir has no history of filing to
17 earn the allowed ROE.

18 Gazifère, when I actually was involved in
19 the hearing in two thousand and ten (2010), it was
20 a little bit of a filing to earn the allowed ROE.
21 It was a little bit in a, I can't quite see it with
22 my eyes that are failing, but there's a couple of
23 instances, three of them, where Gazifère didn't
24 earned his allowed ROE. So, I said there's a little
25 bit of risk involved in Gazifère that doesn't exist

1 in Énergir.

2 But since that hearing in two thousand and
3 ten (2010), Gazifère presumably got their
4 forecasting a little bit better. And as a result
5 they were able to recover their forecasting cost in
6 the test years in the rates that they charge
7 customers. And that little bit of forecasting risk
8 that was evident, prior to two thousand and ten
9 (2010) seems to have to disappear.

10 So the experiences, the last time I
11 testified in both of these cases, is the absence,
12 the total absence of risk. And I say that in a deep
13 sense. Neither of these utilities have suffered
14 any losses while they've been earning material risk
15 premiums. So, they've been earning a risk premium
16 for baring a risk that, so far, has not
17 materialized. Now, in the future that risk may
18 materialize. But the reason why they haven't
19 suffered any risk, is the Régie. Is regulation.
20 It's the fact that they have deferral accounts. The
21 fact that they are allowed forward test years. And
22 they can forecast all that costs. And it's the
23 active regulation in Canada that has reduce their
24 business risks.

25 And there was a case before the Régie when

1 I said that they've been earning their allowed ROE,
2 and one of the questions at the end of the hearing,
3 was a member of the Régie said, words to the
4 effect, I can't remember the exact words, but the
5 words were: "You do realize that they earn their
6 allowed ROE only because we protect them and we
7 provide them with a degree of regulatory
8 protection." And I said: "Absolutely correct." And
9 I think I said absolutely correct.

10 But why they earn their allowed ROE, is
11 because, you, the Régie protect the utility and in
12 that you're no different from the Ontario Energy
13 Board, the Alberta Utilities Commission, the BC
14 Utilities Commission. Every single regulator in
15 Canada protects the utility and their over-earn
16 their allowed ROE.

17 So that's not to criticise Énergir, but the
18 question is simply: should they get a risk premium
19 and ask for more equity, when in fact the actions
20 of the regulator transfer those risks to the
21 ratepayers? In essence, the ratepayers are bearing
22 these risks not the utility shareholders.

23 And this is where I question a lot of the
24 discussion of Dr. Villadsen, she talks about risks
25 and she talked about leverage. I have no doubt

1 whatsoever that if, you the Régie, allowed Énergir
2 seventy-five (75 %) debt and twenty-five (25 %)
3 equity, this over-earning of the allowed ROE would
4 not change.

5 In other words there's no magnification of
6 the operating risks of Énergir by the use of debt.
7 What that is, is compensation for long run possible
8 stranded asset risk and the possibility the
9 product, the fuel, is no longer cost efficient. It
10 is not compensation for short run risk. Right at
11 the moment, and for the last thirty (30) years, the
12 use of debt has not magnified any risk to the
13 shareholders of Gaz Métro or Gazifère or for that
14 matter almost every utility in Canada. Okay. Next
15 slide please, Nathalie.

16 Which brings us to this long run risk. And
17 as I said, my experience in testifying in Canada
18 has been that the utility, witnesses on behalf of
19 the utilities talk about all these risks,
20 qualitative risks and there's always arguments
21 over, which I've heard this morning about all of
22 these different risks. But you have to ask the
23 question: These risks that have been express by
24 witnesses for the last thirty (30), forty (40)
25 years, so far, they have never materialized. And

1 why is that? It's because of the active regulation.
2 Regulation in Canada is a dynamic process.

3 And I regard as a good example of this, the
4 decision of the Ontario Energy Board, when the
5 utility witness said : Well, there are all these
6 long run risks, the utility is risky. And the OEB
7 slapped them down and said essentially no. They
8 said :

9 Regarding thee risk of future events,
10 the Board agrees with CCC that the
11 relevant future risks are those that
12 are likely to affect Enbridge in the
13 near term.

14 That is basically over the future test years.

15 Any risks that may materialize over
16 the longer term can be taken into
17 account in subsequent proceedings.

18 Which is to say: if any of these future risks
19 happen to materialize as they get closer, bring
20 them up in a hearing where they can actually see
21 how the affect the utility. And they went on to
22 say:

23 In considering the risk of future
24 events, the Board will take into
25 account the fact that generally, the

1 more distant the potential event, the
2 more speculative is any conclusion on
3 the likelihood that that risk will
4 materialize.

5 And I used that word "speculative", because when
6 you use it in the bond market or the capital
7 markets, it means non-investment grade. It is a
8 damaging word, when we talk about speculative
9 risks, when we look at an investment.

10 So what the OEB is saying : essentially the
11 risk raised by the utility witness in this business
12 risk hearing before the OEB, they brought up a lot
13 of risks that the OEB said were speculative. We
14 need to wait until they actually sort of come
15 closer and we can get a handle on them and how we
16 are going to deal with them.

17 So I regard the essence of the OEB
18 decision : don't pay too much attention to long run
19 risks as we will deal with them, when they arise.
20 That's what has happened, all the time in
21 regulatory decisions in Canada. The regulators deal
22 with these things as they actually crop up and they
23 may affect the utility. And generally, those risks
24 are transferred to the ratepayers. Next slide,
25 please, Nathalie.

1 Now, this did come up before the National
2 Energy Board. The gas that is used by Énergir may
3 come from Western Canada, where it actually comes
4 from is difficult to determine, because they are
5 just joules of energy, they are just bits of gas,
6 but it traditionally came from Western Canada and
7 starting in two thousand and one (2001), we started
8 getting competition from Marcellus and gas from
9 Pennsylvania. Closer gas fields that basically go
10 through Dawn which has become a major hub.

11 And we started worrying about the
12 TransCanada mainlines where the sum of that
13 pipeline is basically stranded, because
14 TransCanada's forecast was essentially that his
15 load was going down and when we looked to this, in
16 a major hearing in two thousand and one (2001), the
17 question was: what about depreciation? How should
18 we depreciate the mainline and the NEB decision was
19 exactly this:

20 The Board views the issues of cost of
21 capital and depreciation as being
22 related, but as addressing different
23 factors. The primary goal of the
24 depreciation rate is to reflect the
25 assessment of the economic life of an

1 asset. Business risk, which is a key
2 determinant of cost of capital,
3 addresses the probability that the
4 utility may not be able to recover its
5 prudently incurred costs over the
6 economic life of the asset, whatever
7 that economic life may be.

8 So what the NEB did, was shortening the economic
9 life. It basically used a twenty-five (25) year
10 life for the mainline gas transmission assets and
11 given the increase in business risk, it started
12 increasing the common equity ratio. Initially, it
13 was thirty percent (30 %) set in nineteen ninety-
14 four (1994), they then increased it to thirty-three
15 percent (33 %). A hearing after this increased it
16 to thirty-six percent (36 %) and the last time in
17 two thousand eleven (2011), they increased it to
18 forty percent (40 %).

19 So they increased the common equity ratio
20 reflecting the business risk and they shortened the
21 depreciation period, to reduce the stranded assets
22 risk, that all those pipe assets way out in the
23 future may not be used and useful and may not be
24 able to be recovered in rate base.

25 So why is that important? Next slide,

1 please, Nathalie. Why it's important, is that the
2 gas that Énergir gets, the NEB thinks it comes from
3 Western Canada. In the TQM hearing I said: Well it
4 could be coming from Dawn, lots of the contracts
5 are signed at Dawn, but the NEB decided that was
6 just Western Canada gas coming through the United
7 States, rather than the northern Ontario line and
8 then coming through Dawn and contracting the Dawn
9 was basically still contracting for Western Canada
10 gas.

11 As I said, we can't tell the difference
12 between a megajoule or whatever of gas from Western
13 Canada versus Marcellus, it's all system gas. But
14 the fact is that Énergir's gas comes from TQM.

15 So, if there is a real serious risk of
16 stranded assets, and you are not going to use the
17 gas in Québec, then you would think that Gazoduc or
18 TQM would look at that and say: Well, if there is
19 nobody taken our gas, we won't be shipping gas to
20 Énergir, in which case, they should be thinking in
21 terms of the stranded assets of TQM (Gazoduc) and
22 then should be shortening their depreciation study.

23 Well, surprise, surprise, in the
24 settlement, just a few months ago, TQM (Gazoduc)
25 did not change its economic useful life for

1 shipping gas to Québec. And in the depreciation
2 study for TQM, Concentric on behalf of TQM said :
3 We developed the depreciation rate utilizing the
4 economic planning horizon, which is how long is
5 these assets going be used and useful. And the
6 dates were two thousand and fifty (2050) and two
7 thousand and forty (2040) for Québec and East
8 Hereford, segments of TQM.

9 The service life of each of the
10 geographic segments are distinct as
11 contract terms, flow volumes and
12 market dynamics are sufficiently
13 different as to warrant separate
14 segments with different economic
15 planning horizons.

16 What they are saying there: there's simply not
17 enough long term contracts to make sure that the
18 East Hereford branch of TQM will have enough gas.
19 So they are using a shorter economic planning
20 horizon for the East Hereford branch then they are
21 for the branch serving Québec.

22 TQM previous depreciation study completed
23 in two thousand nine (2009) also segmented the
24 Québec and East Hereford lines using twenty fifty
25 (2050) and twenty twenty-three (2023) economic

1 planning horizons respectively.

2 Concentric continues to recommend the
3 calculation of depreciation rates based on these
4 two distinct geographic segments, with an expanded
5 economic planning horizon for the East Hereford
6 segment relative to previous depreciation studies.

7 So what Concentric is saying is: Compared
8 to two thousand and nine (2009), there is more gas
9 flowing on TQM but it is flowing down the East
10 Hereford branch. And as a result, they have
11 increase the economic life of the East Hereford
12 segment going into New England, and it kept the
13 same planning horizon for the segment going into...
14 to Québec.

15 So, from that, if there is no risk of
16 stranded asset for Gazoduc or TQM, it is difficult
17 to see, that the pipelines serving Énergir, is any
18 different in risk from Énergir?

19 So from this, at least as a prima facie
20 evidence, in fact there is not underlined stranded
21 asset risk for the asset serving Énergir and the
22 delivery of gas into Énergir in Québec. Okay. Next
23 slide, please, Nathalie.

24 Now finally, we might talk about short run
25 versus long run risk, we might talk about return on

1 capital versus return of capital, the bond rating
2 agencies are only concerned about return of
3 capital. There only concern about the bonds that
4 have been issued by Énergir, are they getting paid
5 back those long term bonds?

6 So, if you want an assessment of long term
7 risk, you look at the bonds rating because they are
8 looking at the risk of the bond, long term bonds
9 getting paid back and when you look at the long
10 term bond assessment, S&P is very clear. In fact,
11 it can't be clearer. Their assessment of the
12 business risk of Énergir is excellent.

13 Now, how do you rate excellent? Well, there
14 is nothing better than excellent. So from S&P's
15 assessment, a vulnerable is at the bottom, then
16 weak, then fair, then satisfactory, then strong,
17 then excellent. There's nothing better than
18 excellent.

19 So, in terms of the business risk
20 assessment of Énergir, the ability to recover those
21 long term bonds, they've assigned the highest
22 possible business risk assessment, and this
23 assessment comes from the result of site visits,
24 talking to Énergir. The way which you set bond
25 ratings -- I don't know whether they had physical

1 site visits because this is COVID-19 -- but
2 normally there's a site visit, they get a
3 presentation from the company, they go away and
4 write their report, they return it to the company
5 to check for any obvious errors and then they
6 publish their report.

7 So, you've got to look at this and say
8 well, this is S&P assessment based upon discussions
9 with Énergir, and that is the highest possible
10 assessment.

11 In terms of all the risks raise by the
12 company, these risks have been there for a
13 significant period of time and S&P assessment, and
14 I'll read it in because this is their assessment as
15 it applies to long term bonds issued by Énergir.

16 We view Énergir's exposure to
17 environmental, social, and
18 governance-related risks as similar to
19 the broader industry. The company is
20 primarily a gas distributor but also
21 owns an electric regulated
22 transmission and distribution network.
23 The natural gas network operators,
24 environmental risks include gas leaks,
25 explosions, emission of greenhouse

1 gases which can affect biodiversity.
2 We believe Énergir's environmental
3 risk is consistent with the broader
4 industry because the company's gas
5 network is fairly new and does not
6 contain cast iron or bare steel pipes
7 which reduces the potential of gas
8 leaks and explosions. In addition, the
9 company also participates in the
10 Quebec's cap-and-trade system, to
11 offset its GHG footprint in its gas
12 distribution operations.

13 That may have changed over the last year, but that
14 was S&P assessment after discussing business risk
15 with Énergir. And I don't see a lot of the risks
16 raised by the company witnesses being reflected in
17 the bond risk assessment by either Standard &
18 Poor's or the Dominion Bond Rating assessment. Now,
19 final slide... next slide please, Nathalie.

20 So, what's the conclusion from this?
21 Capital structure and business risk. As yet I see
22 no change in Énergir's business risk. And I say "as
23 yet" because the company has not filed any
24 documentation to indicate how these long term risks
25 affect his ability to earn his allowed ROE. Now,

1 normally, I would've expected as I see in other
2 hearings, forecasting models, which is to say they
3 forecast industrial gas use, they forecast
4 residential use, and those forecasting equation
5 allow you to do sensitivity analysis.

6 Suppose that there's an increase ten
7 percent (10%) in the price of natural gas because
8 of more greenhouse gas charges, how does that
9 affect residential and industrial use? That is the
10 information we need to assess the business risk of
11 Énergir. I would assume that they've got that
12 information, but it is not available in this
13 hearing, and I heard a lot of things this morning
14 and I was just dying to say : where is that only...
15 on the regulate, where's that file in this hearing?
16 So, the Régie could make a decision based upon the
17 information filed in this hearing. I don't see a
18 lot of this stuff filed in this hearing.

19 They were not available to me to assess the
20 business risk and I don't think they're available
21 to other people. As I said, when I look at this, I
22 normally recommend thirty-five percent (35%) common
23 equity for an electric or gas distributor. Is that
24 arbitrarily low? Not really. The Alberta Utility
25 Commission assigns a thirty-seven percent (37%),

1 the BCUC assigns thirty-eight percent (38%) for
2 Fortis Energy BC which is slightly higher risk than
3 ATCO Gas. So, I don't regard that as being
4 excessive, I think that reflects the fact that ATCO
5 Gas is more competitive in Alberta than Fortis
6 Energy BC is in BC.

7 Gazifère is a bit of a common drum. As far
8 as I can see, it's fully integrated in Enbridge
9 Gas. It's legal entity is separate, but the senior
10 management that manages Enbridge Gas also manages
11 Gazifère. As far as I can see it manages an
12 integrated utility. So, that may not be the legal
13 situation and I fully appreciate that the Régie has
14 to regulate the legal institution but for the
15 border between Ontario and Quebec, it would be part
16 of Enbridge Gas, it would be completely integrated
17 with Enbridge Gas.

18 My recommendations, thirty eight point five
19 (38.5%) common equity and seven point five percent
20 (7.5%) deemed preferred shares. If it works, why
21 mess with it? And as far as I'm concerned, that
22 adjust for Énergir's higher business risk.
23 Forty-six percent (46%) equity compared to
24 thirty-five percent (35%) is a big boost in the
25 equity.

1 Forty percent (40%) for Gazifère accounts
2 for its small size, AltaGas is allowed thirty-nine
3 percent (39%) and is half Gazifère's size and not
4 only is it half Gazifère's size, it's over a wide
5 area in Alberta versus Gazifère which is a
6 relatively small area in Quebec. So, it's slightly
7 different from... from AltaGas, but that's my
8 recommendation for the equity ratios which flow
9 from the business risk.

10 Me PAULE HAMELIN :

11 So, I think that would be a good place to stop.

12 R. I feel it's a good... a good time to stop and I see
13 Mr. Ouellet smiling, so I think he thinks this is a
14 good time to stop as well.

15 LE PRÉSIDENT :

16 I second the motion.

17 Me PATRICK OUELLET :

18 I third the motion.

19 LE PRÉSIDENT :

20 Mais avant de terminer, Maître Hamelin, avez-vous
21 jeté un petit coup d'oeil sur l'engagement 3?

22 Me PAULE HAMELIN :

23 Oui, tout à fait. Alors, l'engagement convient, on
24 n'aura pas de questions.

25

1 LE PRÉSIDENT :

2 Parfait. Merci beaucoup. Alors, merci beaucoup à
3 tous et on se revoit lundi matin à neuf heures
4 (9 h). Pardon?

5 Me PAULE HAMELIN :

6 Maybe we can verify this directly with Dr. Booth
7 because I think that there was a misunderstanding
8 as to his unavailability, I think the
9 unavailability was with Tuesday and Thursday
10 because he teaches.

11 So, Dr. Booth can you confirm that you are
12 available Monday as of nine o'clock (9:00)?

13 R. Yes. I get up at five thirty (5:30) on Tuesday and
14 Thursday, walk across campus and I have to teach at
15 seven o'clock (7:00) in the morning, so I'm done by
16 nine o'clock (9:00). And when I say done, I'm
17 literally done, I'm tired and I drive myself back
18 to my office, so if you give me half an hour or an
19 hour or so, I can refresh myself with a cup of
20 coffee by ten o'clock (10:00) on Tuesday, but I'd
21 love to be able to be on the stand on Monday rather
22 than continuing on Tuesday after... after teaching.

23 LE PRÉSIDENT :

24 Okay. So...

25

1 Me PAULE HAMELIN :

2 I understand from that that we could start on our
3 side at nine o'clock (9:00) if it works with the
4 Régie?

5 LE PRÉSIDENT :

6 Oui. Parfait. Alors, ça fonctionne pour lundi à
7 neuf heures (9 h). Merci beaucoup.

8 Me PAULE HAMELIN :

9 So, Dr. Booth, it will be Monday nine o'clock
10 (9:00) that we continue.

11 R. Okay. Very good. Thank you.

12 Me PAULE HAMELIN:

13 Thank you.

14 AJOURNEMENT DE L'AUDIENCE

15 -----

16

17 Riopel Gagnon Larose & Associés.