



## COMMISSION OF INQUIRY RESPECTING THE MUSKRAT FALLS PROJECT

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Transcript | Phase 1

Volume 44

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*Commissioner: Honourable Justice Richard LeBlanc*

Thursday

22 November 2018

**THE COMMISSIONER:** Good morning.

Mr. Learmonth, our next witness.

**MR. LEARMONTH:** Next witness is Jim Keating. Could he be sworn, please?

**THE COMMISSIONER:** Just stand, Sir, please, and place your right hand on the Bible, if you would.

**CLERK (Mulrooney):** Could you turn on your microphone as well?

Do you swear that the evidence that you shall give to this Inquiry shall be the truth, the whole truth and nothing but the truth so help you God?

**MR. KEATING:** Yes, I do.

**CLERK:** State your name for the record, please.

**MR. KEATING:** James Michael Keating.

**CLERK:** Thank you.

**MR. LEARMONTH:** First I'd like to enter some exhibits; they are P-01194 through P-01207, P-01305 through P-01310 and P-01312 through – and P-01313 – 01312 and 01313.

**THE COMMISSIONER:** All right.

**MR. LEARMONTH:** Could they be entered?

**THE COMMISSIONER:** Those Exhibits will be marked as entered then.

**MR. LEARMONTH:** Mr. Keating, you're a resident of St. John's, are you?

**MR. KEATING:** Yes, I am.

**MR. LEARMONTH:** Yeah.

Could you please give us the summary of your education after high school?

**MR. KEATING:** Okay. I'm a graduate civil engineer, class of '93 from Memorial University. And I have MBA from Memorial University, 2002.

**MR. LEARMONTH:** Okay.

And what is your work history?

**MR. KEATING:** My work history, I guess, for the past 25 years has been entirely in the oil and gas sector. I can describe it briefly to say it's in thirds. The first third of my career was in the contracting world, working with Aker Stord at the Hibernia site, followed by Saipem, JP Kenny, which is pipeline designers and installers, also in the Hibernia project, and then on to Halliburton for the Terra Nova project.

Shortly thereafter, the next third of my career was with an international oil and gas operator, Norsk Hydro, which is today known locally here as Equinor, and preceding that Statoil.

And then, from that point, the last third has been as an executive at Nalcor Energy, Newfoundland and Labrador Hydro.

**MR. LEARMONTH:** And that's from 2005 –

**MR. KEATING:** 2005.

**MR. LEARMONTH:** – to present?

**MR. KEATING:** December 2005 to present.

**MR. LEARMONTH:** And during that period what positions have you held at Nalcor Energy?

**MR. KEATING:** Initially, I was the vice-president of Business Development for Newfoundland and Labrador Hydro and then once the first of the equity participations occurred in 2007-'08, I – and the *Energy Corporation Act* came into force; I became vice-president of Oil and Gas. I held that position until – perhaps two years ago when Stan Marshall reorganized the – Nalcor Energy and I became an executive vice-president of Corporate Services and Offshore Development.

**MR. LEARMONTH:** So you're in charge of – well, subject to the chief executive officer – you're in charge of Oil and Gas for Nalcor?

**MR. KEATING:** Yes, I'm –

**MR. LEARMONTH:** The top person?

**MR. KEATING:** – the top executive in charge for Oil and Gas.

**MR. LEARMONTH:** Okay. And are you familiar with the Energy Plan?

**MR. KEATING:** Yes, I am.

**MR. LEARMONTH:** Yeah. Did you have any involvement in the development of the Energy Plan?

**MR. KEATING:** Yes, I did.

**MR. LEARMONTH:** What involvement did you have?

**MR. KEATING:** Through the consultation phase, as government turned its attention to oil and gas matters, they would – we would meet – would ask me to do various amounts of research, review bodies of their own research, and so on, and add some commentary that would hopefully make for a complete plan, so to speak.

**MR. LEARMONTH:** So you would review the text of the Energy Plan, insofar as it related to oil and gas?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yes.

Could we have Exhibit P-00029, page 36?

**THE COMMISSIONER:** Okay, that's not in your book, I don't think –

**MR. LEARMONTH:** No.

**THE COMMISSIONER:** – Mr. Keating.

**MR. LEARMONTH:** No, no, but I referred –

**MR. KEATING:** Okay.

**MR. LEARMONTH:** – Mr. Keating –

**THE COMMISSIONER:** Just look on the screen.

**MR. LEARMONTH:** – to it yesterday.

**MR. KEATING:** Gotcha.

**MR. LEARMONTH:** We'll show the first page first, and then go to page 36, please.

So this is the Energy Plan that was released to the public, I believe, in September 2007, and this is the document that you assisted in preparing. Is that correct?

**MR. KEATING:** That's correct.

**MR. LEARMONTH:** Okay, page 36, please. Under the heading: Landing Natural Gas – have we got that? Yes. Okay.

So this paragraph states – I'll just read it in: "Natural gas is in the early stages of development in Newfoundland and Labrador. To succeed, we need to gain a clear understanding of the strategic importance of landing gas in the province. Natural gas can be used in industrial processes such as oil refining, secondary gas processing, petrochemical manufacturing, and in the generation of electricity. All viable options must be fully assessed for the development of our gas resources to ensure they provide an appropriate level of benefits to the province and a fair return to the investor."

And the next paragraph: "The Provincial Government understands the unique challenges of using this resource within the province, but there are also opportunities. To ensure these opportunities are fully assessed, the Provincial Government will request that companies provide detailed 'landing in the province' options prior to submitting a Development Plan. More information on potential natural gas development is found in **Section 4 – Electricity** and **Section 6 – Energy and the Economy**."

Now, you said you had involvement in the preparation of the Energy Plan insofar as it related to oil and gas matters. Did you have any involvement in the preparation of the two paragraphs I just read to you on page 36 of Exhibit 00029?

**MR. KEATING:** Yes, I did.

**MR. LEARMONTH:** Okay.

And what was the purpose of these paragraphs? So the first one, we know, it's – speaks for itself, but the second one called for the provincial government requesting companies to provide a detailed landing in the province before submitting a development plan.

What was the objective, from your point of view, in including this paragraph in the Energy Plan and it becoming part of the Energy Plan?

**MR. KEATING:** Sure. The – at the time, most, if not all of the considerations for the commercialization of natural gas were dedicated to looking at export scenarios; most typically and foremost was the CNG technology as an export avenue and –

**MR. LEARMONTH:** Just for the – CNG is compressed natural –

**MR. KEATING:** Compressed natural gas.

**MR. LEARMONTH:** Yes.

**MR. KEATING:** And of course there were many studies underway, both internal to the companies, that I would've been aware of as a former private sector executive as well. So I felt that these words allowed the provincial government to accomplish something very important, and that would've been: Should a development plan for one of these natural gas projects be submitted, that prior to submitting the plan that they would have exhausted and demonstrated any and all opportunities to land; basically to domesticate the natural gas resource.

And why that was important is because once – if that hadn't been done and the Petroleum Board – the C-NLOPB, the regulator, had only been given consideration for an export scenario – as would've been the preponderance of the cases – then the government would only have a fundamental decision at the end of that review process. And of course the fundamental decision that the provincial government would've had, would've had serious implications as to whether that project would proceed or not.

So in order to de-risk that for both the province and the proponent, it was thought that prior to submitting a natural gas development plan that all those landed options should be explored.

**MR. LEARMONTH:** Okay.

And have – to your knowledge, have any development plans been submitted to the provincial government or the C-NLOPB?

**MR. KEATING:** There has been no natural gas development plan submitted to the C-NLOPB, but I think, to my recollection, maybe four, maybe five now for oil production – since this time.

**MR. LEARMONTH:** Okay. Well, has there been any development plan submitted in relation to natural gas?

**MR. KEATING:** No.

**MR. LEARMONTH:** Nothing? So that plan – this objective has never been activated because there's been no development plan submitted, is that your evidence?

**MR. KEATING:** That's my interpretation, yes.

**MR. LEARMONTH:** Okay.

And page 48, please, of the same Exhibit 00029, P-00029. Now, can you explain this concept of gas-to-wire, natural gas –

**MR. KEATING:** Certainly.

**MR. LEARMONTH:** – fired generation?

**MR. KEATING:** Certainly. Again, it's related to many of the export scenarios.

One of the export scenarios, which was important to the province – because they were also at that time considering, of course, hydro power development and the installation of submarine transmission lines – would be to look at opportunities to secure domestic supply of natural gas to augment energy use on the Island.

But of course, any surplus, or any, let's say, scaled energy – if that gas had to be of a certain volume that we could generate additional electricity and fill an export electricity line, that would be advantageous to the electricity project as well as a natural gas project.

So gas-to-wire is a way where the province, its Crown corporation, could possibly take advantage of what's known in the market as a spark spread, meaning that if we were going to sell electricity and/or gas to an Atlantic or New England market, depending on the price of either of those commodities, we would have the ability

to deliver either at the right time at the right price. Basically it widened our optionality.

And that was a scenario whereby the oil companies as themselves wouldn't have fully contemplated or appreciated or been able to have designed, because it would have required them to be in the utility space.

**MR. LEARMONTH:** So no work has been done pursuant to that paragraph or under the heading of gas-to-wire?

**MR. KEATING:** We had in 2006 or '07, around that time – it may have been either just before the Energy Plan's release or just after – did some internal review and study about this gas-to-wire concept knowing that transmission wires, if you will, and the electrical capacity of those wires being fixed and the seasonal use being variable, that we believed that we could push out additional amounts of electricity generated by natural gas. That, to us, seemed to have some economic sense.

So then we set to propose to speak to the offshore-gas holders about such concept, and we did prepare a presentation, and we had some meetings.

**MR. LEARMONTH:** When was that?

**MR. KEATING:** Again, it is around this time – whether it's some months before the issue of this plan or some months after this plan, that is – that's vague. Something about 2006, which means maybe prior to this plan.

**MR. LEARMONTH:** It's 2006?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And there have been no discussions in that –

**MR. KEATING:** No.

**MR. LEARMONTH:** – on that subject since?

**MR. KEATING:** No.

**MR. LEARMONTH:** All right.

Now, in terms of – we know – we'll deal with LNG, liquefied natural gas, or – and also compressed natural gas and the ways that it can be brought to the Island for domestic use, not electric.

And am I correct that there's – at the present – or, in 2012, there was plenty of gas on the Grand Banks to meet the Island's generation needs?

**MR. KEATING:** That's correct.

**MR. LEARMONTH:** Yeah.

And the concept of bringing this gas to the Island, or one – by pipeline – would be, generally, to build a pipeline and gas-powered combined-cycle turbines – say, at Holyrood or something like that.

**MR. KEATING:** Correct.

**MR. LEARMONTH:** And then to get the gas to the plant, the province would enter into an arrangement with one of the operators of the existing facilities on the Grand Bank, whereby we would pay for the pipeline to transport gas from the offshore and retrofit the platform to be able to accomplish that. As a concept –

**MR. KEATING:** That's –

**MR. LEARMONTH:** – have I got that right?

**MR. KEATING:** That's correct.

**MR. LEARMONTH:** Okay.

Now, you've been involved to some extent in developing Grand Banks natural gas for many years, but am I correct that most of those – that work has been focused on export of LNG?

**MR. KEATING:** The focus –

**MR. LEARMONTH:** Is that correct, or –?

**MR. KEATING:** I would say – if I were to look at my own personal – person hours, as one way to express it, I would say 70 per cent of my person hours dedicated to natural gas economization would probably be export based, 30 per cent probably domestic based, and of course generally most schemes consider both.

**MR. LEARMONTH:** Okay.

And the idea – for export purposes, I understand that the idea of building a pipeline had fallen off the table a long time before 2012. Is that correct?

**MR. KEATING:** That's correct.

**MR. LEARMONTH:** Yeah.

And so the export – and the export focus was on compressed natural gas or liquefied natural gas. Is that correct?

**MR. KEATING:** Yes, and earlier still, may have been large export pipelines, in some cases, to – direct to markets in Nova Scotia or New England.

**MR. LEARMONTH:** Yeah.

The – am I correct that the rejection of natural gas, in any form, was fundamentally based on the 2011 report of Pan Maritime –

**MR. KEATING:** It –

**MR. LEARMONTH:** – which is Exhibit P-00088, which you could bring up just to show it – yeah.

**MR. KEATING:** So that's – that report, that I would call a seminal report, is one of the earlier reports.

**MR. LEARMONTH:** Yes.

**MR. KEATING:** And it is a multi-stakeholder report, so there was broad participation in it, and for me, as an executive in my current role, and in my prior role, what makes that report important is that it is in the public domain. So much of the discussion and discourse about monetization of natural gas is largely hinged from it, and it's still referenced, you know, to this day.

**MR. LEARMONTH:** Yeah, so the fundamental reasoning in that report is, to your knowledge, still sound?

**MR. KEATING:** Still valid although through the passage of time many of the, you know,

costs, the estimates and the economics would have undoubtedly changed, but conceptually, yes.

**MR. LEARMONTH:** The principles remain the same, is that correct?

**MR. KEATING:** And the core principle being that there's a threshold of gas production, which warrants some economic consideration. I think that some-700-million MCF a day would have been a number. Today, that number is still valid. There may be a broader range around it, but most certainly it has mostly to do with the availability in terms of timing and resource size.

**MR. LEARMONTH:** Yes.

And do you agree that in the 2011 submission to the Public Utilities Board, which is Exhibit P-00077, at pages 65 to 67, Nalcor indicated that the Grand Banks natural gas had been screened out as a generation option?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And furthermore that – and referring to this 2011 study –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – that we have as Exhibit P-00088, is that correct?

**MR. KEATING:** Yes, that's what the justification would be.

**MR. LEARMONTH:** Yes.

And do you agree that the same reasoning was presented in the 2011 Navigant –

**MR. KEATING:** That's my understanding, yes.

**MR. LEARMONTH:** – report at DG2? Okay.

Were you involved in this initial screening decision?

**MR. KEATING:** No.

**MR. LEARMONTH:** You had nothing to do with it?

**MR. KEATING:** No.

**MR. LEARMONTH:** Who had – who was the decision-maker, or who were the decision-makers, to screen out natural gas in any form as of 2011?

**MR. KEATING:** I believe that fell to the Lower Churchill Project senior management and executive.

**MR. LEARMONTH:** But were you not the top person in natural gas?

**MR. KEATING:** I was the top person in natural gas, but I guess the differentiation here is they had a utility perspective as if to say what sources of energy could we use domestically. My role was to say, of our offshore resources, how can they be optimized. And indeed, while there is crossover to that, it fell to them to work through the process of excluding options. That wasn't – they weren't – that wasn't done in a vacuum; of course I was consulted. But I think towards the end as the – either a draft of the Navigant report was prepared or maybe its final issue.

**MR. LEARMONTH:** Okay, but you weren't the decision-maker. You were –

**MR. KEATING:** No, I wasn't the decision-maker.

**MR. LEARMONTH:** – available for advice. So who –

**MR. KEATING:** I offered advice.

**MR. LEARMONTH:** Who on the project team did you – you know, sought your input into that decision?

**MR. KEATING:** That would have been chiefly led by Gilbert Bennett.

**MR. LEARMONTH:** Yes. Anyone else?

**MR. KEATING:** Yeah, so, Ed Martin, as basically both Gilbert and my supervisor would have made sure that we, as a team, were collective and integrated on those outcomes.

**MR. LEARMONTH:** Yeah.

But will you confirm that the 2001 study – that's P-00088 – fairly reflected the reasons why Nalcor screened out natural – Grand Banks natural gas as an option as of 2011?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** That's correct, is it? Right?

I'd like to refer to Exhibit P-00090, which is your tab 26, Mr. Keating.

**MR. KEATING:** Okay.

**MR. LEARMONTH:** This is the presentation by Dr. Stephen Bruneau at the Harris Centre on March 28, 2012. Are you familiar with this presentation, Sir?

**MR. KEATING:** Yes, I am.

**MR. LEARMONTH:** Okay.

Can we go to page 5, just down.

Do you agree with the information in the box that future exploration will extend the – "Future exploration of gas resources will extend the economic life of the White Rose Field and permit additional oil recovery ... The timing of gas availability at the White Rose Field for commercial purposes is" depending "on economic and technological factors."

**MR. KEATING:** Yes, I agree with that.

**MR. LEARMONTH:** As of the date it was –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And then page 9, just – yeah.

This is a – the timeline of the marketplace "production of Grand Banks Natural Gas according to the 2007 Provincial Government Energy Plan." Are you familiar with that diagram?

**MR. KEATING:** Yeah, I'm familiar with this diagram.

**MR. LEARMONTH:** Is it – was it accurate as of the –

**MR. KEATING:** No.

**MR. LEARMONTH:** – time of Dr. Bruneau's presentation?

**MR. KEATING:** No, I believe Dr. Bruneau inferred that where the arrow points on the picture below where it says Discovered Gas, that that ties in to a date of 2010 and thereby implies that there's some economic activity that would flow from it.

I believe that was not the intent of the gas as pictorialized. It mostly refers to likely gas availability, post-commercial use in the fields, and/or any new sources of gas discovered from the time of the plan's writing in 2007 and maybe go forward. Because as you can see, the total area of under those – under those curves, extends well out into the future and is largely hypothetical.

The discovered gas would be a pictorial of the known resource at that time which would have been estimated as to say how long it would take to get that gas to market.

**MR. LEARMONTH:** So you're saying this diagram is wrong?

**MR. KEATING:** No, I'm not saying the diagram is wrong; the diagram is basically a pictorial. But I think the marketable production of natural gas, according to 2007 Energy Plan – I think that may be a little misleading.

I think that's – that's what I would say. I don't know that the people who put this graph together fully expected that gas would be sold in the marketplace in 2010.

**MR. LEARMONTH:** But that's just your interpretation.

**MR. KEATING:** That's my interpretation.

**MR. LEARMONTH:** And you realize that there's –

**MR. KEATING:** And it could be subject to alternate interpretations.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** So you – it's the type of thing where there are possibly two or more reasonable interpretations?

**MR. KEATING:** Correct. And from the perspective though, to be sure, at the time the Energy Plan was being written again, contextually, there could have been a domestic or export natural gas opportunity that we would have been actively working to pursue.

So by putting this pictorial in the Energy Plan, we would have indicated or signalled that that would have been an aspiration or a hope. It didn't say it would happen.

**MR. LEARMONTH:** But you said that you were consulted on oil and gas matters –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – for the Energy Plan?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Well then, if this graph is susceptible of two or more interpretations, would you be responsible for the possible – possibility that it was open to interpretation?

**MR. KEATING:** Sure, I would be.

**MR. LEARMONTH:** Yeah. So in retrospect, you would have changed the diagram before you put it –

**MR. KEATING:** No, in retrospect, I would have been more than happy to explain the comings and goings of the evolution of the natural gas opportunities.

**MR. LEARMONTH:** Is there a reason you didn't do that?

**MR. KEATING:** Well, because they were uncertain and there were a multitude.

**MR. LEARMONTH:** All right.



Okay, now page 13. Thirteen – just move it down. Okay, yes. This is a – on page 13. Do you have that?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yes. And that's a summary of Grand Banks natural gas availability time frame and there's different sources. Do you accept this as being a true and correct statement of the gas availability?

**MR. KEATING:** No, this chart now, at the time this was presented into 2012, likely relied on Energy Plan information or development plan application information. And what was lifted from that would have been the timelines for availability.

**MR. LEARMONTH:** Okay.

**MR. KEATING:** And when we look – when I look at those times and dates now, knowing what I knew back in 2011 and '12, at the time this presentation was given, we had come to understand that there were, of course, much more oil in the Hibernia Field. Back in 2011 or 2012 we would have had 1.4 billion barrels of reserve, and at the time Hibernia's, I guess, gas availability time frame was established, they had thought of maybe only 800 million barrels of reserves.

So that additional oil, in the passage of time, meant that the natural gas availability was now being deferred because that natural gas is going to be used for pressure support to produce this extra oil.

**MR. LEARMONTH:** Yeah, but I'm talking about – I'm not talking about hindsight, I'm talking about past 2012.

**MR. KEATING:** No, that would have been the conclusion at the time.

**MR. LEARMONTH:** So this information, you believe, is incorrect?

**MR. KEATING:** Yeah, I believe that the information, as it's used at the time it was published – because I don't think this information was from that time. I think that information may have been picked from prior

submissions of development plans back as far as 2000, 2001, 2003. That's my belief.

**MR. LEARMONTH:** Okay, well, so you're saying that information is wrong?

**MR. KEATING:** At the time, if I were to say what the time frame availability of natural gas would be, they would be different dates, yes.

**MR. LEARMONTH:** Well, what dates would they be for each – under each of the five headings?

**MR. KEATING:** Okay, so the – but they're all pointing to the same moment, they're just five different sources, so there'd be only effectively one date for me.

**MR. LEARMONTH:** Well, there's different dates. The last two contractor – well, anyway, you know the question so give us your answer, please. So for –

**MR. KEATING:** So, for example, I'll highlight the contractor report used by Navigant. It says 2015 but that contractor report used by Navigant was published in 2001, 12 years prior.

**MR. LEARMONTH:** Like the Pan Maritime report.

**MR. KEATING:** Right.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** So that's where the 2015 date comes from.

**MR. LEARMONTH:** Okay.

**MR. KEATING:** So to sit in 2012 and say that that is a valid date because it was said more than a decade ago is an error.

**MR. LEARMONTH:** Okay, now what do you base that on? Do you have any documentation to –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – that could tend to contradict the information (inaudible)?

**MR. KEATING:** Yes, if one would have looked at the development plans, I think in this particular case, the reference was the White Rose Project. I think there was a North Amethyst development plan that went in prior to that. That would've effectively updated the timeline for gas availability, mostly because the operator would've determined that I'm going to use now, gas for pressure support. So that gas I'm not going to make available in 2015 when my project was smaller, as I thought it would've been in 2001.

**MR. LEARMONTH:** Okay, so what dates would you substitute for the dates contained in the –

**MR. KEATING:** Okay, so, no, I'll have to put my mind back in 2012. I would have had said maybe 2028, 2030.

**MR. LEARMONTH:** 2028 to 2030?

**MR. KEATING:** 2028, 2030, which is – which would have perhaps lined up with the, what we call, gas blow down or when the oil production at the White Rose field would have ceased.

**MR. LEARMONTH:** Okay.

And so that would be for the first – for all of these would be to 2028 –

**MR. KEATING:** Oh, I would plan that to all of them.

**MR. LEARMONTH:** – all of them.

**MR. KEATING:** If I was the author and the source of all those informations at that time, that would've been my advice to the various authors of those reports.

**MR. LEARMONTH:** But – and I wanted you to be specific, if you can –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – on the source document that you would've relied on to substitute the dates 20 – to '28 to 2030 –

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** – on that diagram.

**MR. KEATING:** It would –

**MR. LEARMONTH:** What are the documents?

**MR. KEATING:** It would have been the latest development plan amendment put forward by Husky Energy, which would have been the operator with the most significant amount of gas cap gas, I guess.

**MR. LEARMONTH:** Okay and what date would that be?

**MR. KEATING:** I can't recall. That would've been 2009 or '10. I think it's in the exhibits. I think it's in our book.

**MR. LEARMONTH:** Okay, well, that – there is a White Rose Development, that's 2012.

**MR. KEATING:** Yes, and now that would be for the wellhead – that's a good point. While maybe the wellhead –

**MR. LEARMONTH:** By the way, just for your reference, that's tab 22, which is Exhibit 01313.

**MR. KEATING:** Tab 22. Okay, so this is – this presentation –

**MR. LEARMONTH:** Is that the document you referred to?

**MR. KEATING:** That is a new document I didn't refer to, but is relevant to the answer.

**MR. LEARMONTH:** Well, could you take us through this document –

**MR. KEATING:** Sure.

**MR. LEARMONTH:** – and show us the information that you would rely on to make the substitution of the dates on the chart to 2028 to 2030?

**MR. KEATING:** Yes, I will, and just provide the chronology, the context. I think Dr. Bruneau's presentation was in March. This document was issued in May.

**MR. SIMMONS:** Oh –

**MR. KEATING:** So Dr. Bruneau or most people outside –

**MS. O'BRIEN:** Sorry, Commissioner, we – Mr. Simmons was looking to speak.

**THE COMMISSIONER:** Oh, I'm sorry.

**MR. SIMMONS:** While Mr. Keating is going on with his answer, I was just going to say that this particular document is one that was – we were given notice of yesterday. And I don't know to what extent Mr. Keating has actually had a full opportunity to review it, but he can certainly speak to that. But this is not something we've had available for some time to (inaudible).

**MR. LEARMONTH:** Well, no – okay, fair enough. You're right; he didn't receive it until yesterday. So if Mr. Keating wants to take additional time, there's no problem with that. But is this one of the documents that you did refer to earlier in your evidence as supporting the changing of the dates to 2028 to 2030?

**MR. KEATING:** No, so I can clarify. The presentation was in March of 2018, so I would have assumed that all publicly available information would've been perused for any relevant information. At that time, I knew of an earlier development plan submitted by Husky, where they would've addressed their gas management strategies.

It would so happen, as I see this document now that you've given me attention to, it was published in May 2012. It is not a development plan application in the first instance, as I see; it's a project description, so – which basically is a precursor for the issuance of a full development plan. But what would've been, of course, in the minds of my – me and my company and our partners is, ultimately, the content. And, of course, we would've been engaged in any number of assessments and analysis to support the development plan application. So we would've been mindful, at that time, of the availability for natural gas.

Okay, so that would've been forming and shaping my opinion at the time the Bruneau presentation was drafted, but if I sit back and, say – put myself in Dr. Bruneau's position and

say: Okay, what could he have relied upon? I, to be fair, would not expect he could've relied upon a document he had seen yet, or not been issued, notwithstanding the fact that I would've known content at that time. He would have to probably go back to the next earliest one, which I believe was the development plan for North Amethyst. I don't know if that's in my book.

But in there, in that development plan, there would've been an explanation of what the gas management strategy would've been. And I think the operator would've made some fairly robust statement as to say that they were going to continue to store and evaluate, you know, the future options for natural gas. And one would see from the production profiles and all the technical data and information that the oil project would have been extended. And in my mind, at that time, one could probably see that that oil production would have gone to 2028, for example.

**MR. LEARMONTH:** Okay, well, I'm not concerned about what was in your mind.

**MR. KEATING:** Right.

**MR. LEARMONTH:** My question is: What document or documents can we rely on to substantiate – or do you rely on to substantiate what you've said, which is that the dates 2020 in the Bruneau presentation are wrong, they should be 2028 to 2030. I'm not interested in what's in your mind.

**MR. KEATING:** Right.

**MR. LEARMONTH:** I'm interested in what documents I can look at to verify the information you're giving now.

**MR. KEATING:** The development plan amendments –

**MR. LEARMONTH:** Okay, what –

**MR. KEATING:** – that existed at that time.

**MR. LEARMONTH:** Would they be public record?

**MR. KEATING:** Yes, they would be.

**MR. LEARMONTH:** And what dates?

**MR. KEATING:** I can't recall.

**MR. LEARMONTH:** The develop plan amendment for what?

**MR. KEATING:** For the North Amethyst at White Rose expansion project area.

**MR. LEARMONTH:** And that would have been prior to sanction?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Okay. Can you give us some idea about when?

**MR. KEATING:** I think 2009.

**MR. LEARMONTH:** Okay.

**MR. KEATING:** If I'm not mistaken (inaudible).

**MR. LEARMONTH:** Okay. So as far as you know that's the document that will show us that Dr. Bruneau's information is incorrect?

**MR. KEATING:** Right. In absence of any other information, I would have been drawn to the development plan applications as they existed at the time.

**MR. LEARMONTH:** Yeah. But I'm asking you that what – when you make the statement that it should be 2028 to 2030 –

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** – is this the document that you were relying on to point out what you see to be an error in Dr. Bruneau's presentation? Is this the document?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yes, okay, and no other documents.

That's a question: Are there any other documents?

**MR. KEATING:** I'm just thinking now: Would there be any other documents available in the public domain?

I could say that I'm aware of a series of presentations, maybe, that oil company executives from Husky may have made related to those developments. They would have presented them publicly at Noia. It was likely that there would be a series of consultation documents that would have been made available and they would probably be in the public domain. All those –

**MR. LEARMONTH:** Excuse me, would they be prior to the 2009 report that you referred to or –

**MR. KEATING:** Prior and post. Pre- and post-.

**MR. LEARMONTH:** Between 2009 and when, 2012?

**MR. KEATING:** Correct.

**MR. LEARMONTH:** 2009 and the date of sanction?

**MR. KEATING:** Correct.

**MR. LEARMONTH:** And these would be publically available?

**MR. KEATING:** They – should be. If they were – you know, in my mind, if they were given public presentation, they would exist –

**MR. LEARMONTH:** Okay.

**MR. KEATING:** – in public domain.

**MR. LEARMONTH:** So, that would take – that would do it for the documentation that you believe would be available to support your position that Dr. Bruneau was wrong?

**MR. KEATING:** Yes

**MR. LEARMONTH:** All right. Thank you.

Mr. Keating, could you turn to tab 27, which is Exhibit P-000302. And at page 3, please?

And you can see on the – right side column of page 3 of that exhibit the – says: “On the last claim by the Crown that they have had no authority with which to encourage and enforce all operators to do fair business selling gas for isolated domestic use, recall this from the CNLOPB (November 2001)” and there is a quote concerning results that were ““expressed during the Public Hearing that White Rose gas might not be available for export if gas transportation infrastructure was put in place. The Board, on its part, would expect in such circumstances that access to White Rose gas, subject to conservation considerations, would be realized through normal commercial negotiations. As discussed later the Legislation does, however, provide the Board with authority to issue a Development Order should such a course of action be required.””

Do you acknowledge the correctness of that statement?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And it’s still correct, is it? I mean it hasn’t – there has been no change to it from – 2012, say the date of sanction?

**MR. KEATING:** Right, I’m just – we’re gonna reread that one more time.

**MR. LEARMONTH:** Take your time, please.

**MR. KEATING:** Yes. I believe that’s – that’s correct.

**MR. LEARMONTH:** That’s correct. All right. Before we leave the subject of Dr. Bruneau, do you know Dr. Bruneau?

**MR. KEATING:** Yes, I do.

**MR. LEARMONTH:** You recognise his qualifications and expertise in the subject of – offshore natural gas?

**MR. KEATING:** Yes, I do

**MR. LEARMONTH:** You do, okay.

Next, please turn to the October 30, 2012 Ziff report on natural gas, which is tab 23, Exhibit P-00060.

Have you got that, Mr. Keating?

**MR. KEATING:** Yes, I do.

Could I go back to the prior question? You asked if I believed that that statement to be correct, which was the one in quotation marks: concern was also expressed in the public hearing.

I just want to make sure my interpretation of what that statement is. It said that the board would have a development order power to enforce, if there was gas transportations infrastructure in place. So that’s a – together that hangs together. If there is no gas transportation infrastructure in place then I would have a different perspective. And, as it is today, my interpretation, there was no gas transportation infrastructure in place.

**MR. LEARMONTH:** Okay. So on that basis, you don’t think it would have any application to anything at the time.

**MR. KEATING:** Yeah, so that the – it’s the context.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** So my belief, and, again, I’m trying to infer the context of when that statement was made. The context of that statement could have been intended to say that the board now has the power to issue a development order on natural gas. That I don’t agree with.

**MR. LEARMONTH:** Do you agree that it’s open to interpretation?

**MR. KEATING:** No.

**MR. LEARMONTH:** You don’t.

**MR. KEATING:** No.

**MR. LEARMONTH:** So give us the only interpretation that you think is fair and reasonable.

**MR. KEATING:** Okay.

So, in order for the board to exercise its development order powers, they would have to

have, first of all, an eye to the conservation aspects of the approved development plan. They would then have to onus on the board to justify that part of the stated development plan, as submitted by an operator, was deficient in certain areas, and they could require – in the interest of conservation – an order to develop the substance. In all substances and all cases, to this point, there's only been oil development projects.

So, I do believe the board has sufficient powers today to compel oil development opportunities, if they see fit, but in the absence of two things: an approved development plan for natural gas and the project itself, the gas project, the board may be limited.

Now, it might now preclude the board from attempting, but in my experience, in my knowledge, they would have an almost certain no recourse, no ability to enforce a project that doesn't exist or to enforce on a plan that hasn't been submitted. So that's my qualification.

**MR. LEARMONTH:** Okay. Thank you very much.

Please turn to tab 23, Exhibit P-00060.

**MR. KEATING:** Okay.

**MR. LEARMONTH:** That's the Ziff report that I asked you to look at –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – Mr. Keating.

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** Are you familiar with this report?

**MR. KEATING:** Yes, I am.

**MR. LEARMONTH:** And do you know the reason that the provincial government – because it was the provincial government, not Nalcor – retained Ziff to prepare this report?

**MR. KEATING:** Yes. Yes, I do.

I think at the time there was much discussion about the alternatives to Muskrat Falls. I think at the time the – there were a combination of either letters to the editor, public presentations, submissions before the PUB and so on, that caused a good deal of interest on the subject.

So as the only, I guess, one of the very few publicly available assessments or studies about this, which was in existence, was this 2001 study we referenced earlier, and that study was deficient, really, in terms of explaining that small bore pipe scenario. It really only spoke to the larger, 36-inch pipe scenario, and much of the discussion was focused on the small pipe scenario. The government, I believe, decided it needed to fill the void with a study or an assessment to basically inform public opinion on this opportunity.

**MR. LEARMONTH:** Okay.

And do you agree – or was it your understanding at the time that the government announced that Ziff had been retained, that the objective was that – for the report to be completely objective and independent?

**MR. KEATING:** I would expect that to be, yes.

**MR. LEARMONTH:** Yeah.

So what does independent mean in your – to your understanding?

**MR. KEATING:** Independent would mean that you'd have a series of knowledgeable experts that would come and assess known situations. They would interrogate people who would have subject matter expertise, where they would have gaps, they would have ability to make assessments. They would have any and all abilities to come to their own conclusion about the question that would be put to them, and their manner in which they would arrive at that may go – be through consultation, internal analysis, public record searches and so on and so forth.

**MR. LEARMONTH:** But was it your understanding when the government announced that Ziff was – had been retained – was it your understanding that this was to be a fair, good faith, honest assessment of the natural gas (inaudible)?

**MR. KEATING:** Correct.

**MR. LEARMONTH:** Without restrictions?

**MR. KEATING:** Correct.

**MR. LEARMONTH:** Okay.

Now, can we turn to page – excuse me – tab 1, that’s Exhibit P-01194, page 3?

This is an email from Ed Martin to Jim Keating, Dawn Dalley and Charles Bown. And he says, “Dawn and Jim, We need a strategy to deal with the gas stuff.”

Do you know what he means? Did you have any interpretation as to what he meant by gas stuff?

**MR. KEATING:** Yes, because at the time gas could have been LNG, imported LNG. It could’ve been FLNG, could’ve been CNG, could’ve been pipe, could – there’s a myriad of natural gas-type proposals or solutions that would have been discussed at the time, and I think he just said gas stuff to summarize.

**MR. LEARMONTH:** So that’s everything dealing with –

**MR. KEATING:** It likely would be for me, as I would have received it: Keep your radar open wide to consider any and all questions related to natural gas.

**MR. LEARMONTH:** Okay.

So at this point – that’s March 16, 2012 – that was before the Bruneau presentation.

**MR. KEATING:** Correct.

**MR. LEARMONTH:** Were you aware at the time that the government had already retained Ziff?

**MR. KEATING:** No, I wasn’t.

**MR. LEARMONTH:** You’re aware now, are you?

**MR. KEATING:** I am – I’m – I wasn’t then aware that they had retained Ziff. I wasn’t aware

that actually they had retained Ziff until I was asked to meet with Ziff.

**MR. LEARMONTH:** Okay.

Well, just for the record, there’s a reference to government having retained Ziff in February 2012. And as we’ll see later, representatives of Ziff were watching or listening to the Bruneau presentation, so they had to be retained before then (inaudible).

**MR. KEATING:** I would agree to that. I know that now. I don’t know that I knew that then.

**MR. LEARMONTH:** Oh, at the time you didn’t know, but you know that now.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yeah. Were you or anyone else at Nalcor, to your knowledge, consulted by government on – with respect to retaining the services of Ziff Energy for this independent report?

**MR. KEATING:** I can recall a telephone conversation with Wes Foote. He asked what kind of consultants, you know, do you know any in the marketplace that would have the capability and the knowhow to make a quick assessment, short order for offshore? And I said, you know, I’ll think about it. I came up with some, you know, multi-national names, but Ziff wasn’t one of them.

**MR. LEARMONTH:** So the Government of Newfoundland consulted with you at Nalcor on –

**MR. KEATING:** Yeah. They would consult with me because, of course, I – subject-matter expert – I am involved – I have many dealings with international oil and gas companies and consultants, and I think they were just looking for some names and numbers and ideas – contacts and that sort of thing.

**MR. LEARMONTH:** Okay.

So why would you need a strategy to deal with the natural gas?

**MR. KEATING:** I think it would have been a communications strategy.

**MR. LEARMONTH:** Well, why would you need a communications strategy? If Ziff is gonna be doing an independent report, why would you need a – why would Nalcor need a communications strategy?

**MR. KEATING:** Because at the time, and – if my memory serves me correctly, and if the timeline here is correct, I wasn't aware on March 16 that government had any plan to study gas. I'm fairly sure – I thought this was gonna fall again to Nalcor Energy to effectively communicate and fill a void in this important area, which was, of course, the consideration of natural gas, and I knew that there was pretty much not a lot of information out there in the public sphere about natural gas. And I knew that was becoming frustrating to the general public, as they wanted to know more information.

And we knew that it's gonna fall to us, ultimately, to justify any decisions we would have made, and any screening that we would have done, and my concern would have been that the only thing I could rely on then, at that time, would be internal and commercially sensitive documents that I would have had, in consultation with my partners, our studies that they would have had, experiences I would have had. And I don't think I could have put any one of those out quite readily, certainly without any permissions and probably not at all.

So my sense is that we needed a strategy to figure out how to address the public concern.

**MR. LEARMONTH:** But at that point, March 16, I suggest to you that you had already decided that natural gas had been properly and correctly screened out.

**MR. KEATING:** That's correct.

**MR. LEARMONTH:** So that was your attitude.

**MR. KEATING:** That was our attitude.

**MR. LEARMONTH:** Yeah.

And you wanted to –

**MR. KEATING:** Justify it.

**MR. LEARMONTH:** You wanted to convince Ziff of the correctness of your position?

**MR. KEATING:** No, I was – I probably wasn't even aware Ziff was a consultant.

What we wanted to do was make sure that the public understood our position. And, invariably, that could come from either our own work, if we were able to find a way to present it, and/or what was probably the best response here was to get an independent company, arm's length, to make a review and publish its findings.

**MR. LEARMONTH:** Okay.

So Ms. Dalley was the – was developing a communications strategy, is that right?

**MR. KEATING:** That's correct.

**MR. LEARMONTH:** Okay.

Well, wouldn't it be better to wait 'til you got the Ziff report before you developed a communications strategy?

**MR. KEATING:** Again, I'm not sure that I was aware there was a Ziff report around in March of 2016. I would maybe have assumed that I had to do some report and in – ironically, I would have been drawn to – not piped gas – I would have been drawn to LNG, 'cause LNG, in my sphere of the quote, unquote gas stuff would have been the one that was probably most realistic, most economic. And I would have thought, from my perspective, the value I could have added would be to go and study the LNG import scenario.

And it was on that basis, I think I advised internally that we should engage PIRA – PIRA was a New York-based consultant – to thoroughly review the LNG import case. And honestly, I probably at that time continued to discount the credibility of the domestic piped-gas case. And wouldn't have been, probably, an area I would have rushed to study.

**MR. LEARMONTH:** But at that time you had – you were convinced, I suggest to you, that gas, natural gas, had been properly excluded?



**MR. KEATING:** Yes.

**MR. LEARMONTH:** And that you –

**MR. KEATING:** At that time, yes.

**MR. LEARMONTH:** And you had formed the intention that you were going to do what you could to convince Ziff of the correctness of your position?

**MR. KEATING:** I would have tried to convince any consultant, not just Ziff. Because I – again, I don't think I knew that Ziff was a named –

**MR. LEARMONTH:** Well –

**MR. KEATING:** – contract or consultant.

**MR. LEARMONTH:** Whatever consultant (inaudible) –

**MR. KEATING:** Any consultant that would have come and asked me for my opinion, I was freely giving it.

**MR. LEARMONTH:** Okay.

Please turn to tab 11, which is Exhibit P-01195.

Now, this appears to be a – there's a number of messages. But it appears that Wes – who – Wes Foote. Who's Wes Foote? I was looking at the bottom of page 1 of Exhibit P-01195. Okay. It says, "Charles ... please find comments" below.

So this is Wes Foote. Who is Wes Foote?

**MR. KEATING:** Wes Foote was the assistant deputy minister of Natural Resources at the time.

**MR. LEARMONTH:** This is March 28, 2012. And who's Charles Bown?

**MR. KEATING:** Charles Bown, I believe – was he the deputy at the time?

**MR. LEARMONTH:** Okay. And then down below – this looks like it's a cut-and-paste email. It says: Charles, please see below. It appears – do you agree with me – that this is a cut-and-

paste from an email from an Ed on page 3? Just look at page 3. There's an Ed.

**MR. KEATING:** Okay, now what's – sorry, I was looking at the screen – but what tab was that?

**MR. LEARMONTH:** Okay, if you see the bottom of this email?

**MR. KEATING:** Okay.

**MR. LEARMONTH:** The bottom on page 1.

**MS. O'BRIEN:** Tab 2, I believe.

**MR. KEATING:** Tab 2. Sorry, I just missed the tab part.

**MR. LEARMONTH:** No, it's tab 11.

**MR. KEATING:** Tab 11.

**MS. O'BRIEN:** It's – are you in 11 now?

**MR. LEARMONTH:** It's tab 11 on mine.

**MR. KEATING:** Tab 11. Okay, so page 2?

**MR. LEARMONTH:** Well, page 1 first.

**MR. KEATING:** Okay.

**MR. LEARMONTH:** See the email: Wes Foote to Charles Bown?

**MS. O'BRIEN:** I don't think that's the tab.

**MR. LEARMONTH:** It's in my tab 11.

**THE COMMISSIONER:** I don't have that as tab 11.

**MR. LEARMONTH:** It's in my tab 11.

**MS. O'BRIEN:** Yeah, P-01195 –

**MR. LEARMONTH:** Yeah.

**MS. O'BRIEN:** – is tab 2, according to mine.

**MR. LEARMONTH:** Okay. Well, it's tab 11 in mine.

**THE COMMISSIONER:** Okay, so –

**MR. LEARMONTH:** Well anyway, it's P2 – P-01195.

**THE COMMISSIONER:** So just to clarify this so I understand where we are. So this exhibit is actually at tab 2, then – 01195 – and that appears to be the one that's on the screen. So it's in your –

**MR. LEARMONTH:** Okay.

**THE COMMISSIONER:** I assume it's – your book is the same as mine – tab 2?

**MR. KEATING:** Two?

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Okay, well, it's tab 11 in mine, so I guess – anyway, I think we've identified the error. Either your books are all wrong or – and mine's right or vice versa. Probably the latter.

**MR. KEATING:** Mine seems to be never right.

**MR. LEARMONTH:** Okay, very well.

Anyway, we've got the Exhibit 01195, page 1. Do you see at the bottom there's an email from Wes Foote to Charles Bown, March 28 at 11:11 p.m.

**MR. KEATING:** Okay, the bottom of page 2?

**MR. LEARMONTH:** Page 1.

**THE COMMISSIONER:** Page –

**MR. KEATING:** Sorry, page 1. Sorry.

Yes, "Charles

"Below please find comments. We can discuss in the am"?

**MR. LEARMONTH:** Yeah, and if you go to page 3 –

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** – there's a long email from an Ed –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – which, based on my – to my knowledge was cut and paste in this email from Wes Foote to Charles Bown. Do you agree?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Okay, very good. So this is Ed. Now, would that be Ed Kallio?

**MR. KEATING:** Yes, that is likely to be Ed Kallio from Ziff.

**MR. LEARMONTH:** Or – it wouldn't be Ed Martin, would it? To your knowledge.

**MR. KEATING:** No, I'm pretty sure that would not be Ed Martin –

**MR. LEARMONTH:** Okay.

**MR. KEATING:** – to Wes Foote.

**MR. LEARMONTH:** Okay, so this was forwarded – it's from Wes Foote to Charles Bown, but they're referring to an analysis done by Ed Kallio of Ziff, it appears.

**MR. KEATING:** It appears.

**MR. LEARMONTH:** Yeah. Okay, it says – so Wes – that's Wes Foote. Bill – would that be Bill Gwozd – G-W-O-Z-D – of Ziff, to your knowledge? Or is there another Bill?

**MR. KEATING:** To my knowledge, at that time, in this context, it could likely be – not for sure, but more than likely is.

**MR. LEARMONTH:** Would you know any other Bill that it could be in this context?

**MR. KEATING:** No.

**MR. LEARMONTH:** No, okay. And then Cameron Gingrich, he's from –

**MR. KEATING:** He's Ziff.

**MR. LEARMONTH:** He's Ziff – and I. I take it that would be – well, probably if I'm correct that it's cut and paste – that would be Ed Kallio, right?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Okay. Now he says: "Wes, Bill, Cameron Gingrich and I were online for the lecture." That's the Bruneau lecture?

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** So they were monitoring it. "Speech was about 1.25 hrs., plus questions, about 11 of these, mostly technical, finished up at 6:00 mt." I guess they were out in Calgary.

Then if we turn to the next page, Mr. Kallio says: "Many good points made by speaker: 1. availability of resource, - no quibble with his conclusions, lots of gas available in offshore, up to 500 MMcf/d by 2025, cited NEB, Producers."

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** So he's saying that's a correct observation, I guess.

**MR. KEATING:** Yeah, that's what he's saying.

**MR. LEARMONTH:** And then: "2. timing: no quibble, could be online 2020'ish, Whiterose gas available sooner, Hibernia gas available 2020'ish, needed for pressure maintenance until that time" National Energy Board. So that's pretty straightforward.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** "3. no quibble with volumes required for power generation, annualized daily load of 35 MMcf/d (in 2010 he cited a gas equivalent of 12.7 ... lots of hydro, etc.)" So these are the observations (inaudible).

**MR. KEATING:** That he's made.

**MR. LEARMONTH:** Of Ed Kallio, who had been – was representing Ziff, which had been retained by the Province of Newfoundland.

**MR. KEATING:** Correct.

**MR. LEARMONTH:** Okay.

Now, do you agree with these observations?

**MR. KEATING:** I would agree with number 1. I would agree with number 3. I would have some disagreement with number 2.

**MR. LEARMONTH:** Okay. What would be the –

**MR. KEATING:** And, again, I would not be sure that Ed, in this case, would have had, at that time, a full consideration for the different timelines that existed and maybe he took all his information from the strength of the presentation that he observed. So, again, I would probably – would've had an opportunity, if asked, to highlight or indicate where maybe those dates could be different.

**MR. LEARMONTH:** Okay. And those dates – so based on your earlier evidence, would you substitute the dates 2028 to 2030 for the 2020ish in point 2?

**MR. KEATING:** Yeah, so I would put the end of the 2020s versus ish and sooner. But it's a minor point, but I think I would've been able to rely on –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – a different source document.

**MR. LEARMONTH:** Well, I don't think it's a minor point. I mean, you were talking about eight or 10 years for availability. I suggest that's not a minor point.

**MR. KEATING:** Oh, okay, that's fair.

**MR. LEARMONTH:** Yeah, okay.

So at this point, March 28, were you aware that the government had retained Ziff as the expert?

**MR. KEATING:** I think at that time – now, as this email went through, I think I may have had a phone call with Wes Foote who asked if I had seen the presentation, which I hadn't. And he told me some feedback, and I think it was maybe

on that phone call he said he had a consultant monitor it or follow it for him.

**MR. LEARMONTH:** Okay.

So there's certainly nothing improper about it, but do you know why government would have disinterest –

**MR. KEATING:** I think –

**MR. LEARMONTH:** – in seeing Dr. Bruneau's presentation and having their experts – paying their experts to view it?

**MR. KEATING:** Yeah, I think so. I don't think there would've existed in the Department of Natural Resources any of the expertise that, you know, could readily in real time make any kind of determinations as to the veracity of any of the points made, either to agree or disagree.

So I think what they did – what they do typically is hire a consultant, knowing full well that this is an issue of public interest and could very well in the next, you know, several days, 24 hours, they could be asked – inquired as to what the government believes that they observed in the presentation.

So I think by having a consultant monitor this it's – they were just looking for some credible information which they could either inform the minister and test the veracity of the presentation, I think that would be typical.

**MR. LEARMONTH:** Is this the only written analysis of Mr. – Dr. Bruneau's presentation that you're aware of?

**MR. KEATING:** No, I think there was several others.

**MR. LEARMONTH:** Okay.

Now, before you go to the next one, I just want you to confirm that there's a lot of references to the Husky –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – and that – is that – does Husky have – well not exclusive control, there – I know there's partnerships and joint ventures

and so on, but they – Husky is the operator of the White Rose –

**MR. KEATING:** Field, yes they are.

**MR. LEARMONTH:** – field. And the – on the eastern edge of the White Rose field are the North Amethyst: the West White Rose and the South White Rose.

**MR. KEATING:** That's correct.

**MR. LEARMONTH:** That's correct.

And then the West White Rose project, which is being constructed, is also – will be operated by –

**MR. KEATING:** By Husky.

**MR. LEARMONTH:** – Husky. I just wanted to set that –

**MR. KEATING:** That's correct.

**MR. LEARMONTH:** So Husky is the operator in the area where, perhaps, not the only but the most logical source of natural gas would lie. Is that a fair comment?

**MR. KEATING:** It is the holder of the largest accumulation of natural gas in an unassociated form.

**MR. LEARMONTH:** Yes, thank you.

Can we now turn to tab 3, which is Exhibit P-01196?

Do you have that? Do you have that, Sir?

**MR. KEATING:** Yes, I do.

**MR. LEARMONTH:** Okay.

Now, this is April 2, so just a, you know, less than a week after Bruneau's presentation, and you're communicating with a Paul McCloskey. Who is Paul McCloskey?

**MR. KEATING:** At the time, he was the vice-president, East Coast, for Husky Energy.

**MR. LEARMONTH:** Okay. Now, why would you be communicating at this time with the Husky Energy?

**MR. KEATING:** Because he's a partner in our equity projects.

**MR. LEARMONTH:** Yeah. But the government is doing an independent study?

**MR. KEATING:** Yeah. So this mail is the announcement that government is going to commence an independent study. So, I think, Paul McCloskey sent me a mail of – and internal mail, which highlighted that sort of press release from government and then he says to me: Okay, so now what? As if to say, partner to a Crown corporation, is there anything expected of me or, you know, how does this involve me?

And there you see my response and so on. So I think that's the context.

**MR. LEARMONTH:** Okay. But your answer on April 2, 2012 – excuse me, page 2 of Exhibit P-01196 as the originating email, it's from Colleen McConnell.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** I take – and with copies to McCloskey and others. Do you know Colleen McConnell is?

**MR. KEATING:** She was the communications lead, I think, for Mr. McCloskey at the time.

**MR. LEARMONTH:** Okay, and he says: "Government says Ziff Energy has been commissioned to study natural gas, in order to inform Muskrat Falls debate." So I guess that sent on his behalf?

**MR. KEATING:** Yeah –

**MR. LEARMONTH:** To you and –

**MR. KEATING:** – on his behalf? I think he sent it directly.

**MR. LEARMONTH:** Okay. Correct. Yeah.

Okay, so then your answer; you do an email to Paul McCloskey, and this is on page 1 of Exhibit P-001196.

And just going back to page 2, sorry, it says "OK, now what?" That was an email from Paul McCloskey to you?

**MR. KEATING:** Correct.

**MR. LEARMONTH:** Okay. And then you say: "I should have added that added that its 'all under control'. The province used Ziff to do a report on LNG. We had used PIRA. In a public forum, its better to" – take – "a 3rd party to dismiss.

"We will work with Ziff so they understand our NG opportunity or lack thereof." So what's all under control?

**MR. KEATING:** All under control would be that Husky Energy would have been loath to have been in – brought in or engaged in this very public debate and discussion around Muskrat Falls. They would have been fairly averse to being asked to make public statements and commentary about what it would – would not do with natural gas.

It didn't want to be positioned in a way, I believe, that it would be seen that they were somehow creating an uneconomic or an unhealthy situation for the people of the province and so they were concerned. And they were indeed following and monitoring, as everybody was, the discussions as it relates to oil and gas. And they were looking to us, as their partner, to ensure that to the best of our ability – and as it was going to be required of us to communicate that – that we're going to do it in an effective way.

**MR. LEARMONTH:** So you were working side by side with Husky oil, is that right?

**MR. KEATING:** We still do.

**MR. LEARMONTH:** No, no, at the time, though.

**MR. KEATING:** Yeah, at the time, yes.

**MR. LEARMONTH:** Yeah.

And since they were – Husky oil was the biggest possible supplier of natural gas, did you see anything untoward about your communicating directly with Husky oil –

**MR. KEATING:** Completely normal –

**MR. LEARMONTH:** – at the time this –

**MR. KEATING:** – because –

**MR. LEARMONTH:** –this study was about to begin?

**MR. KEATING:** No, not at all. It was completely normal. They're our joint venture partner. We are engaged in mutual activities; we spend money on mutual studies and investments. And the overall determinations of the operator, which is in this case, Husky, for that field, we'd ultimately have to be in a line with to make sure that the field progressed.

So this kind of discussion around natural gas, or oil for that matter, would be fairly typical and common.

**MR. LEARMONTH:** So you're trying to – by saying that all is under control – it's all under control, you're trying to assure him –

**MR. KEATING:** I'm trying to assure him –

**MR. LEARMONTH:** – that Husky has no (inaudible).

**MR. KEATING:** – that Husky – I would do my best to ensure that Husky's interests would be maintained, and also that I would have the ability to be a communicator, if called upon, and I would do my best to inform the public of what, I think, all the analysis to that date has done and supported. And that's my purpose of saying all under control.

**MR. LEARMONTH:** So you're trying to assure him –

**MR. KEATING:** Trying to assure him.

**MR. LEARMONTH:** – that they wouldn't get drawn into the debate?

**MR. KEATING:** That's – that was my intention in that mail, yes.

**MR. LEARMONTH:** And all under control – what exactly is under control?

**MR. KEATING:** The – well, in this particular case, specifically this had to do with, now, a consultant brought in to do an assessment of domestic use of natural gas. I would tell Paul McCloskey that if he was going to be involved or engaged, I would hopefully have a chance to describe to him to what extent it would be, or, as the case turned out, that the government or Ziff communicated with him directly.

So my effort to him would have been just tell him that they say, yes, there's a lot of public discourse around natural gas and, yes, invariably, you will be asked – and he has been asked by the media in that time – but for the purposes that I could, to the way that I know Nalcor has to effectively defend its positions and defend its conclusions, I do my best to make sure the right information made it there.

**MR. LEARMONTH:** You're trying to protect Husky?

**MR. KEATING:** No, I'm just trying to make sure the right information is made available and let Husky know that that's – that'll fall to me.

**MR. LEARMONTH:** Okay.

Well –

**MR. KEATING:** I don't know that Husky needed protection, but for the fact that they did have no interest at being involved in a public debate. And I would have believed that we could have certainly stepped in to Husky's shoes there and been a spokesperson on the resource, on the opportunity.

**MR. LEARMONTH:** Why would Husky need to have any involvement in a study by Ziff on natural gas? Why would they have any right to be involved?

**MR. KEATING:** Well, they would have effectively all the technical information that a company like Ziff would invariably need to do any kind of credible assessment. So whether that

information came directly from Husky or evidently, as it had from us, they would need to have been engaged at some point if that study was going to be worthwhile.

**MR. LEARMONTH:** Okay.

Now, tab 4, Exhibit P-01197, please. So this is an email from you to the same Paul McCloskey dated April 3, 2012.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** That's the following day.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** At 9:15 a.m. you say, Paul: "Could I take you up on" the "offer to meet with someone in your shop to get some alignment on piped gas issues. I believe that we will be out on this soon. We will take you through our assumptions and costs and would be interested in your considerations.

I would have K Costello and our economic" advisor "Terry O'Reilly joining me. The sooner the better."

So why would you send this email to Husky Energy on April 3, 2012, about this alignment?

**MR. KEATING:** Because it may have been – we would have communicated by phone, too, during this time. It seems that Paul offered to say, hey listen, anything you need from us, we'll be more than happy to provide, as long as it's through you. And because my – one of my considerations would have been, okay, has – is – do you have still the same position you have on this piped gas scenario, because simply put, none of us really had looked at piped gas in some time at that point, maybe a couple of years before the – any of the parties really had studied piped gas.

So I wanted to make sure now that this issue is front and centre, I – if I was going to convey any information, either myself directly in the public in speeches or presentations, or Ed for that matter – I had the best information. So Paul said he would be more than happy to meet, get our teams together and share whatever information we had and we could somehow lift or extract for

two reasons; one is that if we could present it or we could study it.

**MR. LEARMONTH:** Yeah, but the report – the study was being conducted by government –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – not by Nalcor.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** So –

**MR. KEATING:** There –

**MR. LEARMONTH:** – did you advise Nalcor or government that you were communicating with Husky Oil?

**MR. KEATING:** Oh, always. And they know that, they would expect that.

**MR. LEARMONTH:** Well, did they know that you – at this time –

**MR. KEATING:** For sure.

**MR. LEARMONTH:** Okay.

And you say very confidently for sure. Do you have any emails or other communications that would substantiate that statement?

**MR. KEATING:** There would be a series of emails – I think, maybe that I've seen and could be in this – where Natural Resources would ask me to have Husky look at some transcript. Or Natural Resources would inform me out of courtesy – inform your partner that the minister was going to make a speech and he's going to refer to it.

So there'd be a natural understanding that I would have an ongoing dialogue with my partner and that as – either as a courtesy to inform them if something was happening or if the government or the minister was looking for a statement or their perspectives, that I would be that channel or conduit.

**MR. LEARMONTH:** Okay, now, I'm not talking about natural assumptions or natural understandings, I'm asking whether you can

point me to any email or record that you may have in our possession that would confirm that on April 3, 2012, government was aware that you were communicating with Husky on this subject.

**MR. KEATING:** On that – with regards to this specific email at that specific time, I don't know that I can connect you to that directly. I do know – I think I forwarded this email to Ed and maybe other senior – Gilbert maybe and Dawn. Sometimes I would add Charles Bown into that loop. And I basically was trying to say: Listen, this didn't go down so well with our partner. You can see how they were irritated; a little bit frustrated.

I know I sent that email. I just can't remember who was in the address line. But other than that, I don't – oops – other than that I don't know if, on that specific matter, government was aware or not. They (inaudible) –

**MR. LEARMONTH:** You don't know?

**MR. KEATING:** No.

**MR. LEARMONTH:** Okay. That's fair enough.

Now, what does – so this word “alignment,” why is it important that you have alignment with Husky Oil on this subject?

**MR. KEATING:** Well, I would think it was important, as partner, to be aligned in all things. It may mean you have a difference of opinion, but the process of alignment is to try to resolve the differences and come to a common conclusion. So on this particular case, I know periodically I've had alignment on this gas issue, particularly the piped gas issue, there's a strong degree of alignment. I just wanna make sure that the alignment persisted and that there was nothing new or that I wasn't aware of, that would've changed my understanding of where Husky's position would've been.

**MR. LEARMONTH:** So you weren't open minded to the possibility that (inaudible) –?

**MR. KEATING:** Did you say I wasn't open minded?

**MR. LEARMONTH:** You wasn't – you weren't open minded –

**MR. KEATING:** Oh, I were – I am – I'm always open minded, and that's why I asked for this meeting.

**MR. LEARMONTH:** Yeah. But didn't you say earlier that, at this time, you were convinced that natural gas had been properly excluded?

**MR. KEATING:** Yeah, that is my understanding and I was convinced. Now, should someone put alternate facts, figures, data or analysis, then I could be – that could be changed.

**MR. LEARMONTH:** Yeah. But what study had there – had been done on the feasibility of bringing – not LNG, but you know, building a pipeline from somewhere in the White Rose field to shore? What study had been done on that and when?

**MR. KEATING:** There were probably, in my memory, maybe some seven, eight different natural gas studies undertaken by either my old employer, Norsk Hydro, by Petro-Canada, now Suncor and now – and Husky. They would've maybe done them individually. They may have done them collectively. They would've all formed a history of proprietary knowledge that would've been in the common domain of those partner companies through a decade. And every three to four years, invariably, if the price of natural gas on the continent went up or down, or if – in many cases a refinery, a new refinery would emerge on the Island, or an expansion of one, this would give cause to these companies to make those types of assessments.

And I can say that in the earliest of these studies – say, 2000, '03, '04 and '05 – Husky did a pre-seminar one in 2004 where they went out for an RFP; I believe the conclusions of which are not public. I think they completely assessed this pipeline perspective. I think it's shared with members of the oil and gas industry to the extent they could. And largely all of our belief stems from those studies through time, and unfortunately, they're not in the public domain.

**MR. LEARMONTH:** These were 2003 and 2004?



**MR. KEATING:** Yes.

**MR. LEARMONTH:** But we're talking about 2012.

**MR. KEATING:** Correct.

**MR. LEARMONTH:** So there had been no study carried out by Nalcor with respect to the feasibility of building a pipeline for natural gas from the offshore to the Island. Is that correct?

**MR. KEATING:** That's correct, no study by Nalcor.

**MR. LEARMONTH:** Well, why not?

**MR. KEATING:** Because we had understood, and the condition still exists to this day, that a small-bore pipeline to feed the domestic market was either uneconomic or less optimal than a host of other natural gas opportunities. So we choose to prioritize other natural gas opportunities for further study. And the pipeline – this small-bore pipeline for domestic use had long since been discounted.

**MR. LEARMONTH:** Well, did you not think that before you reached that conclusion that you should've done an up-to-date study on this subject?

**MR. KEATING:** No.

**MR. LEARMONTH:** No.

**MR. KEATING:** Not at all.

**MR. LEARMONTH:** So from two – you relied on, what you say is, a 2003-2004 report that you believe was prepared by Husky, is that right?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And you didn't revisit the issue at any time before sanction?

**MR. KEATING:** There were no market changes. The load profile was very known and publicly available to anyone. The domestic market was so small. The costs actually would go up. The oil window would extend. The use of gas would extend. Almost every and all indication that would make that pipeline a viable

thing to restudy, were going in the wrong directions.

**MR. LEARMONTH:** Okay, but that's just your general observation –

**MR. KEATING:** That's my – it's an informed executive determination as a joint venture owner.

**MR. LEARMONTH:** So it wasn't the case of you looking at the possibility of a pipeline. It was a case of you rejecting it outright based on a report that was done in 2003 and 2004, is that correct?

**MR. KEATING:** It was a case of taking that body of knowledge and trying to make it understood in a public discourse about natural gas opportunities.

So before you step off and begin that journey, I wanna make sure that what I knew back in 2003, '04, '05 – what I continue to believe I understood, was still the case.

**MR. LEARMONTH:** Mmm.

**MR. KEATING:** So – and as did Husky. So (inaudible) let's get together and look at what our assumptions would've been, and had there been any significant change in those perspectives to warrant a full on re-evaluation and a necessity for further study. And that meeting concluded that there wasn't; we were still aligned on the use of gas as it would be, and with that we went off and got to the next chapter, I guess.

**MR. LEARMONTH:** And when was that again? You said 2003, 2004 in the beginning and then you said 2005.

**MR. KEATING:** Yeah, so now remember, there's – I mentioned seven or eight studies.

**MR. LEARMONTH:** Did you ever receive these studies?

**MR. KEATING:** Personally, yes.

**MR. LEARMONTH:** Okay, do you have them?

**MR. KEATING:** No, I don't.

**MR. LEARMONTH:** Okay, where are they?

**MR. KEATING:** Those would be the property of either Husky Energy, Suncor or Equinor today.

When I left the employment of those companies and started anew at Nalcor, I started with zero documents.

**MR. LEARMONTH:** Yeah. So you don't know – you don't – you're just going by memory as to what was in them.

**MR. KEATING:** Yeah, for the most part on this pipe gas piece, at that time – yes.

**MR. LEARMONTH:** Yeah, so – say, in 2012, you're going on your memory for something that happened, let's say, seven years ago.

**MR. KEATING:** For the most part, yes.

**MR. LEARMONTH:** Yeah. Well, for all.

**MR. KEATING:** Well, what I would say is – what happened in the interim is we did engage in alternate modes of domestic gas production – CNG, for example. So I would've been informed –

**MR. LEARMONTH:** I'm not talking about that. We can talk about – we'll talk about –

**MR. KEATING:** Okay, yeah.

**MR. LEARMONTH:** – that later. I'm talking about the pipeline –

**MR. KEATING:** Okay, no –

**MR. LEARMONTH:** – (inaudible) –

**MR. KEATING:** – there would've been no additional pipeline assessments that I would've undertaken at Nalcor.

**MR. LEARMONTH:** Or that you were aware of?

**MR. KEATING:** No, I would've – I was aware in 2009 that Petro-Canada was doing a study,

because Petro-Canada approached Newfoundland and Labrador Hydro looking for load profiles.

**MR. LEARMONTH:** Did you ever see a report from Petro-Canada?

**MR. KEATING:** No, not at all.

**MR. LEARMONTH:** Okay.

Okay. Now, tab 5, please, which is Exhibit P-01198. If you turn to page 2 of Exhibit 01198, this is from Mr. Paul Harrington. Says: "Jim

"Ed is seeking clarification on what is going to be available by June 7th 2012 to inform the debate on MF. Can you pls let me know what the scope of the Natural Gas and LNG reports are –

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** – and when are those reports going to be completed and issued." So does that ring a bell? Mr. Harrington was involved in this?

**MR. KEATING:** Yeah. So I guess Mr. Harrington, in his role as the leader of the Muskrat Falls Project, was trying to probably collate and collect for Ed – it escapes me now what the significance –

**MR. LEARMONTH:** Is that –

**MR. KEATING:** – of June –

**MR. LEARMONTH:** – Ed Martin?

**MR. KEATING:** Ed Martin, yeah.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** To collect and collate for Ed by June 7. I don't know the significance of that date, as I sit here, see it now, but he's just looking for the status on the LNG or CNG or piped gas piece.

**MR. LEARMONTH:** Yeah. And then your reply is on page 1 of Exhibit 01198.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** “By June 7th there will be an independent report from Ziff Energy regarding both LNG and piped gas option. Ziff would have a draft read for review by the middle of May.

“We will not have a report here per se, but we will have a series of commentaries that may find their way into blogs and letter to the editor. Target is to have these written by the end of the week.”

How would you know that – the dates on which Ziff was intending to, you know, send their report to government?

**MR. KEATING:** I’d say maybe through conversation with Ziff and government.

**MR. LEARMONTH:** Oh, you had a number of conversations with Ziff?

**MR. KEATING:** Yes, I had a couple of conversations with Ziff, maybe three or four.

**MR. LEARMONTH:** Yeah. And – so you were working with government on this project, were you?

**MR. KEATING:** Yeah. So –

**MR. LEARMONTH:** On this review by Ziff?

**MR. KEATING:** So – yes. Let me, I guess, describe my role here. So Ziff asked government if they could interview a series of persons to put this report together, and I was one of them.

**MR. LEARMONTH:** When was this request made?

**MR. KEATING:** This is – now, in no happenstance, I didn’t know at the time, and I don’t know when that request was made. But I –

**MR. LEARMONTH:** Okay. When you say this request was made, what documentation, if any, are you relying on to make that statement?

**MR. KEATING:** A conversation with Wes Foote. It would have no document.

**MR. LEARMONTH:** When did you have that conversation with Wes Foote?

**MR. KEATING:** Just prior to my first meeting with Ziff.

**MR. LEARMONTH:** Okay. And what did he say in that conversation?

**MR. KEATING:** He said Ziff is attempting to connect, either on video conference or in person, as the case may be, on schedules with ourselves, I believe Husky, I think maybe the board and – to just, basically, understand, a little better, the offshore, the potential and, basically, to aid them in the completion of their report.

**MR. LEARMONTH:** So would – was it your understanding that Ziff would provide you with a copy of their draft report?

**MR. KEATING:** Yeah. Ziff told me in my first meeting that they’d be interested if I would take a look at certain aspects of their report, in particular the parts that they were relying on, I guess, ourselves or our partners to provide information, to ensure its correctness and completeness.

**MR. LEARMONTH:** Okay. So did you get a draft report by the middle of May 2012?

**MR. KEATING:** Yeah, I did get a draft. I – it may have been in the middle of May. I just can’t recall the – that first draft, but I certainly did get a draft.

**MR. LEARMONTH:** Okay. Did government get a draft or were you in charge –?

**MR. KEATING:** I believe I got the draft from government.

**MR. LEARMONTH:** You got the draft from government.

**MR. KEATING:** I think so. I think that was the route.

**MR. LEARMONTH:** Okay.

Then you say in paragraph 2: “We will not have a report here per se, but we will have a series of commentaries that may find their way into blogs and letter to the editor.”

**MR. KEATING:** Right.

**MR. LEARMONTH:** What are you be talking about there?

**MR. KEATING:** So in that case the discussion was ongoing; it was continuous. And from time to time, you know, Ed would ask – or Dawn would say – you know, this is something that we know we should get out on. We should we get out on it; should we get out on it quick. We might not be able to wait 'til the final report, is there enough that you know about any subject at all that you can inform the public opinion, because it is a complex and deep issue that maybe if we can put parts of this gas story out – and I would say in this case it wasn't just piped gas. It would have been CNG; it would have been LNG.

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** So it would have been a broader gas strategy. So at that time we were hungry for any and all information that we could make public and help create the – an understanding in the public domain about the realities of our natural gas resource.

**MR. LEARMONTH:** So government had retained Ziff and you – Nalcor – would have felt comfortable in taking information from a draft report and putting it out to the media?

**MR. KEATING:** If that information was correct and substantive, for sure.

**MR. LEARMONTH:** A draft report?

**MR. KEATING:** Yeah. I – now, I wouldn't put a draft report; that's the difference. You said draft report. I would have said if there were parts of a draft report that I saw that held water, and I could certainly see that we could release that, because most of these reports from consultancies are effectively statements of general knowledge. It could be that a preamble about an – the LNG market might be something we would find useful, might be that a general discussion about metocean characteristics might have been something I could have made useful.

So there's a myriad of components of a deep study that could serve as discreet information items.

**MR. LEARMONTH:** Yeah, but it's not your report. It's government's report. So why would you feel justified – you meaning Nalcor –

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** – in taking that information from a draft report and putting it out in the media in part?

**MR. KEATING:** If that was – if it was seen that that was to be interesting or valuable, why not? That would be my assumption.

**MR. LEARMONTH:** Valuable to who?

**MR. KEATING:** Valuable to the public discourse.

**MR. LEARMONTH:** Yeah. Well, I suggest to you that you were – Nalcor at this time was determined to shut down the natural gas option and you were waiting to get this information to substantiate that decision. Is that correct?

**MR. KEATING:** That's correct.

**MR. LEARMONTH:** Yeah, okay.

Now we can go to tab 6, please, Mr. Keating?

**MR. KEATING:** Tab 6?

**MR. LEARMONTH:** Tab 6, which is Exhibit P –

**MR. KEATING:** Okay.

**MR. LEARMONTH:** – 01199.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** Thank you.

Now, you're – this is an email from Wes Foote to Jim Keating – that's you – April 12, 2012.

“Jim

“Did Ziff call go ahead? If so how did it go?”

So I take it that, obviously, Wes Foote knew you were going to have a phone call with Ziff?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And then you say:  
“Really good. Call u tomorrow. Gone to Bryan Adams.”

**MR. KEATING:** Yes.

**MR. LEARMONTH:** So did you call him?

**MR. KEATING:** Yes, I did.

**MR. LEARMONTH:** What did you tell him?

**MR. KEATING:** I said that the meeting went very well – I think it was a long one, a couple of hours – and that Ziff had a pretty good knowledge already of the natural gas resource. And they had – I understood in the phone call – already spoken to Husky. So I think, by my recollection, they had previously spoke to Husky before they spoke to me.

And they had a good deal of knowledge and understanding, which, to me, was good. There was a couple of areas whereby they had a knowledge gap. Most of that would have been around, like, royalty system, how the royalty worked. It might have been around the load profiles that we would have had to supply on the energy use for natural gas. So there was plenty of questions and plenty of gaps that they would ask me.

But they were – they – of the areas where I thought they had most certainty was that – if I can recall, they thought – they said this pipeline is a non-starter.

**MR. LEARMONTH:** Okay. Well, you persuaded them of that, didn’t you?

**MR. KEATING:** No. They – what was interesting to me – what provided me that real good is that, I believe in entering discussions with Husky, they saw to it that this pipeline’s a non-starter. And they believed that the pipeline was a non-starter from two thrusts. One is that it might have been, indeed, on its own, uneconomic, which maybe their report ultimately shows. But I think they were most convinced because the gas resource owner is not interested, or had no interest in making gas available for domestic use, and in their mind

commercially how do you start from there. So if the gas resource owner has different options, different plans for its gas, of which he understood and talked about, then this is a non-starter.

**MR. LEARMONTH:** Yeah. So you’re aware that before April 4, 2012, Ziff had had discussions with Husky.

**MR. KEATING:** I distinctly remember because my first five minutes of almost any discussion with any company that wants to talk to Nalcor Energy about gas, as I say, you should talk to Husky first.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** Because it would save a tremendous amount of time and energy. And invariably – and in this case, they had, so that was a relief to me.

**MR. LEARMONTH:** So I take it your position is that unless Husky expressed an interest in this, it was a dead issue?

**MR. KEATING:** Absolutely.

**MR. LEARMONTH:** Okay.

So Husky had the veto. If Husky said for whatever reasons we’re not interested in talking about a pipeline – that was the end of the matter?

**MR. KEATING:** That would have been a pretty big ending. There would be precious few alternatives to employ if the gas resource owner had no interest to develop an offshore project.

**MR. LEARMONTH:** But what about negotiations?

**MR. KEATING:** You need a willing buyer and a willing seller and we didn’t have a willing seller.

**MR. LEARMONTH:** But you had negotiations. The provincial government has exerted power over oil companies.

**MR. KEATING:** And I’ve been first-hand in any number of those negotiations and time and

time again when it came to natural gas monetization, we would have employed a multitude of scenarios that may encourage Husky, Suncor – the White Rose gas owners – because I should add that Nalcor is not a White Rose gas owner. That we would try, on numerous occasions, to convey or compel Husky to see a merit in some commercial opportunity, but one – of course, the weakest one always had been is the singular provision of gas for the electricity market.

Most of the more compelling ones, which did lead to discussions and meetings and analysis, led to scenarios whereby you would expand the marketplace through a new refinery, a new expansion resisting refinery or, as I mentioned earlier on, the provision of an export line on gas to wire.

So we would try to create the circumstances that the gas owners would see as maybe a more substantive market, a more compelling market, that when they look at their optional value, it would creep up in their list. And then, if you had seized that imagination, then you could begin a negotiation. But as it always was with the domestic provision of gas at 30 million MCF on average, that was of no interest and continues to be.

**MR. LEARMONTH:** Okay, now you're talking very generally about discussions and so on.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** I want to know the times of these discussions, the dates of these discussions and I want to know who was present –

**MR. KEATING:** Mm-mm.

**MR. LEARMONTH:** – and I want to know exactly what the subject matter was. Do you have any notes or records of these meetings or discussions?

**MR. KEATING:** I have a series of emails that relate to a number of opportunities.

**MR. LEARMONTH:** What dates are these emails?

**MR. KEATING:** Oh –

**MR. SIMMONS:** Excuse me.

Mr. Commissioner, I just wanted to point out that these are very specific questions about dates and communications of particular things that have not been specifically explored in any preparation for Mr. Keating's evidence. So I'm sure he'll do his best to respond, but there could be follow-up that we could do afterwards if these are items of interest.

**THE COMMISSIONER:** Thank you.

Did you want to respond to that, Mr. Learmonth?

**MR. LEARMONTH:** Well, you know, I guess I could say that's very helpful, Mr. Simmons, but I'm asking the question, so if he doesn't have any reference point, then he can say that.

**THE COMMISSIONER:** Right, but in fairness, if there are – you know, if there are things that he doesn't have today that could be available tomorrow, then I think it might be helpful to me to see those at some stage.

**MR. LEARMONTH:** Well, if that's your decision, that's fine, I won't ask him any more about it. But I would ask for –

**THE COMMISSIONER:** No, I'm not saying you can't ask him the question, I'm just saying that if he – you know, if he's not able to answer today and he's able to provide additional information later, then I think we would be – I would be interested in seeing that. But I'm not saying – I don't think there's any objection to the questions that are being asked.

**MR. SIMMONS:** No, there's no objection to the questions.

**THE COMMISSIONER:** Okay.

**MR. SIMMONS:** I just wanted to put it in that perspective. And it is an area where – and as you can appreciate, we've managed, I think, the structure of this so we could avoid getting into commercially sensitive areas where there'd be any concerns about public discussion. Depending on how far that line of questioning

goes, that could be an area where we could start to stray into some concerns around.

**THE COMMISSIONER:** Right, okay. I understand that. Okay.

Mr. Learmonth, I just noticed it's 10 after 11. Did you want to take your break now – take the break or did you want to continue on? It's up to yourself.

**MR. LEARMONTH:** That's fine, we can take a break.

**THE COMMISSIONER:** Take a break? Okay, so we'll adjourn now for 10 minutes then.

**MR. KEATING:** Sure.

**CLERK:** All rise.

### Recess

**CLERK:** Please be seated.

**THE COMMISSIONER:** All right. Mr. Learmonth, when you're ready.

**MR. LEARMONTH:** Okay. Thank you.

Just before – just turn back to tab 6, Exhibit 01199. You're saying to Wes Foote, at the top of that email, "Really good." in terms of the telephone call with Ziff. So, what do you mean by 'really good'?

**MR. KEATING:** Um, yeah. So, what I meant by really good was, Ziff had a pretty good knowledge of our offshore. They – understood for such a – I guess, short time to be engaged in this file, the particularities of the offshore, the ocean environment, the regulatory environment, fiscal environment. So, that was really good – that they were quick to study.

Also, really good was that they had previously engaged Husky – spoke to Husky. And that resonated with me most, because oftentimes – my interactions with consultants or proponents of projects invariably ends that: you need to speak to Husky more deeply before you believe that this a concept that you wanna move forward with, or study or evaluate. So, they had in fact

done that. So I, collectively, believed that to be a good outcome.

**MR. LEARMONTH:** Okay, well, was your objective to inform Ziff or persuade them of the right – correctness of the position (inaudible)?

**MR. KEATING:** My objective was to inform them. They would come to their own conclusions.

**MR. LEARMONTH:** Okay. But you were trying to persuade them also of the correctness of your position, weren't you?

**MR. KEATING:** Oh, I would – I – if they held a contrary opinion, I would attempt to explain the validity of mine, for sure.

**MR. LEARMONTH:** So, why is it that Husky held the hammer? That – if Husky wasn't interested, that was the end of it? The reason I say that is that – like, oil companies, we know that they're big and powerful and that, but you can negotiate with oil companies. For example, our Premier Williams negotiated very successfully with oil companies on Hebron, when he sent them away, because they wouldn't give what he considered to be sufficient share of the project to the province.

So, well, you know, maybe oil companies are tough to deal with; that doesn't mean you can't approach them with a proposal. For example, we're gonna build – pay for a pipeline, this is the deal.

**MR. KEATING:** For sure. So I –

**MR. LEARMONTH:** So just – I'm suggesting to you, that the discussion with Husky, or any oil company, does not end with the oil company saying: we're not interested in discussing that. There is lots of give-and-take – they are applying for development permits and so on.

So, I guess my question is to you that: do you acknowledge that the art of negotiation plays a large play in these things, and just because one party's opening position is a flat no, that it doesn't mean that's where you're going to end up.

**MR. KEATING:** I would fully agree to that.

**MR. LEARMONTH:** You do?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** Fully agree.

**MR. LEARMONTH:** But nevertheless you said that when Husky said no to Ziff; game over.

**MR. KEATING:** Yeah, that's – and that's what Ziff believes that in all negotiations – and you mentioned the one about – with Premier Williams and Hebron – here's the situation where you had two willing parties to conclude on a project. Where they differ is on how the value would be allocated.

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** In this particular case, Husky believed there's no value to be allocated.

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** It wasn't interested in pursuing it. If contrary in the art of negotiation, the other party would introduce additional value to such a time that the other party recognized it; that indeed is part of a negotiation.

**MR. LEARMONTH:** Right.

**MR. KEATING:** My understanding is of – at the time, that the provision of this extra value on a project that was either negligible of starting value or likely negative value, would have not been an advisable course of action and, at the end of the day, too, what we need to be mindful of is that companies are operating in our offshore no different than they are anywhere in world.

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** They have multiple opportunities to invest their capital. Husky Energy or Suncor, as the case may be, could always and will always employ the value of real options. So they will have made an assessment and said that we are better off doing what we're doing, in this case, injecting for pressure support for more oil and storing for future potential

development, than engaging in any consideration today. Now –

**MR. LEARMONTH:** How do you know that was Husky's thought process? How do you know that?

**MR. KEATING:** How do I know that? Well, first of all, it's in – they state what their intention is in their gas management strategies in other documentation and they've been on, I guess, the records for saying this is what our intention is. They are constantly asked about the commercialization of natural gas and they say –

**MR. LEARMONTH:** On offshore –

**MR. KEATING:** – it's –

**MR. LEARMONTH:** On our offshore?

**MR. KEATING:** Offshore? Absolutely.

**MR. LEARMONTH:** Well, can you show me where they've made public statements about that?

**MR. KEATING:** Okay. In the last development plans that we spoke of this morning; in the gas management strategies.

**MR. LEARMONTH:** Okay, we'll look at that.

But I come back to the point that it's a defeatist attitude to just say – or it would be for someone to say: Husky said no, that's the end of the matter. Because I'm suggesting that there are other applications that the – where they need the co-operation of government and this can be, with the leverage given to government holding that hand, that the – to foreclose the possibility of a successful outcome is a, I suggest, a defeatist attitude.

**MR. KEATING:** So I would agree that that would be a defeatist attitude, but I guess what I'm going to try to convey, if you look at tab 15.

Tab 15 is a presentation deck from August 2006, and actually addresses the earlier question before the break: Do we have any examples of where Nalcor – in this case, Hydro – engaged Husky for the purposes of commercialization of



their natural gas through any means, including pipe? So this was a –

**MR. LEARMONTH:** It's 2006, right?

**MR. KEATING:** This is 2006, August.

**MR. LEARMONTH:** Yeah, not 2012.

**MR. KEATING:** No, no. There was – nothing changed. So in that particular package we lay out a pretty compelling argument why Husky should consider the commercialization of natural gas and in that particular circumstance, we believe that the market expanded. Now, what happened is that market didn't materialize, and the opportunity waned. And in our view at the time the project, the economics of the project were undermined and no further discussion was warranted.

**MR. LEARMONTH:** Yeah. Okay, well that was 2006.

**MR. KEATING:** That's correct.

**MR. LEARMONTH:** Yeah, well, anyway.

**MR. KEATING:** That is one example. Probably, in follow up, we can probably find a few other emails where we attempted to engage Husky on gas issues (inaudible).

**MR. LEARMONTH:** Can you show me those emails?

**MR. KEATING:** I don't have them here with me and –

**MR. LEARMONTH:** Can you find them?

**MR. KEATING:** I can probably find a couple, yes.

**MR. LEARMONTH:** Okay, well, would you do that and –

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** – give them to me.

All right, page – there's just one thing that came to mind, I'm just going to go back for a minute,

if I can, to tab 2, which is Exhibit P-01195, please.

**MR. KEATING:** Exhibit what number?

**THE COMMISSIONER:** 01195.

**MR. LEARMONTH:** 01195, it's at tab 2.

**MR. KEATING:** Tab 2, sorry.

**MR. LEARMONTH:** And if you turn to page 2 there were three points that Ed Kallio made after observing the comments of Professor Bruneau.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** And you said you agree with the – with 1 and 3 –

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** – but not with 2.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** But then if you look at your email on page 1 to Ed Martin and Gilbert –

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** – Bennett you don't make that statement.

**MR. KEATING:** No, again, I agreed with Ziff's assessment, especially the one about (inaudible) LNG export case.

Again, to me, that wasn't – the pipeline option, I have to say at that time, was not my primary focus. I was really focused on the LNG, because I believed LNG –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – had the most likely compelling case. So I probably would gaze over most of the other references to the pipeline, per se, because at that time, too, I hadn't had a chance to fully scrutinize the presentation. I didn't have a consultant sit and watch the Bureau presentation. I was getting this in real time, so I would've made a read, not much more

than seven or eight minutes of these points, and largely felt it okay.

**MR. LEARMONTH:** Yeah, but tab – you know, point – you’re a professional –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – man.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** You pay attention to detail, and on page 2 – point 2 on page 2, it’s pretty clear, and you said earlier that the – you would substitute 2028 to 2030 for the 2020.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** I just find it – based on what you’re saying now – I suggest that it’s unusual that something as significant as that would not have caught your attention the day after.

**MR. KEATING:** I wouldn’t say that’s unreasonable. There’s a –

**MR. LEARMONTH:** You –

**MR. KEATING:** – ton of data, ton of information. Timing: no quibble. I probably would’ve felt the same. I wouldn’t have jumped on that as some specific piece of information that –

**MR. LEARMONTH:** Why not?

**MR. KEATING:** – made or break this discussion.

So, I would say in the preponderance of the facts and figures and numbers there that I would be looking at, the timing, when someone says: ish, it is a matter of degree, and I take your point. There’s a difference between 2020 and 2028; that’s eight years, but could be – I don’t know, maybe it was 2025 was – I have no idea what was mentioned or said. So –

**MR. LEARMONTH:** But you said 2028 to 2030.

**MR. KEATING:** That’s what I said.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** I’m referring –

**MR. LEARMONTH:** And now you’re saying 2025?

**MR. KEATING:** No, no, no. I’m – what I’m saying is in my mind 2028 was the right year. I know that now, and at the time, I might’ve had a range on that. I would not have had in the front of my mind absolutely the year that White Rose gas would be available because I’m not engaged in the production of gas these days. I’m engaged in the production of oil; a lot going on; presentation the night before, some expert reviews it. I high-grade view it and say: You know, generally, I think what they’re observing is fine.

In hindsight, with the benefit of hindsight, as I look down at those three items, I would say number two was one of the ones that I’d probably have least agreement with, but at the time, I wouldn’t have – probably even caught my eye.

**MR. LEARMONTH:** Okay. Well, that’s your explanation.

Okay, we’ll go back to tab 7, which is Exhibit P-01200. This is email from Jim Keating, you, to Ed Martin, April –

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** – 12, 2012. The bottom you say: “Spoke with Ziff 3 hours. Real good. Ziff said ‘Husky says they are considering using gas for pressure support in the future. That’s it. End of story.’ I pile drove another dozen issues. They most like the one that ‘oil runs out in 2023 or 2028 at latest.’”

So you had a three-hour telephone –

**MR. KEATING:** Yes, I did.

**MR. LEARMONTH:** – with Ziff?

**MR. KEATING:** Yes, I did.

And you're saying – earlier, you said that mainly you're intending to inform them, not persuade them?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yeah. Well, why would you be pile driving?

**MR. KEATING:** Well, because – again, big issue. They would say: Mr. Keating, how does the royalty work? Oh, okay. Let me explain. Well, we can't find evidence of the royalty. Well –

**MR. LEARMONTH:** By the way, do –

**MR. KEATING:** – it's in the Energy Plan.

**MR. LEARMONTH:** I'm going to interrupt you just for a sec. Do you have any record of these conversations?

**MR. KEATING:** No, I don't – I didn't keep notes of the conversation.

**MR. LEARMONTH:** So your memory is – so you're going back six years.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** More than six years.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And you're giving a detailed –

**MR. KEATING:** No, no. I'm not giving a detailed three-hour, I guess, retrospective of what was in that conversation. But I can remember the highlights, the high points. The high points were, as this email confirms, that Husky was engaged before me. The other one, which I'm happy to see, is that the issue spans between 2023 and 2028. So I was accurate in your earlier question on 2028; they're maybe in the span. So maybe now we understand the context of me not quibbling with 2023 to 2028. That's useful.

The issue that I thought was pile driving were mostly issues not so much along the technical lines but for this: what's the composition of the

gas, is it rich, what's the amount of liquids we could get out, some of those technical considerations.

What is – a very important one they wouldn't have any insight on: what would happen when the oil runs out? And – well, that's a good question. Well, if you're the oil producer, you would look at the value of this gas project – very small, low-revenue stream of gas, if at all. It could be negative stream – and you would likely sail away. And they said: Okay, that's what we've concluded, and that's what you believe it would be. And I said: Yeah.

So we went down through a number of sort of macro issues, some technical ones. Royalty was a good one. I remember that was a pile drive, and what I mean by pile drive was, you know, they were looking for the legislated royalty, of course there wasn't one. There was one at the Energy Plan, I think, contained wherein. It was general. And I had then to explain the intent of that natural gas royalty was going to be similarly – the provision was going to be similarly provided as was in the oil royalty section, so I had to explain how that kind of works.

**MR. LEARMONTH:** (Inaudible.)

**MR. KEATING:** So those are the kinds of things that would take three hours, much the same as this morning, in terms of having a consultant understand some of the broader issues. So that's really what I meant. So it felt really good, was full – I was asked the right questions, and they seemed to know a lot of good stuff. And where I could, I helped them, and they accepted and found no issue, and there it was.

**MR. LEARMONTH:** But if they're doing an independent study, why are they relying on information provided to you?

**MR. KEATING:** I –

**MR. LEARMONTH:** Provided by you.

**MR. KEATING:** It is a question that you could put to them, but I – in my experience, I don't know that I've ever commissioned a study – now, in the private sector, there's not so many independent studies. You commission studies

for expertise and insight. But I don't know that I would have ever commissioned a study where I wouldn't have invited those that would know the information first-hand, have experience, know some of the opportunities or deficits to inform my study.

So for me, this notion of true independence, meaning that you just send the letter and please deliver, and there's nothing in between with any of the proponents that are engaged, I don't know that that – it works well or, in actual fact, exists.

In this particular case, I felt, very much so, that this was – and it is – Ziff asking us for information versus us inserting ourselves into their content.

**MR. LEARMONTH:** It appears that Ziff put a lot of weight on what you said and what Husky said, is that right?

**MR. KEATING:** For sure, it would likely be – other than what is publicly available, which wasn't a lot – their only source of information.

**MR. LEARMONTH:** Okay, and do you know how many conversations Ziff had with Husky, say, up until April 12?

**MR. KEATING:** I am not – I don't know that.

**MR. LEARMONTH:** You don't know that. And so you say Ziff said Husky says they are considering – considering – using gas for pressure support in the future, that's it. End of story.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** What story is ended by Husky saying that they're considering that?

**MR. KEATING:** Yeah, so when – Husky at this time was in the process of –

**MR. LEARMONTH:** No. Based on this statement –

**MR. KEATING:** Yeah. Okay, and –

**MR. LEARMONTH:** I wanna take you back to that statement –

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** – because you say they're considering using and then end of story.

**MR. KEATING:** Right.

**MR. LEARMONTH:** What story?

**MR. KEATING:** Whether they were going to make commercially available natural gas.

**MR. LEARMONTH:** But they were just considering it, they – you said.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** So they hadn't, like, determined that that was their (inaudible) –

**MR. KEATING:** No, they hadn't determined it, but in – what was this date. This is April 2012.

I would say the plans were fairly well advanced, a significant amount of assessments would've done, and they would've probably been comfortable with the fact that this would allow them to exploit fields, like the southwest extension. And I'm feeling – short of them putting that into a plan and submit it, internally they were crystalizing on that as the most likely outcome.

**MR. LEARMONTH:** You're just guessing, Mr. Keating.

**MR. KEATING:** No.

**MR. LEARMONTH:** You don't know.

**MR. KEATING:** I'm a partner.

**MR. LEARMONTH:** How do you know that?

**MR. KEATING:** I'm a partner, and I'm engaged in this in –

**MR. LEARMONTH:** Yeah, but how do you know that at that time – I'm gonna to go back over what you just said. How do you know that information is true?

**MR. KEATING:** Because we would be going to –

**MR. LEARMONTH:** No – what you did do, not what you would’ve done, is what I want to hear.

**MR. KEATING:** Okay. What happened at that time is I have Management Committee representatives and technical committee representatives. We meet in quarterly and monthly meetings, as the case may be, and Husky, the operator, would present its plans for the year, for the future and for, at this time, this would have been the White Rose Expansion Project and my team would have informed me, and using Husky information and material, that that indeed was their course of action.

**MR. LEARMONTH:** Yeah. Well, that’s your answer.

**MR. KEATING:** That’s my answer.

**MR. LEARMONTH:** It’s on the record. And then you say at the end: “End of pipe option.”

**MR. KEATING:** Yes.

**MR. LEARMONTH:** So that’s over. As far as you’re concerned, you persuaded them that – forget about the pipe option.

**MR. KEATING:** No. They were persuaded – as I was on the phone listening to their commentary, as they heard that from Husky, they made that statement to me that this is – I think they said this is a done deal or this is not happening, is it? And then I said, well, that’s what it seems. It was the opinion of Ziff, after the conversation with Husky, that this pipeline option wasn’t a realistic one.

**MR. LEARMONTH:** And that was because Husky said they were considering using –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – gas?

**MR. KEATING:** One hundred – yes.

**MR. LEARMONTH:** Considering. That’s a pretty wide-open term, isn’t it?

**MR. KEATING:** Yes, it is.

**MR. LEARMONTH:** Okay.

Anyway, so then you get a reply from Mr. Ed Martin. He says – this is April 12, 2012 – the top of page 1 of Exhibit P-01200. “Bingo. Are they definitely done? We still need your stuff, with a –” I guess it’s bow?

**MR. KEATING:** Bow. Yeah.

**MR. LEARMONTH:** Not a bough. A bow.

**MR. KEATING:** No, no. Bow.

**MR. LEARMONTH:** “I have learned that winging doesn’t work ...”

So how did you interpret that bingo?

**MR. KEATING:** Yeah. Okay. So what, again, was elusive because Husky was considering, at that time, they may have not made any or many overt statements as – with regards to why or why not they were not commercializing gas.

I can’t be certain, but all I know is that we were indeed in need of statements by Husky that completely declared what their intentions would be, that an independent consultant engaged Husky and heard that information, first-hand, was significant, and of course, we were interested that they would include that in their report. And then Ed would say – all right, that’s a big piece of the unknown that it’s not commercially available. Now we need to get on and get the particulars in the presentations.

**MR. LEARMONTH:** So this 2023 to 2028, you’re saying that was correct at the time?

**MR. KEATING:** Yeah, that would have been, in my mind, a range of outcomes when the oil would have depleted, based on planning scenarios that would have been available.

**MR. LEARMONTH:** Yeah.

But you gave that information to Ziff, did you?

**MR. KEATING:** Yeah, I believe I did.

**MR. LEARMONTH:** Yeah and it was an important piece of information?

**MR. KEATING:** Yes, I believe it is.

**MR. LEARMONTH:** It seems to have turned the tide.

**MR. KEATING:** I don't know I would give that that kind of quality. I think I may have made a dozen or more points. They may have had as many or more. This is probably one that – oh yeah, okay. So the context of that one would have been for Ziff is they were unsure in the planning horizon that gas would be made available, if that FPSO, the production facilities, was actually going to be there.

So when they look out decades to say, okay, this is the case that I'm asked to look at, would the production facilities be there? And then they would be quick to say – and I would agree – as long as they're producing oil there's certainly a case to be made that you could produce gas alongside of oil and land it. There's certainly those – that's – I still believe that to that day. It's – it shares costs. But the provision that the gas will run out at somewhere in the 2020s –

**MR. LEARMONTH:** The oil.

**MR. KEATING:** – oh, sorry, the oil, runs out then causes a big decision. Who provides the service? Will the gas owner sit there and just provide the gas service without the production of oil? And if so, who bears the costs of that? So that then turned their attention to say, okay, I think we may have figured out from 2012 to 2028, say, that – they could put their mind around that, but they didn't truly appreciate the post-oil reality.

**MR. LEARMONTH:** Okay. And you've – you maintain that position today that 2023 to 2028 is the end of oil production?

**MR. KEATING:** No, I'm optimistic today that, again, as the fields go and we drill and we find more oil and gas, that that window extends. As a matter of fact, the operator, Husky Energy, is looking at now life expansion – life-of-FPSO expansion go beyond 2030, of course, because we hope to produce oil into the future.

So, yeah, so my number today, if you were asking me, I'd say it'd be mid-2030s or slightly beyond for the oil window. And, of course, as I

say that, there are a couple of exploration opportunities that may add oil and extend that.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** So it's a dynamic number.

**MR. LEARMONTH:** Yeah but I suggest to you that in 2012 before sanction, Husky had indicated that they'd be producing oil on the West White Rose Extension Project (inaudible) up to 2041.

**MR. KEATING:** No, I don't think they would have held that consideration. At the time in 2011, 2012 the Wellhead Platform Project, as it was one of the concepts being under consideration, was a front-runner and a significant amount of study had been involved. But if you can recall, back in 2012 we were fairly optimistic that we would fairly soon get that into sanction and in production. As it is, it was delayed about three to four years because of the collapse in oil prices and – but for that, I would have accelerated the production profile.

But now we're in a situation where that platform is not going to be ready 'til 2022, 2023 and effectively we extend the field that way as well. It's just a deferment of production. So, at the time, oil price was high, the opportunity was near and present and a lot of effort was put into filing the development plans to see if we can accelerate and hit that window, which is the 2028, the back end.

There was the delay, a collapse in oil prices, deferment in production, very public in that. There's lots of information out there in the public domain about what happened there. So it is the same project except it's shifted. So, in fact, gas availability has effectively shifted because they're still going to need that gas for pressure support, except it's going to be utilized a little longer.

**MR. LEARMONTH:** Yeah.

But I suggest to you that as early as May 2012 Husky had indicated that they expected the field to be producing oil until 2041 at least. You don't agree with that, do you?

**MR. KEATING:** I don't disagree with that but –

**MR. LEARMONTH:** Do –

**MR. KEATING:** – I don't know that that's in a plan that I would –

**MR. LEARMONTH:** Okay, well, let's just look at Exhibit P-01313 which is your Tab 22.

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** You see page 1? This is May 2012 White Rose Extension Project.

Do you see that, Sir?

**MR. KEATING:** What page? Page – oh sorry, page 1?

**MR. LEARMONTH:** The cover page.

**MR. KEATING:** Yes, yeah, the cover page.

**MR. LEARMONTH:** Okay. Then go to page Roman numeral i. I'm going to read this to you.

**MR. KEATING:** Roman numeral i.

**MR. LEARMONTH:** Page 3.

**MR. KEATING:** Oh, sorry, page 3.

**MR. LEARMONTH:** Sorry about that.

**MR. KEATING:** Okay. Yeah.

**MR. LEARMONTH:** Okay.

So the first three paragraphs are a description of the White Rose Extension Project.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** And that's the one that's under construction at Argentia now, correct?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** It says – paragraph 4: “The WHP will consist of a concrete gravity structure (CGS) with topsides consisting of drilling facilities, wellheads and support services

such as accommodations for 120 to 130 persons, utilities, a flare boom and a helideck ... topsides will be constructed at an existing fabrication facility and is therefore not considered part of this Project Description. The primary function of the WHP is drilling. There will be no oil storage in the CGS. All well fluids will be transported via subsea flowlines to the *SeaRose FPSO* for processing, storage ... The design of the WHP will account for the risks posed by icebergs, sea ice and the harsh environmental conditions found offshore ... The productive life of the WHP facility is currently planned to be 25 years.”

**MR. KEATING:** So if I can attempt to –

**MR. LEARMONTH:** Okay, I just want to give you another piece of information, too.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And then, so 25 years from what? If you go to page 35 of the same document, you'll see project schedule: The WREP development schedule affects the current preliminary timeline projected to achieve first oil within the fourth quarter of 2016. So I'm suggesting you that in May 2012 Husky was indicating that there would be – it'd be – first oil would be in 2016. If you add on the 25 years that I referred to you from page 3, we get – I guess it's ironic – 2041.

Now I suggest, Sir, that that puts to rest this business you're talking about, about running out of oil in 2023 to 2028. Do you agree?

**MR. KEATING:** Let me – so this was in May. Bruneau's presentation was in March.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** Okay, so this came out after.

**MR. LEARMONTH:** That's right.

**MR. KEATING:** Okay, so number one; number two, the productive life likely refers mostly to that as a concrete structure with the capability of performing productive services –

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** – for at least that period of time.

**MR. LEARMONTH:** Well, okay –

**MR. KEATING:** There is a –

**MR. LEARMONTH:** Go ahead.

**MR. KEATING:** – separate discussion as to whether the reservoirs would be productive to that point in time. And I was just searching in this document here now – I haven't seen it in ages – to see if there's a production profile to match. If there's a production profile to match the 25 years, I'll accept your point.

**MR. LEARMONTH:** But –

**MR. KEATING:** But that is an important aspect, that the productive life – it's like the FPSO life. The FPSO life is 2030.

**MR. LEARMONTH:** Well, I suggest you, you can look all you want, and –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – if you find something, I will be happy to –

**MR. KEATING:** Sure.

**MR. LEARMONTH:** – acknowledge the error that I've made.

**MR. KEATING:** Okay.

**MR. LEARMONTH:** But until you show me something like that, I'm suggesting you two things; to start off with, an oil company is not going to spend billions of dollars building a concrete platform unless it has solid information that the service life that – you know, 25 years for oil production is going to be met. In others words, it's totally unreasonable, in my opinion, to suggest that an oil company would incur this expense, believing that the production life would

be, you know, 2028, because of the capital expenditure. Do you agree with me?

**MR. KEATING:** (Inaudible) – I'm gonna give some context and condition to that –

**MR. LEARMONTH:** Well, what the context –

**MR. KEATING:** No, I don't – no, I don't agree fully with the statement as conclusively as you make it. You would have to look at the choice of the wellhead platform here was to give additional drill slots to –

**MR. LEARMONTH:** Right.

**MR. KEATING:** – take on, maybe, some 120-million barrels of production.

The wellhead platform is an ice-proof structure – that if we were in any other part of the world, wouldn't – would simply not be – not materialized. It will either be subsea development or some steel jacket. So the choice of building a big robust concrete structure is mostly dominated by two factors: the environment and, of course, the reservoir. The productive life then – the opportunity there is with a big robust structure like a wellhead platform, maybe it's the productive life that we're looking for. Actually, it's gas production at the end of field life – blowdown.

So there are a number of strategies that Husky would put in place. And yes, it would seek to fill that productive life of 25 years with future exploration and future field expansion.

I don't necessarily agree that they build structures whose lifespan expires at the last barrel.

**MR. LEARMONTH:** Well –

**MR. KEATING:** I don't think they match. And I'd be happy to just – well, I just can't recall now what the 2012 development plan application called for in terms of oil production. And if indeed is 25 or beyond, I certainly take your point, but I think the choice of the concrete facility and the huge investment in it is multi-factored.



**MR. LEARMONTH:** Well, anyway, I've pointed this out to you –

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** – and I've suggested to you that based on this information – there may be more information – but based on the information, your use of the terms 2023 to 2028 as the end of oil production – and that's what you've relied on – is simply wrong.

Now, if there's other information that I don't have I'll gladly open my mind to that, but, you know, I think –

**MR. KEATING:** So –

**MR. LEARMONTH:** – you've put a lot of weight on that Mr. Keating.

**MR. KEATING:** I'll put the weight on it this way: This project wasn't sanctioned. Meaning this may not – in 2012, despite this filing of the development plan and the intention of the operator, this project wasn't sanctioned, but for a couple of years ago – 2015. So this was deferred – is this may have never happened. So at the time if I engaged a consultant, he may – could have – and he did, I think, have a scenario where there's a stand-alone structure, purpose-built for gas production.

I don't think this consultant – because as Husky said in their own words to him, their plan is to – forget the gas pressure support. The consultant will only have to go on with – what is available to him. This wasn't available to him, I don't think at the time, nor was it certain. Neither – none of the partners – although we were working towards it, and a lot of information informed our considerations – had any complete knowledge that this would see the light of day. In fact, it almost didn't.

So at the time, I would've relied on the cases that the consultant built, which was the expansion of the FPSO, which was the end of the oil window as was approved by the board. This was not approved by the board for production. So this 25-year productive life, if that's what it is, is – it wasn't approved by the C-NLOPB to even occur.

So I need to go back – (inaudible) – I guess as a benefit of hindsight – we know there's a big concrete structure out there now, I know that provides –

**MR. LEARMONTH:** No, no, this is May 2012, Mr. Keating.

**MR. KEATING:** Yeah, May in 2012.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** But there's no sanction.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** There's no approved development –

**MR. LEARMONTH:** Right.

**MR. KEATING:** – plan. All there is, is an approved development plan for current production profile, which is 2020 –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – (inaudible) 2028.

**MR. LEARMONTH:** Well, when you made that comment, the 2023 – which seems to be from the emails – I suggest a strong, potent –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – selling point for your position to Ziff.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Why didn't you tell them about this other information so that they could analyze it, if your intention was to inform them rather than persuade them?

**MR. KEATING:** They did – they were aware of that.

**MR. LEARMONTH:** Oh, they were?

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** Well, if you were aware of it, why didn't you put it in your emails? How do you know they were aware of it?

**MR. KEATING:** Because they – the scenario that they adopted as the hybrid – or I guess this in absence of a known FPSO, was this stand-alone development. Now, you know, I could've taken exception to it and – I actually – actually, if you look at the Ziff report, they do – they do in fact consider this. If you look at the graph – if you do you look at the graph, there's one of FPSO – the Refit FPSO – and I think there's some discussion here – West White Rose.

See that West White Rose scenario in tab 23, page 20? I believe – and my memory serves me correct – integrated – so here you are, on page 19 –

**UNIDENTIFIED MALE SPEAKER:** Exhibit number, please, Mr. Chair – Commissioner.

**UNIDENTIFIED FEMALE SPEAKER:** (Inaudible.)

**THE COMMISSIONER:** So it's tab – 60, 00060 –

**MR. LEARMONTH:** Tab –

**THE COMMISSIONER:** – and (inaudible) –

**MR. LEARMONTH:** What is the tab number?

**THE COMMISSIONER:** Tab is 23.

**MR. LEARMONTH:** Yeah.

**THE COMMISSIONER:** And the page is page – I think, page 20.

So we'll just wait for a second 'til we get this brought up.

**MR. KEATING:** So – yeah, so this is the document, and if you turn to page 19 – Exhibit page 19. And if you look at Integrated West White Rose.

**THE COMMISSIONER:** Page 19.

**MR. KEATING:** And if you read that – I can read it: "A potentially lower cost alternative to a

standalone development could be to integrate the gas well development with the Well Head GBS that Husky is evaluating ...."

So it was fully contemplated and understood; we made sure that they did.

**MR. LEARMONTH:** Yeah, but where's the reference to this year – the 25-year lifespan from 2016?

**MR. KEATING:** So what I'm – what I –

**MR. LEARMONTH:** No, but where is –

**MR. KEATING:** – I don't think there's any reference. I don't think it has an operable reference. The operable reference would be –

**MR. LEARMONTH:** What does "operable" mean in term – is it –

**MR. KEATING:** Operable is operating – the production profile.

**MR. LEARMONTH:** Okay.

**MR. KEATING:** Not the physical life –

**MR. LEARMONTH:** Yeah, but –

**MR. KEATING:** – expectancy of the structure.

**MR. LEARMONTH:** So you're relying on that, are you?

**MR. KEATING:** Well, I'm relying on the –

**MR. LEARMONTH:** That paragraph?

**MR. KEATING:** I'm relying on the oil production that the Well Head GBS could produce for the purposes that we understood at the time. And I believe Ziff understood that and worked that into their analysis.

**MR. LEARMONTH:** Well, you didn't understand it, because if you had understood it I suggest that you would have made comment of it.

**MR. KEATING:** I didn't have to. They accept – they integrate – I don't understand your question.

**MR. LEARMONTH:** Well, you're saying now that Ziff was aware of this – the information that I gave you.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** I suggest to you, number one, you weren't aware of it, because if you're an honest man, which I presume you are, and you had been aware of the information I gave you, that you would've passed that on to Ziff.

**MR. KEATING:** I –

**MR. LEARMONTH:** And I suggest you weren't aware of it –

**MR. KEATING:** I don't know what –

**MR. LEARMONTH:** – and that's why –

**MR. KEATING:** – (inaudible) reference –

**MR. LEARMONTH:** – you didn't say –

**MR. KEATING:** – you're making in that claim.

**MR. LEARMONTH:** Well, I'm asking you: Why didn't you pass on this information to Ziff –

**MR. KEATING:** 'Cause –

**MR. LEARMONTH:** – rather than just leave it that the oil is gonna run out at '23 – 2023 to '28 –

**MR. KEATING:** Those are –

**MR. LEARMONTH:** – if you had known about the development plan that I just referred you to?

**MR. KEATING:** So let's break it down into the scenarios – three-hour conversation –

**MR. LEARMONTH:** Well, can you just answer the question?

**MR. KEATING:** I don't know what the question was.

**MR. LEARMONTH:** Okay. If you knew –

**THE COMMISSIONER:** Just one second now, Mr. Learmonth.

**MR. SIMMONS:** I just want to say, I think Mr. Keating is doing his best to try to address the question, so I think we should –

**MR. LEARMONTH:** I –

**MR. SIMMONS:** – give him a chance to try and do that.

**MR. LEARMONTH:** Well, I think he's evading the question –

**THE COMMISSIONER:** Well –

**MR. LEARMONTH:** – but anyway –

**THE COMMISSIONER:** – anyway, again everybody has their point of view. But you're gonna repeat the question, I think, for Mr. –

**MR. LEARMONTH:** I'd be happy to.

**THE COMMISSIONER:** Okay.

**MR. LEARMONTH:** If you knew, when you were having this three-hour telephone conversation with Ziff, about the report, the May, 2012 report with the information you needed, I suggest you would have told Ziff about that rather than just say: 2023 to 2028.

**MR. KEATING:** Okay. What I know now and at the time is that Ziff had an engaged conversation with Husky. They would have had the preponderance of their knowledge from Husky. They would have had the knowledge of the wellhead GBS from Husky and likely a development scenario from Husky.

**MR. LEARMONTH:** How do you know that?

**MR. KEATING:** Because it's in their report.

**MR. LEARMONTH:** What about the 25 year –

**MR. KEATING:** There's nothing about the 25 – the 25 year is an artifact of report that describes a lifespan of a concrete structure. I believe the relevancy of this in this report – I'm trying to be as fulsome as I can because this is

part of the challenge of explaining this in a public forum is that –

**MR. LEARMONTH:** It's not a difficult subject matter.

**MR. KEATING:** They had to – sorry.

**MR. LEARMONTH:** I don't think it's a difficult, technical matter.

**MR. KEATING:** It – I guess I'll try one more time. That with each scenario there are different production profiles. The governing production profile, at the time, the one that was duly approved, was for the FPSO only and it had a lifespan of 2022 to 2028. That was the, say, bankable basis.

Ziff then, in efforts to actually decrease the costs and increase the commerciality, asked questions, presumably – obviously, they found that the wellhead platform was indeed in existence and they provided further analysis, which hybridized the GBS into, not only in oil but a gas situation and were able to share and allocate costs more fairly, actually, to improve the likelihood of a gas development scenario.

When you come to look at my simple two or three lines of an email, my consideration for that time window was in reference to the FPSO only timeline because their question was to me: What if this wellhead platform doesn't exist? What if the oil runs out? Who's going to provide the service? That is the context and I'm trying to be so full and if I'm not clear, I can continue.

**MR. LEARMONTH:** And you're just going by memory about that three-hour telephone –

**MR. KEATING:** Oh, for sure. Everything here is by memory for the most part, yes.

**MR. LEARMONTH:** Okay. That's fine.

Well, anyway, if you find something – please look, and if you find something, I'm sure the Commissioner would be very happy to have a look at it.

**MR. KEATING:** Sure. Yes, absolutely.

**MR. LEARMONTH:** Okay.

Now, were you involved in any way in the Wood Mackenzie review?

**MR. KEATING:** I wasn't involved in the Wood Mackenzie process review, but I may have seen their final reports and maybe I got the – I received those from Charles Bown at the time. And he asked me, you know, what did I think. Or I don't think I had actually any engagement with any Wood Mackenzie person during this time.

**MR. LEARMONTH:** Nothing?

**MR. KEATING:** Not that I can recall or in my preparations here I could find.

**MR. LEARMONTH:** Okay.

This – I'm just gonna jump over a couple of other topics to a document at tab 20, Mr. Keating, which is Exhibit P-01310.

**MR. KEATING:** Which tab, sorry, excuse me?

**THE COMMISSIONER:** Tab 20.

**MR. LEARMONTH:** Tab 20.

**MR. KEATING:** Twenty.

**MR. LEARMONTH:** And if you could turn to page 15?

**MR. KEATING:** Fifteen.

**MR. LEARMONTH:** Now, first, can you identify this document? What – who prepared this document, when and why? There's no date on it that I can see.

**MR. KEATING:** Yeah, I –

**MR. LEARMONTH:** Apart from the email.

**MR. KEATING:** I prepared –

**MR. LEARMONTH:** The email is dated July 13, 2012 on page 1 of Exhibit P-01310.

**MR. KEATING:** I would assume then by the email that this document was probably completed not much before that date. Maybe in July. I don't know that I would sit on such an

expensive kind of narrative on my own. That's number 1. So, I think, without a date, it likely was completed in July.

This –

**MR. LEARMONTH:** July 2012?

**MR. KEATING:** July 2012, yes.

**MR. LEARMONTH:** So that's after that May 2012 Husky –

**MR. KEATING:** Correct.

**MR. LEARMONTH:** – report (inaudible).

**MR. KEATING:** We're a little further on in time.

**MR. LEARMONTH:** Yeah. Okay. If we just turn to page 15.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** At the bottom you say: "Notwithstanding, this likelihood, a natural gas solution may have the best chance of meeting the screening criteria," is the White – I think you mean is the white.

**MR. KEATING:** Yeah, no. This is a draft.

**MR. LEARMONTH:** That's okay.

**MR. KEATING:** I don't think anyone –

**MR. LEARMONTH:** Yeah, I know it's not a formal report.

**MR. KEATING:** – looked at this except for me.

**MR. LEARMONTH:** Yeah. "So the focus in this discussion will be with regards to White Rose natural gas."

And then you say: "At White Rose however, there are the following supply risks that need to be addressed.

"...While there exists many decades of natural gas volumes sufficient for electricity production on the island, the range of potential oil reserves at White Rose indicates that oil production may

continue as late..." as "2028, however, current trends, third party reserves depletion reports and the current approved development plans forecast oil production to only 2023. This means that any pipeline scenario using natural gas associated with oil production has a possible commercial horizon for only 6 to 10 years. There is no certainty afterwards. What are the costs for commercially securing gas deliveries beyond 2028? Does it make sense to install a \$1 billion pipeline with a 30 year design life for as little as 6 to 10 years of us? Does it make sense to invest the hundreds of millions more in platform modifications, subsea equipment and gas production wells?"

Okay, once again, I'm going to ask you: That May 2012 report, there's no reference to that whatsoever in that statement, which you wrote in July. And, once again, I suggest to you that the reason – there's two possibilities – you'll agree with me. Either you didn't know about the report, therefore you couldn't refer to it, or you knew about it, and decided it wasn't something that should go in to inform the reader of this report.

**MR. KEATING:** I would say –

**MR. LEARMONTH:** (Inaudible.)

**MR. KEATING:** – that without – I scanned this before, but I would say the reference is not express or explicit in calling about the wellhead platform project, as I said that there is no certainty afterwards. So, effectively, for me to bring in to the wellhead platform project, as an equal to the 6- to 10-year window, that would've been equally misleading, 'cause then we would've had a situation where a gas development – a small gas development, which would probably generate 60 to \$150 million dollars per annum in sales, is tied to the contingent approval of a massive multi-billion dollars oil development, which was certainly not certain at the time, and continued not to be for a number of years.

So, that would've been in my mind, and if I fail to stretch that out, it's not because I believe this is the only place where that is said. There's – this was a common understanding, common discussion, presentations at tradeshow, conferences. In the oil and gas industry, it's not

secret that the wellhead platform project was a consideration. And I should say, at that time, Husky was still making its consideration: Will it be an expansion of the subsea network or a wellhead platform. So, it was with great joy, I guess, 2015, when the determination was made, ultimately, to proceed with the wellhead platform project.

So, at that time – and I will say, if my memory serves me correct or some benefit of additional research, that not only was the project a certainty – far from it – but there could even be an alternate scenario, which is more subsea.

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** So, when I write what I write, I write based on certainty. And by knowing where means here, do I discount a Ziff report, which includes that as a possibility that there's a wellhead platform and any and all analysis.

So I take your point that maybe I could have put some additional words in there, but I felt that there is no certainty afterwards and the certainty that I did have with six to 10 years was indeed valid and, quite frankly, any number of reviews of this decision to this point concur with.

**MR. LEARMONTH:** Now, you said that you – in talking about this May 2012 situation, you say you failed to stretch it out. I mean you didn't mention it at all; it wasn't a case of not stretching it out. Do you agree? I don't see any reference in this report to the May 2012 Husky document.

**MR. KEATING:** No.

It wouldn't occur to me really that it – this necessitated a complete discussion of the sub-depletion schemes of natural gas. I choose to approach this from an LNG perspective and a pipeline perspective; look at the leading pipeline perspective, look at the leading LNG perspective.

**MR. LEARMONTH:** Mm-hmm.

So are you saying then that at the time you prepared this report in July 2012 you knew about the information contained in the May 2012

Husky document, but you intentionally decided not to include it?

**MR. KEATING:** No. It didn't occur to me that it would be – I should include it.

**MR. LEARMONTH:** Well, looking back, do you think you should have?

**MR. KEATING:** No.

**MR. LEARMONTH:** No? Okay.

**MR. KEATING:** Because I wouldn't. To do that then I would've had to consider then a host of other scenarios. I – we should be talking about the subsea depletion strategy; it was equally weighted at the time. Another drill centre – excavated drill centre and additional wells, that had equal veracity, equal opportunity to be discussed.

**MR. LEARMONTH:** Mm-hmm.

But you're stating that – I don't want to dwell on this anymore because I think you've said –

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** – what you're going to say, but you're saying that, you know, generally that there's no point in having a pipeline because it might have only a commercial horizon for only six to 10 years. And you have a document – it may not be an approved document – but you have a formal document prepared by Husky and you decided that it wasn't necessary or it wouldn't have been helpful to refer to that information in this document.

Now, my question is this – and that is what you're saying, isn't it?

**MR. KEATING:** So what I'm saying is the sanction of the Muskrat Falls Project had its own independent timeline and requirement. For me to put in as a trumping clause that says we should not develop this hydroelectric project because there's an offshore oil company that wants to make a decision about a GBS at some point in the future, we shouldn't proceed until that is done, that, to me, is the stretch. So this, to me, was to provide the pertinent and relevant

information, which is actionable, in a way that is most focused and provides the right outcome.

And the key about the six- to 10-year part means – whether it's a GBS or not, it says when the oil is gone, there's a provision of gas, who stands there to provide the gas and how are those costs allocated? So even by me to suggest that the addition of the wellhead platform in this document has some degree of impactful insight, means that there's probably higher costs to share on a domestic gas scenario.

So, to me, in the balance of all my assessments and probabilities, I would say we'll just stick to what everybody is – understands and knows, has agreed to and signed up for. So if I were going into a negotiation per se for the provision of natural gas, this is the starting point.

**THE COMMISSIONER:** Can I just ask you a question, Mr. Keating?

**MR. KEATING:** Yes.

**THE COMMISSIONER:** Who was this report prepared for?

**MR. KEATING:** That's funny – that's a good question. I wrote this largely in isolation. My background and my history –

**THE COMMISSIONER:** Okay, well, let's look at who you sent it to.

**MR. KEATING:** Yes.

**THE COMMISSIONER:** You sent it to Charles Bown, correct?

**MR. KEATING:** Yes.

**THE COMMISSIONER:** For the government. So my thinking would be that if you were advising or providing a report to the government –

**MR. KEATING:** Yes.

**THE COMMISSIONER:** – they're looking to you to provide information related to this situation. Like, you could well believe that this was uncertain, but wouldn't it have been prudent to at least advise government that this is

potentially on the horizon so that they could keep that in mind?

They were making a billion-dollar – \$6-billion decision at this time, why would you not basically put something in here at least to indicate as uncertain as it is – and you could have said that – that at least there was this proposal which basically possibly meant an extension beyond six to 10 years?

**MR. KEATING:** Maybe for me at the time it was self-evident because the government had commissioned their studies, the government had been engaged with the operators, the government understood the possibility of the Wellhead Platform Project. It wasn't that it was unknown to them and it wasn't that they didn't understand the impact of the possibilities it could create.

My purpose in this particular document is to form a section of a potential Decision Gate Support Package highlighting a process and a narrative of what had been done. And when I look at the White Rose field as I addressed, yeah, could I have been more expansive? Probably so and maybe if this wasn't the draft and had been circulated and maybe my team was involved, they might have said, well, maybe let's add that. But that was sort of me in isolation and, actually, to this day I don't think this report – there was ever action to published, used – I have no knowledge of it. It was – I drafted it as if it could be part of a broader discussion.

**THE COMMISSIONER:** Yeah (inaudible)

**MR. LEARMONTH:** That's your answer?

**THE COMMISSIONER:** Sorry, I didn't mean to interrupt you, Mr. Learmonth.

**MR. LEARMONTH:** No, that's all right.

**THE COMMISSIONER:** Okay?

**MR. LEARMONTH:** That's fine.

So that's – do you want to say anything more about this, Mr. Keating?

**MR. KEATING:** No, that's it.

**MR. LEARMONTH:** And remember if you can find some information, I'd really be happy to see it.

**MR. KEATING:** Sure.

**MR. LEARMONTH:** Okay. Thank you.

I just want to talk a little but about the cost and benefits of a Grand Banks pipeline. And over the years you've stated – made a number of points; one is that you couldn't supply the Island indefinitely from existing wells. We'd have to pay for new wells.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** Do you still agree with that?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yeah. So who said that there'd be a requirement that the natural gas be supplied indefinitely?

**MR. KEATING:** I don't know. I don't know that indefinitely is a real term. I think indefinitely means to whatever comparison that the project was going to be compared to – Muskrat Falls or whatever. Indefinitely, to me, just is another way of saying: I don't know the year that you want me to shut down. So as long as the gas is available commercially as it rides, that's my concept of indefinitely.

**MR. LEARMONTH:** Okay.

**MR. KEATING:** Not forever.

**MR. LEARMONTH:** And I take it that – and you've also said that the price you'd have to pay to Husky or Exxon, if it was Hibernia, to provide gas in the existing platforms, would be too high to be economically feasible?

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** Correct?

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** And your two reasons for that are the operators who understand their best

interests have never displayed much enthusiasm for the idea.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** And even if there was an economic benefit, the operators would calculate what the value of the benefit is and charge us a price equal to the value of their best – our best alternative?

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** Yeah, so that's your just your gut reaction, is it? Do you have any documentation –?

**MR. KEATING:** Oh, it is –

**MR. LEARMONTH:** Do you have any documentation to back those points up?

**MR. KEATING:** I may have, not from either of those operators. I do have the benefit of – so there's about two points, I was just focused on the second one: What would be the price of the gas?

No, I don't think that I have anything related to the price of the gas from either of these operators. I do have an experience with an LNG provider, another oil company, that had made a proposal to supply LNG to us, at our avoided cost, effectively, the cost of oil at Holyrood.

And, of course, the discussions around that didn't go so far because it, of course, it didn't provide us an economic advantage. And they did not see the need to reduce that. They set the market.

I do have also the benefit from the experience I had with consultants like Ziff and PIRA, who they would look at Isolated Island scenarios and they would have seen in the market place that the natural gas suppliers would often try to seek a – an avoided cost type basis.

So it is gut, but it is an informed gut based on experience and examination of existing contracts around the world. But nothing directly from Husky or Exxon.



**MR. LEARMONTH:** It's just your own personal knowledge –

**MR. KEATING:** Yes, it's my –

**MR. LEARMONTH:** – or belief in correctness –

**MR. KEATING:** My belief, yes.

**MR. LEARMONTH:** – of what you know.

Are you saying there'd be a realistic reliability concern if a pipeline were to be built to the Grand Banks – from the Grand Banks to the Island?

**MR. KEATING:** That has been, from the early days to present, one of the chief, I guess, undermining aspects of the pipeline scenario versus other scenarios, is the reliability and risk to the pipeline.

**MR. LEARMONTH:** Mm-hmm. Well, Dr. Bruneau has, I think, some experience in that. Do you agree?

**MR. KEATING:** He has some experience, but not – I would (inaudible).

**MR. LEARMONTH:** No, with ice and the scouring?

**MR. KEATING:** Yes, yes.

**MR. LEARMONTH:** Yeah. But there's pipelines all over the world. I mean it's not a –

**MR. KEATING:** Yes, there's pipelines all over the world.

**MR. LEARMONTH:** Well that's just – you know, there's a risk in everything.

**MR. KEATING:** There's a risk in everything except the Grand Banks is a special risk and that's related to iceberg scour.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** And any number of studies would have concluded that the optimal routing of a pipeline should one be deemed to go forward would be below the 200-metre contour

mark, which would take you some 600 – 40 or 80 kilometres in more of a circular route to the Island, and that would statistically reduce, but not eliminate, the occurrence of pipeline interactions and disruption. Also true, you would need to trench and bury the pipeline along the shelf 'til you got to that contour line to reduce your risk.

**MR. LEARMONTH:** Yeah. But isn't it true that Exxon just ran a fibre optic cable to the Hebron platform?

**MR. KEATING:** Yes, and that's a very good example of how the risk is mitigated.

Dr. Bruneau, I believe, in his testimony made a point of that. But what Dr. Bruneau doesn't – didn't realize is that fibre optic cable is over 700 kilometres long and it's two lines; one running from Logy Bay to Hibernia and the other one – and then from Hibernia to Hebron and then back in to Cape Broyle. A circuit, which means if one line is lost, the other one works. And then there's additional redundancy in satellite and microwave communication.

And I should also add, too, that if the 680 kilometre pipeline were in place, it's still just a singular line, still subject to some risk. They've effectively eliminated risk with the fibre optic cable and there's no commonality to the pipeline scenario.

I would further add that any damage to the fibre optic cable can more readily be repaired and replaced with materials that are available and ships that are available in the marketplace, versus securing a specialized equipment to repair a pipeline.

So I guess it's important to realize, and it's for me, again, part of the frustration of why this is a difficult topic is that we're – I'm trying to convey some simple points that Dr. Bruneau, as a, I guess, a respected academic at Memorial University has chosen to edit or to bypass or to short circuit to give effect to his argument. And in reality, the oil and gas industry has very much considered most, if not all, completely all, his considerations, and this is a very significant one.

**MR. LEARMONTH:** Yeah. Well, do you have that in that report at tab 20? I mean, I should ask you this, so are you (inaudible) –

**MR. KEATING:** No, this – there's no fibre optic cable or no discussion of the –

**MR. LEARMONTH:** No, no, but I'm talking about – so are you saying that the difficulties and risks of building a proper under-the-seabed pipeline, that the risks involved in that would be too great to undertake that?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** So that's a showstopper then; you can't do it.

**MR. KEATING:** The seabed pipeline that's described –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – by Dr. Bruneau is a showstopper and that –

**MR. LEARMONTH:** Okay, what studies do you rely on?

**MR. KEATING:** 2001, the first study. There is a JP Kenny –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – C-CORE.

**MR. LEARMONTH:** Yeah, 88, P-02088, [sp P-00088] but technology has improved since that, hasn't it, 17 years?

**MR. KEATING:** Icebergs are still going to scour, and I don't know what technology Dr. Bruneau is referring to.

**MR. LEARMONTH:** Well, I think he's done a lot of research himself. He has some personal experience in this area, do you agree?

**MR. KEATING:** I believe he has some personal experience in this area, but I believe his ultimate clients, that would be consumers of this type of experience, would be in disagreement with these outcomes.

**MR. LEARMONTH:** The consumers would be in disagreement?

**MR. KEATING:** That would be the offshore oil and gas companies. They would simply not lay an oil or gas pipeline on the seabed in a straight, 300-kilometre routing.

**MR. LEARMONTH:** But he didn't talk about laying it on the seabed. He said trench.

**MR. KEATING:** Or trench or bury it.

**MR. LEARMONTH:** Yeah. And did you have any studies to confirm that, or are you just talking based on what you think –

**MR. KEATING:** No, I'll –

**MR. LEARMONTH:** – would be the case?

**MR. KEATING:** – go back (inaudible) –

**MR. LEARMONTH:** No, wait 'til I finish the question.

**MR. KEATING:** Sorry.

**MR. LEARMONTH:** Okay, did you hear the question?

**MR. KEATING:** Do I have any studies?

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Can I see them?

**MR. KEATING:** I believe the first study in the JP Kenny, C-CORE study goes on at some length about the various pipeline routes.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** And they –

**MR. LEARMONTH:** That's 17 years old, right?

**MR. KEATING:** Correct.

**MR. LEARMONTH:** Yeah. Do you have any studies that are more current?

**MR. KEATING:** Interestingly enough, there is a study, not related to the Grand Banks, per se, but similar environment. There's a JIP – a joint-interest project – yeah – with oil and gas companies, I think, from 2006 and '07 that relates to Labrador gas. And in that consideration, they were examining a combination of seabed trenching and pipeline routing in depressions in the seabed to avoid – so there's a significant amount of knowledge and study on pipeline analysis.

I would say that C-CORE, of which I was a board member for seven years, has a pretty conclusive assessment of the risks to pipeline and ice scour. And if you were in a – I guess to borrow Dr. Bruneau's concept, as best as I follow it, it would require a significant degree of trenching and burying of which – there are two other technical challenges. One is the existence of machinery to trench at water depths deeper than 100 metres – there's only a few machines available – and the prevalence of what they call hardpan and sedimentation.

So there's going to be some differences of opinion that would say that, A, the direction pipeline routing has some extra costs that maybe Dr. Bruneau has not fully incorporated. But, nevertheless, if you were going to take on those additional costs, those costs are best applied to avoidance, which is – the norm out in our offshore is to avoid hazards by floating FPSOs away or having GBSS – walls to maintain contact. So avoidance is the key, and that would be the most prudent and most lasting conclusion of any pipe scenario.

And I would go on to say that there are a number of studies inside the oil companies that are proprietary, that, when they look at the massive – the bigger export scenarios that were probably commonly discussed in 2007, '08 and '09, that, again, those studies, which – much larger pipe – would still go below the 200-metre mark.

So on this one, while I duly respect Dr. Bruneau's expertise and focus in this area, I think the oil companies completely cognizant of that scenario and have determined that that is not a viable option for them.

**MR. LEARMONTH:** Okay. Well, if that's true – if what you're saying is true –

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** – why – if we look at tab 7, Exhibit P-01200 – your email to Ed Martin.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** You say: "Ziff said 'Husky says they are considering using gas for pressure support in the future. That's it. End of story.'"

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** If what you're saying is true, why wouldn't they have said we can't do it because we can't – the risk of installing a pipeline under the seabed make it impossible, the risk is too high. Why wouldn't they say that if it's so plain and obvious?

**MR. KEATING:** No, they do. They do –

**MR. LEARMONTH:** Where?

**MR. KEATING:** In the Ziff report, what they say is that they've adopted the 640-kilometre route.

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** So that's how they say it: that they have looked at the two routes; they've determined that if you're gonna work an analysis of the piped gas option, that's the one they'll look at.

**MR. LEARMONTH:** Yeah. But I thought you said it was – that would be a showstopper.

**MR. KEATING:** No, no –

**MR. LEARMONTH:** Or words to that effect.

**MR. KEATING:** It's – yeah. What's a showstopper is the Dr. Bruneau proposal.

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** But it's not a showstopper to consider other means and ways to take pipe gas to the Island. That's – I think that was the context of your question.

**MR. LEARMONTH:** Okay.

Now, let's turn to LNG.

**THE COMMISSIONER:** It's – I'm just noticing it's 12:30 now. Did we wanna take our break here, Mr. –

**MR. LEARMONTH:** That's fine with me. Yeah.

**THE COMMISSIONER:** Did you have very – do you have much longer?

**MR. LEARMONTH:** Yes.

**THE COMMISSIONER:** Okay. So I guess we better wait, then, until 2 o'clock. We'll come back.

**CLERK:** All rise.

### Recess

**CLERK:** All rise.

This Commission of Inquiry is now in session.

Please be seated.

**THE COMMISSIONER:** All right.

I don't know how everybody's feeling about the temperature in here; I'm frozen. I'm just wondering is it comfortable for most or is it just me?

**MR. SIMMONS:** I'll only speak for myself and say that I find it warm.

**MR. LEARMONTH:** I find it warm, too.

**MR. SIMMONS:** Sorry to be disagreeable, but –

**MR. LEARMONTH:** Yeah.

**MR. FITZGERALD:** I'm pretty cool myself.

**THE COMMISSIONER:** Okay, well we won't expend too much load demand, then, for extra power today.

Go ahead, Mr. Learmonth.

**MR. LEARMONTH:** Okay, thank you very much.

So Mr. Keating, I wanna turn to LNG –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – at this point. So as I understand it, as a – in the Grand Banks natural gas proposal, with respect to LNG, the idea would be to build a new gas-powered combined-cycle turbine, but instead of shipping gas in from the Grand Banks, the province or Nalcor would buy natural gas in a liquefied form from a world market?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And then we'd – Nalcor, the province, would have to enter into a supply arrangement to get the LNG here, and we'd have to build a specialized jetty to unload the LNG, and tanks to store it. We'd need some facility to re-gasify it.

That's a very, you know, general description.

**MR. KEATING:** Very general description, but accurate.

**MR. LEARMONTH:** But is that generally true –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – we'll say? Is that –

**MR. KEATING:** That is generally –

**MR. LEARMONTH:** – general description generally true?

**MR. KEATING:** – truest estimate.

**MR. LEARMONTH:** Okay, we'll put two generals in there just in case.

**MR. KEATING:** Then you got a leader.

**MR. LEARMONTH:** Fair enough.

**MS. E. BEST:** We just can't hear Mr. Learmonth, and it's happened a few times this

morning – just every now and then – I just kind of – it’s just a little bit quiet back here.

**MR. LEARMONTH:** Okay. Is that –

**THE COMMISSIONER:** Okay.

Thank you. And if that – and there are times when he is soft-spoken, so what I’ll do is maybe just advise the technical people if they could just up the volume a bit. Okay.

**MR. LEARMONTH:** Well, that’s the first time I’ve been described as being soft-spoken, but thank –

**THE COMMISSIONER:** I said –

**MR. LEARMONTH:** – you very much.

**THE COMMISSIONER:** I said occasionally, Mr. Learmonth.

**MR. LEARMONTH:** Thank you very much.

**MR. KEATING:** I can vouch for that.

**MR. LEARMONTH:** Okay.

So has it been your view, say, since 2006 that natural gas was a more promising proposal for Island generation than the – power generation than the Grand Banks pipeline or Grand Banks natural gas, either by tanker or by –

**MR. KEATING:** Correct.

**MR. LEARMONTH:** – (inaudible).

**MR. KEATING:** So of the two primary forms of bringing gas into the electricity mix, my assessments would have been that market-based importation of LNG may afford the – maybe the nearest term, and likely the most economic opportunity, if gas was considered as a generating fuel.

**MR. LEARMONTH:** So of the gas options, your preferred – if you’re just considering gas options, your preferred choice would be LNG?

**MR. KEATING:** So I’ll have two hats in this response.

As a Newfoundlander and Labradorian, who would like to exploit my natural gas reserves, I would much like to see my natural gas reserves exploited to the best of their intent. But if your consideration, then, is to get lower cost electricity generated by natural gas, then it’s probably a better alternative to seek market-based LNG, or even CNG, but primarily LNG – and import it.

**MR. LEARMONTH:** So from a ratepayer’s point of view, it would only be concerned about electrical rates. The importing LNG –?

**MR. KEATING:** Should be the top priority.

**MR. LEARMONTH:** Top priority, okay. Now, it’s my understanding that Nalcor screened out LNG as a supply option in 2010, is that correct?

**MR. KEATING:** I believe that’s the case, yes.

**MR. LEARMONTH:** And that – were you involved in that initial screening decision?

**MR. KEATING:** No, I wasn’t.

**MR. LEARMONTH:** Okay, and just for the record, the references for that would be Nalcor’s submission to the PUB, which would be P-00042 – oh, excuse me – P-00077, pages 65 to 70, and the Navigant report, P-00042, at pages 36 to 37. That would be – I’m not gonna go into that, because you’ve agreed that it was screened out at that point, but those are the references if anyone wants to check.

So in 2011 and 2012, you write in your own – in that – your report at 220 – at tab 20, which is 01310. That’s that letter you sent to –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – Charles Bown – that that was your preference, is that correct?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yeah. Now, is it correct – well, it is correct, but you did commission a report from PIRA or PIRA or whatever it is – that’s tab 10, P-01203. Is that correct?

**MR. KEATING:** Tab 10?

**MR. LEARMONTH:** Yes.

**MR. KEATING:** Sorry – okay.

**MR. LEARMONTH:** Exhibit P-01203.

**MR. KEATING:** Yes, that's the report that we commissioned.

**MR. LEARMONTH:** From PIRA?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Now, is it correct that that report was never made public until now?

**MR. KEATING:** I believe so.

**MR. LEARMONTH:** Okay, if Nalcor was trying to, you know, convince the public that – of the correctness of its position, and if the PIRA report was useful as an aid in doing that, why wouldn't it have been released to the public when it was received? And the date of that is – the report – is September 7, 2012, so very close in time to the work done by Ziff.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yeah, and this is just on LNG, right? So why wouldn't that have been released to the public?

**MR. KEATING:** So as I understand it, we actually commissioned it and scoped it such that the report could be, and should have full expectation, that it would be released to the public and I think we even added some commentary to say that it would likely be used in a Public Utility Board's kind of proceedings. In the final analysis, once this report was completed and that – I will agree this served for me, personally, and my team, as a very substantive document where we learned much about the global LNG market – that PIRA, when I asked their permission to, indeed, release it and I also coupled that with the request that someone come and present it. Then the PIRA business manager said that they are not interested in coming to present their report and – I am now, probably, paraphrasing a response I had in an email – that that is not their practice to present themselves as experts because of their multi-client interest.

So when I notified Ed Martin that we have a problem; that we have this great report and PIRA is reluctant to represent or to present it, he said: Well, we can't use it. And effectively, then, all of the focus turned to: We've got to get, now, another version of this, another story that educates people on LNG. And that was disconcerting for sure.

**MR. LEARMONTH:** But surely that would not have been a contractual term with PIRA when you engaged them that you wouldn't be able to make it public? I mean, the point is that –

**MR. KEATING:** No, no, I think –

**MR. LEARMONTH:** – you paid for the report.

**MR. KEATING:** – I think we could make the document public.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** There was no prohibition on the document.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** I think the challenge was that PIRA wouldn't have made one of their experts or authors available to present it in a – certainly in a public forum.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** I think that was a limitation, then, on our full use of it. And I can remember that, you know, Ed Martin wasn't so pleased about that, because he spent some time and energy on it. But I think also we understood that Ziff was about or around and they were going to –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – or maybe even had also looked at LNG and that might suffice.

**MR. LEARMONTH:** Okay, I don't want to spend too much time on that. But what jumps out at me is this: That you could've released it and just said that, you know, there's no one from PIRA available to discuss that. I don't know why –

**MR. KEATING:** That's true.

**MR. LEARMONTH:** – you wouldn't have done that.

**MR. KEATING:** That's true.

**MR. LEARMONTH:** I don't know why you wouldn't have selected that option, because you paid for it.

**MR. KEATING:** That's true.

**MR. LEARMONTH:** Okay. Well, anyway, you didn't.

Now, the Executive Summary is on – starts on page 4 of Exhibit 01203, at tab 10, Mr. Keating. It's a detailed document. It goes through the overview of global LNG pricing. It's very detailed.

Can you – are you able, in looking at the Executive Summary, to give me a summary of the conclusion that you drew from it, in summary form? Or is that asking too much?

**MR. KEATING:** Yeah – no. I am a little speed-reader, but I have reviewed this a few days ago in advance. The gist of this was that our market is, again, very small –

**MR. LEARMONTH:** Mm-hmm. They say that right at the beginning.

**MR. KEATING:** They say that right at the very beginning.

**MR. LEARMONTH:** Yeah, yeah.

**MR. KEATING:** They say our market is very small, which implies, then, to the body of the report that somehow –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – our negotiating position would be impaired.

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** Then the thrust of the document speaks to what the market trends are and that there's no global price for LNG; that

it's very regional. And then they talk about the emergence of spot markets versus long-term contracts. And they talk about, then likely, if we were to buy LNG in a particular time frame most likely, (a) where the supplies would come from and likely what kind of markets we would be competing with. And then they go on to talk about, you know, renewals and the types of contracts, firm and fixed, and how many cargoes and then there's – most of the balance of the body of this is tied to some cost elements that build up each part, of how you just described, from liquefaction to transport to regasification and so on.

So I think I'm generally summarizing the report, but I think was pretty comprehensive view.

**MR. LEARMONTH:** Yeah.

So the conclusion: What did you draw from the report in terms of the advisability of pursuing LNG as an option?

**MR. KEATING:** So actually it was a very, very interesting conclusion. That they would believe that within the time horizon that we were interested in potentially purchasing LNG that we would have, likely, oil index pricing but that that oil index pricing would likely be around a band of some 80 to 90 per cent of the price of oil. To be specific, I think, in this case the price of oil would be the Japanese [sp Japan] Crude Cocktail, which is JCC, which is similar to Brent and, you know, it's not far from it.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** And in that boundary, when we would work out the energy equivalence of LNG versus No. 2 and No. 6 fuel that would be burned at Holyrood, we would find that actually it is very close, very similar economics to the base case, if you will –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – the Isolated Island. And that was very interesting to me because, you know, I don't think anyone had a view before or really understood it.

**MR. LEARMONTH:** Yeah. But assuming that it is the same as 6 crude, it would still have the

benefit of environmentally – being environmentally –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – superior to a –

**MR. KEATING:** Yes, and –

**MR. LEARMONTH:** – large (inaudible) –

**MR. KEATING:** – so natural gas is and continues to be the preference in that regard.

**MR. LEARMONTH:** So that would be an advantage.

**MR. KEATING:** That would be an advantage.

**MR. LEARMONTH:** But on price you're saying it wouldn't have been.

**MR. KEATING:** Price wouldn't be so much an advantage because you're – you would compete head on head with oil as the alternative. You would also be – because of the size, we would say, we wouldn't be a scale purchaser. It's not like we're buying hundreds of cargoes like some big collection point in Europe, for example.

And the other aspect is: Yes, you would have some capital cost risk now, because you'd have to build most of these new constructions, and maybe that doesn't occur other than the, sort of, refurbishment of Holyrood.

So all in all, it was indeed compelling. It had some puts and takes. And it – and that's why, I guess, as I said earlier, it was always for me, if natural gas was to be considered as a fuel – sorry, if natural gas (inaudible) – it could be this model – this mode.

**MR. LEARMONTH:** Okay.

Now, if you're buying natural gas, LNG, from a producer, say, in the Gulf of Mexico, I think there's some big ones – Cheniere is a big one –

**MR. KEATING:** Cheniere, yeah.

**MR. LEARMONTH:** Yeah, Cheniere is big. I know they export to India and China and so on.

So you have a supply contract that's fixed? Or did you say it was tied to the price of crude?

**MR. KEATING:** So our advice would be that if we were an Isolated Island, and you wanted to have – if you were effectively using the gas as your baseload – 'cause you would be replacing Holyrood – then you would want certainty in delivery, certainty in quality, and you'd likely want to have a long-term relationship with a particular supplier. These are just general commercial considerations that we – I wouldn't object to.

And in that particular case, yes, something like – I think their advice would be a 20-year contract would be consideration, and that we would look for commercial mechanisms in the price – that while may be linked to oil, would have some sort of an S-curve behaviour –

**MR. LEARMONTH:** Mmm.

**MR. KEATING:** – and I don't know if you're – I'm going too far, but anyway it was a very interesting proposal.

**MR. LEARMONTH:** Okay.

Please turn to tab 11, which is Exhibit P-01204.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** Now, on this document, will you confirm that the various CPWs are based – well, as stated on the Ziff estimates?

**MR. KEATING:** Yeah, so as I recall, this sheet was completed by the Investment Evaluation folks who used their CPW model, and used as inputs to this model a combination of Ziff inputs from their report and the, I believe, the PIRA work that we've done.

**MR. LEARMONTH:** Okay.

Now, the LNG CPW has two bars –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – correct – showing 10.7 billion and then 11.2 billion?

**MR. KEATING:** Yes.



**MR. LEARMONTH:** And the description says: “LNG @ 80 - 90% of Brent.”

Now, the 10.7 billion figure represents 80 per cent and the 11.2 billion 90 per cent, is that correct?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** On this graph? Yeah.

And do you agree that both columns are based on Ziff’s cost estimates for the jetty, the storage tanks and re-gasification facilities, is that correct?

**MR. KEATING:** I’m going to say – I just don’t know. I – maybe if I had the benefit of looking at some of the source emails.

We had carried on several numbers, some that were generated purely from Ziff, some were generated purely from PIRA. They have a large degree of alignment. I just can’t recall right now which of the scenarios –

**MR. LEARMONTH:** Okay –

**MR. KEATING:** Okay, I see here in the subject line –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – it says using Ziff estimates.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** So for me, that’s –

**MR. LEARMONTH:** Okay.

**MR. KEATING:** That’s all I need.

**MR. LEARMONTH:** Yeah, I was just gonna show you that.

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** Now, on the low end of Ziff’s estimate, do you agree that LNG is already cheaper than the Isolated Island?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And – it’s a better Isolated Island approach, would you say?

**MR. KEATING:** Yeah, from this economic –

**MR. LEARMONTH:** Yes.

**MR. KEATING:** – through – seen through the economic lens –

**MR. LEARMONTH:** Yes.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Okay.

Now, Ziff’s estimate that a long-term LNG contract would cost 80 to 90 per cent of Brent crude wasn’t the only estimate that you got, is that correct?

**MR. KEATING:** I believe Wood Mackenzie offered some commentary to Ziff reports –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – or maybe just on their own.

**MR. LEARMONTH:** Well, I think the PIRA report –

**MR. KEATING:** Okay.

**MR. LEARMONTH:** – tab 10 –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – estimated it would cost as little as 10.21 Mcf, and that’s P-01203 at page 6, if you wanna look at it, the PIRA report.

**MR. KEATING:** Okay, back to the PIRA.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** And that page is again –

**MR. LEARMONTH:** Six.

**MR. KEATING:** – sorry, six?

Yes.

**MR. LEARMONTH:** It’s tab 10.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** So isn't – do you confirm what I just said as correct, or do you want me to repeat it?

**MR. KEATING:** No, that's – that is what that says.

**MR. LEARMONTH:** Okay.

And that – further, that the most likely price was 16.20 Mcf?

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** Okay.

Now, for comparison purposes, Ziff's numbers were \$16.30 to \$18.35 Mcf, and that's –

**MR. KEATING:** Mmm.

**MR. LEARMONTH:** – P-00060, tab 23, page –

**MR. KEATING:** Tab –

**MR. LEARMONTH:** – 33.

**MR. KEATING:** – 23.

**MR. LEARMONTH:** Can you confirm that?

**MR. KEATING:** Tab 23, page – what number, 23?

**MR. LEARMONTH:** Page 33.

**MR. KEATING:** Thirty-three.

**MR. LEARMONTH:** P-00060 is the exhibit.

**MR. KEATING:** So they have a graph there and they say FOB 18.35, that the one?

**MR. LEARMONTH:** Yeah, 16.30 to 18.35.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Okay, so you confirm that?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Okay. Now, if you redid the CPW using PIRA's numbers –

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** – particularly their best case, you'd have a significantly lower cost, do you agree?

**MR. KEATING:** If I used – oh, if I used PIRA's number –

**MR. LEARMONTH:** Yeah, their best case number –

**MR. KEATING:** Their best –

**MR. LEARMONTH:** – particularly their best –

**MR. KEATING:** Oh, their best case number? For sure, yes.

**MR. LEARMONTH:** – you'd have a significantly –

**MR. KEATING:** Yeah –

**MR. LEARMONTH:** – lower cost.

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** Is that true?

**MR. KEATING:** That's true.

**MR. LEARMONTH:** And that would be – do you agree that that would be – using that cost, that it would be a substantially cheaper than the Isolated Island Option?

**MR. KEATING:** Yeah, that would indicate that.

**MR. LEARMONTH:** Yeah.

And I suggest to you that PIRA wasn't the only one with a lower estimate, that the government commissioned a draft – well, there was a draft review of the Wood Mackenzie numbers, correct?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And that's P-01312, tab 21.

**MR. KEATING:** Tab 21.

**MR. LEARMONTH:** Wanna have a look at that?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Did Charles Bown discuss this with you as he indicated?

**MR. KEATING:** This report?

**MR. LEARMONTH:** Wood Mackenzie, yeah.

**MR. KEATING:** Yeah, generally.

**MR. LEARMONTH:** Okay.

**MR. KEATING:** I had no real issue with it.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** I probably would – where was this reference to the – their LNG price, though? I'm just looking for it.

**MR. LEARMONTH:** Well, I can – I – Wood Mackenzie indicated their belief that Ziff's estimate of LNG prices were too high.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And he thought 70 per cent was more appropriate. And if you look at tab 21, Exhibit –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – P-01312, page 9.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Right?

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** And – okay, you've already told us why the PIRA report was never made public.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** But from the research we've done, the Wood Mackenzie report was never made public either, on LNG.

**MR. KEATING:** I don't know that they actually did a report. I think this is the report?

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** This is a review of PIRA. Again, I'd have to recollect or check some data, but I think Wood Mackenzie was asked to review Ziff.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** I'm not sure that they did an independent LNG report?

**MR. LEARMONTH:** Well, there was another report. I can show it to you.

**MR. KEATING:** Okay.

**MR. LEARMONTH:** And then it was canned. The terms of reference were changed at some point.

**MR. KEATING:** Okay.

**MR. LEARMONTH:** And I think you – if you look at tab 13, that's Exhibit 01206 at page 1, you do say that Wood Mackenzie should say they were comment only on the pipeline piece.

**MR. KEATING:** Yeah, I think I am referring to this actual – the exhibit here at tab 21.

**MR. LEARMONTH:** Okay, but –

**MR. KEATING:** That's, I think, what I'm referring to.

**MR. LEARMONTH:** But are you familiar with the Wood Mackenzie report on natural gas that never made it to the final stages?

**MR. KEATING:** No.

**MR. LEARMONTH:** Okay.

Okay, well, I'll turn that up in a few minutes.

You weren't aware of that, were you?

**MR. KEATING:** No.

**MR. LEARMONTH:** And the terms of reference, I understand, were changed so that it wasn't form – didn't form part of the final product?

**MR. KEATING:** I only understood, and actually to this moment, that Wood Mackenzie was asked to review Ziff, like, check the –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – checker.

**MR. LEARMONTH:** But anyway, turn to tab 21.

**MR. KEATING:** Okay.

**MR. LEARMONTH:** that's Exhibit 01312.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And this is a draft, Charles Bown to Jerome Kennedy.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And this comes from Bob Fleck at Wood Mackenzie?

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** You see the – all the different emails, and then you see the draft report, and I suggest to you that it's quite different from the final report. Specifically, one of the – the final report of Wood Mackenzie does not comment on LNG viability and analysis, which is contained on page – starting on page 8 of Exhibit P-01312 –

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** – and ending on page 10 of Exhibit 01312.

**MR. KEATING:** Okay.

**MR. LEARMONTH:** Are you with me?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Do you agree with what I'm saying?

**MR. KEATING:** I –

**MR. LEARMONTH:** That there was never –

**MR. KEATING:** I agree with what you're saying. I'm just pausing to consider if they actually did a study or, again, were just offering an opinion on someone else's study.

I – that's – I'm just reflecting on that, but I don't disagree that – with what you just said. I was just still trying to think that this document here, which is the subject of those emails you just referenced, is that called a study?

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** I think it's a review. I think it's like a document review.

**MR. LEARMONTH:** Well, I mean, it's a report.

**MR. KEATING:** It's a report, yes.

**MR. LEARMONTH:** Yeah.

And if you look at the draft report, at the tab I just referred to, 21, and then –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – you turn to the final Wood Mac report, which is at tab 24, and it's Exhibit P-00064 –

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** – you can see that it's chopped off, doesn't have anything to do with LNG.

**MR. KEATING:** Correct.

**MR. LEARMONTH:** Okay, so – and the evidence will show at some stage, I believe, that it – that was done because Wood Mac was told to take that out.

**MR. KEATING:** Okay.

**MR. LEARMONTH:** Do you know why, and I want you to refer –

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** Before you –

**MR. KEATING:** Yeah, I think I kind of give an indication here in my email. I understood that Ziff was doing the LNG report. We had PIRA. We internalized PIRA, and Wood Mackenzie was asked to come in and validate and verify the pipelined option, as far as I understood what they were going to do, and did they elect to review some additional stuff, well then, that's probably something that I thought was outside the scope.

**MR. LEARMONTH:** Well, we're gonna ask Charles Bown about that.

**MR. KEATING:** Sure.

**MR. LEARMONTH:** But I'm saying that they obviously –

**MR. KEATING:** Took it out.

**MR. LEARMONTH:** They submitted a draft report; they thought they were supposed to do this, and then it wasn't. And what strikes me when I look at this is that there are comments, for example, the last paragraph on page 10 of Wood Mackenzie's conclusions – that's page 10 of P-01312 –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – where they say: “Relative to the use of LNG imports as a fuel, Wood Mackenzie's research would tend to have lower costs than those determined by Ziff for the reasons stated within the report. Looking at the costs of some recently constructed facilities, and possibly evaluating the FSRU technology could lower the costs from Ziff's estimates. That said, we agree that it will be difficult ... to secure” et cetera.

So that's the thing that – they obviously, I suggest, did a review, otherwise they didn't – they wouldn't have been able to make this conclusion in this draft report. And I'm suggesting, or I'm asking, whether it's possible

that the reason that it was – that this scope of work was changed to delete the LNG reference was because of this paragraph, which put in question the Ziff report – or it didn't put in question, but it expressed a different point of view on that topic than Ziff?

**MR. KEATING:** That would be – I don't know, that would be between, I guess, Charles and Wood Mackenzie. I wasn't – I didn't have any direct commentary or even, I guess, reference this myself.

**MR. LEARMONTH:** Okay.

But you do acknowledge that Wood Mackenzie – so you know, Ziff and PIRA had similar estimates for this price, but Wood Mackenzie, in their draft report, they indicated they thought Ziff's estimates, cost estimates, were too high, right?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Okay, but you don't know why that Ziff report was – well, the scope of work was changed so that didn't appear in the final report?

**MR. KEATING:** No, I don't.

**MR. LEARMONTH:** And you don't know why this was not made public, these findings on LNG?

**MR. KEATING:** No, I don't.

**MR. LEARMONTH:** Okay. So I guess we'll have to ask Charles Bown about that?

And also – Wood Mackenzie also expressed the view that regasification costs could be significantly reduced if, instead of building a regasification plant, Nalcor leased a floating regasification facility, do you –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – acknowledge that?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yeah, so that would drive the price down, too, right –

**MR. KEATING:** Correct.

**MR. LEARMONTH:** – the cost down?

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** Yeah. Well, anyway, I'll ask that – I'll have to ask someone else if you don't know the answer to why that report wasn't completed.

**MR. KEATING:** Yeah, well that – on that question, I understand the, yeah, the S – the FSRU technology would be effectively a floating power station, and I think that may give you opportunities to reduce your costs. I don't think it's a permanent solution, so amongst other considerations, I – now, this is my pure hypothesis – is that when the government and Wood Mackenzie talked about some of these commentary, they probably had deeper discussions and they realized that, well, that's probably not an area that they were looking for Wood Mackenzie's input.

That's my –

**MR. LEARMONTH:** No.

**MR. KEATING:** – summary.

**MR. LEARMONTH:** The question is why weren't they looking for their input after Wood Mackenzie had already expressed an opinion on it and done work on it?

**MR. KEATING:** Fair.

**MR. LEARMONTH:** And so, in short, I suggest to you that Wood Mackenzie thought that the cost of storage and regasification would be less than 50 per cent of what Ziff thought. And that's – if you look at tab 21, P-01312, page 10 – do you agree with that?

**MR. KEATING:** And that's on page 9, is it?

**MR. LEARMONTH:** Ten.

**MR. KEATING:** Oh, sorry, 10?

**MR. LEARMONTH:** Well, 9 and 10.

You see the second-to-last paragraph on page 9, and then the –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – the conclusions on page 10?

**MR. KEATING:** Yeah, so they make reference to some other current projects of similar size where they had evidence of lower costs –

**MR. LEARMONTH:** Yeah, yeah.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And that would be something that you'd be very familiar with because – I suggest that Nalcor had been approached in the past by companies seeking to lease floating regasification facilities that see similar use in the southern hemisphere?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yeah, so you'd –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – be very –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – familiar with that point wouldn't you? Okay.

So if based on what you've seen and your knowledge, if you had redid – redone – the CPW analysis with the low Wood Mackenzie regasification costs, and either of the Wood Mackenzie or the PIRA prices –

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** – you agree that the result would be significantly lower than the Ziff estimate?

**MR. KEATING:** I actually believe we may have run those scenarios, and they indeed would be lower, and significantly may be a matter of degree of language, but it would be lower. Yeah, I would agree it would be lower. I just can't recall how much lower.

**MR. LEARMONTH:** Yeah, but it's certainly lower.

**MR. KEATING:** Certainly lower.

**MR. LEARMONTH:** Yeah, and that, once again, that would significantly, using those numbers, it would significantly improve LNG as compared to the Isolated Island Option?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Yeah.

Now, you – we know you spoke to Ziff when they were doing their review. And did you speak to PIRA when they were doing their review?

**MR. KEATING:** Oh yes, I was – they were our consultant so we engaged them quite frequently and often.

**MR. LEARMONTH:** Okay, and do you recall suggesting to either or both Ziff or PIRA that they consider using a floating shuttle and regasification vessel?

**MR. KEATING:** To Ziff or PIRA, a floating option. I believe it came up in conversations –

**MR. LEARMONTH:** With – with?

**MR. KEATING:** With PIRA.

**MR. LEARMONTH:** Okay.

**MR. KEATING:** And mostly, I think, we were trying to relate our knowledge of that particular sector; you know, how many ships are available, what is the global fleet of floating FSRUs is it, and we wanted, basically, to get some market knowledge, I remember calling that.

I think it was discounted and dismissed in this way: That these types of ships, their purpose is to participate in spot markets. So they'll exercise market arbitrage; they'll buy a spot cargo in some weaker market, and they may store it cryogenically, you know, in a bay or in a – for a number of days or weeks, and then go and sell it to a spot market when the price is higher.

**MR. LEARMONTH:** Right.

**MR. KEATING:** So that would be the general – the thrust in their business model.

This alternate business model, which was a seasonal one where you would go to the – South America, and then go to, say, Canada, alternate seasons, was something new that they had just explored, and – but it wasn't something that – I guess, the – I can say the name – Excelerate was interested into the long run.

I remember having discussions inside with Newfoundland and Labrador Hydro, because, of course, we had, in those days, always concern for meeting load, and particularly in the winter, that was this – would this be a concept that we could even take for four months and put in a suitable, sheltered bay and provide electricity, and I believe some of the folks at Hydro looked at it, and I think we had some meetings.

At the end of the day, though, I believe, when we asked Excelerate for what price of LNG we would be able to utilize this service for, they effectively said the equivalent of your number six. So, to us then, it was a true market test of this – now, in this Wood Mac report – concept. This is a sort of a nebulous concept that says this exists. We actually tested it; we spoke to the service provider; we had several meetings, and it – and we actually – I'd have to look. I think we actually asked them to give us a consideration for what the price of LNG would be. Because their job would be to maximize the spot price they would have bought this cheaper LNG somewhere in the market –

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** – that was distressed and then sit for four months and provide a service. And so it was the price of that oil, if you will, which is gas now is the equivalent –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – and the rental of the ship for four months. And then when the Hydro folks looked at that they said: This is the type of thing we would do if we were doing a major, you know, maintenance or we really did have a load issue. But it's not something that you would simply contract as a –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – as any kind of a mid-term solution.

**MR. LEARMONTH:** Okay, so the answer to the question: Do you recall suggesting to Ziff and PIRA that they consider using a floating shuttle and regasification vessel?

**MR. KEATING:** No.

**MR. LEARMONTH:** No?

**MR. KEATING:** I don't think I ever suggested – I know we discussed it.

**MR. LEARMONTH:** But why would you not suggest it?

**MR. KEATING:** For the reasons I just mentioned.

**MR. LEARMONTH:** That's your answer, is it? Well – yeah?

**MR. KEATING:** Yeah, it's my answer.

**MR. LEARMONTH:** Okay.

Now, if the Muskrat Falls Project had not been an option, so if we were stuck with an Isolated Island, would you have been an advocate of LNG as a solution?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** Okay. It would have been cheaper than Holyrood?

**MR. KEATING:** So if we had no hydro power alternative – and I did have these discussions with certain of our executives – Ed Martin, in particular, said if we simply did not have the opportunity, there's enough opportunity here, as I can see it, from now three source's reports that say it'll be close. But it warrants some deeper exploration but for the fact that the hydro project seemed to be even more significantly cheaper than the LNG. So I did say on a hypothetical basis that if we didn't have hydro power in Labrador, this is likely the avenue we would be taking.

**MR. LEARMONTH:** So –

**MR. KEATING:** In my opinion. I'm not a utility person –

**MR. LEARMONTH:** But it would be cheaper –

**MR. KEATING:** – oil and gas guy.

**MR. LEARMONTH:** It would be cheaper than –

**MR. KEATING:** There's scenarios –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – where this would be a cheaper; scenarios where it would be not as cheap. And then you would have to add in sort of additional considerations: risk of fuel switching, the new capital costs of those investments.

Then, rather than relying on subsequent contract renewals – which we do now, we just order oil on an annual basis and it's delivered on the global market – you would have to sit down and negotiate another 20-year or X-year arrangement. But in this particular case, you don't have options; you've already converted to a fuel.

So some of those considerations were thought of. And that band that you see, that – well, you look on the economics and say well, there's scenarios whereby imported LNG –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** – beats Island Isolated. In the totality of it, it's not so clear.

**MR. LEARMONTH:** Okay. So did you advocate for LNG as an alternative to Muskrat Falls?

**MR. KEATING:** I was – and one of the reasons why I think the PIRA report is – was useful because we did take it very serious to determine that. Because if, in fact, the Muskrat Falls Project for – or Gull Island, or any hydro project for that matter, would not have been sanctioned or taken place, we would need, you know, quite



readily to come up with an alternative scenario. And for – well, if anyone would have asked me at the time, this would have likely been the one.

**MR. LEARMONTH:** Okay. But it wasn't pursued?

**MR. KEATING:** No.

**MR. LEARMONTH:** No.

And it wasn't included in the potential Isolated Island scenario?

**MR. KEATING:** I –

**MR. LEARMONTH:** In the CPW?

**MR. KEATING:** I'll say no, but I don't know for sure because I didn't do the Isolated Island scenario.

**MR. LEARMONTH:** Okay, fine. Thank you.

This is a couple of points I want to cover from this morning that I didn't ask you, but were you aware that Dr. Bruneau had conducted iceberg pipeline risk analysis for offshore operators when he was employed by C-CORE in the 1990s?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** You're aware of that?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** So he had some –

**MR. KEATING:** Sure.

**MR. LEARMONTH:** – practical experience then?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And were you aware that Dr. Bruneau, while employed with Tatham Offshore, commissioned his colleagues at C-CORE to do their first probabilistic analysis of iceberg seabed contact?

**MR. KEATING:** Generally aware, not specifically, about the particular study.

**MR. LEARMONTH:** Generally?

**MR. KEATING:** Like, I would know his involvement in that organization.

**MR. LEARMONTH:** You would?

**MR. KEATING:** And I would know he would've been active in studying it but I don't know precisely what he studied.

**MR. LEARMONTH:** And were you aware that – can you confirm that Dr. Bruneau was the first person to propose the longer Northern route for a Grand Banks pipeline as a means of reducing iceberg risks?

**MR. KEATING:** I didn't know he would've been the first person, no.

**MR. LEARMONTH:** But did you know that he had some involvement in that Northern –?

**MR. KEATING:** I would know he had some involvement in that, yeah.

**MR. LEARMONTH:** Yeah.

So he was an experienced person in this field then, correct?

**MR. KEATING:** No doubt, no doubt.

**MR. LEARMONTH:** Okay.

**MR. KEATING:** I – again, I respect Dr. Bruneau immensely. He's a member of the Memorial University engineering staff. We worked – collaborated to get engineering co-op students in the company. I fully respect him but I – and I've met with him on a couple of occasions, early on in particular, when I first started at Nalcor, or Newfoundland and Labrador Hydro back in those days. And he's a passionate Newfoundlander, as am I.

And I just would have the benefit of a huge amount of information, mostly from the operators, that has shaped my opinions where maybe Dr. Bruneau's opinions is shaped in other ways. There's indeed overlap, but there's differences.

**MR. LEARMONTH:** Okay. Thank you.

And so was there ever a cost analysis done of the – for the cost of the pipeline, either route, the Northern or otherwise?

**MR. KEATING:** Yeah, we – I asked my own staff to do an estimate of various pipeline sizes just to make sure. You know, we often ask consultants to do work but, you know, you have to truth check and my organization is made up of 30 people, of which the vast majority have come from prior employees of Husky Energy, Suncor, Exxon, and they all have relevant experience.

My manager was actually one of the focal persons at Husky during these years in 2003, '04, '05. So I asked my folks to do their own sort of, tabletop or desktop analysis and so I've come to appreciate the cost estimates for these components. I would say there's variance, it depends on your assumptions and so on but, yeah, we've done some internal work to test them ourselves.

**MR. LEARMONTH:** Who – when was the last work done on that subject?

**MR. KEATING:** I think certainly during this time. I'm trying to think subsequently. Pipeline would have to be 2011, 2012.

**MR. LEARMONTH:** And what was the cost estimate?

**MR. KEATING:** I can't recall.

**MR. LEARMONTH:** No idea?

**MR. KEATING:** It's strange, for the long 600-kilometre pipeline, I think I'm – we may have had something like 800 million.

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** Depending on your trenching or, you know, well thickness or the diameter of the pipeline, you go up to 1.2. If you are able to avoid trenching, maybe minimize wall thickness, you are down to 600. So it is a little bit of a mug's game around that estimate.

But I think when I look at Dr. Bruneau's, it wasn't so far off ours and neither was Ziff's. So, again, at that – at all our levels, they're all

screening. No one actually engineered the pipe or the routes.

**MR. LEARMONTH:** Right.

**MR. KEATING:** So that's my recollection.

**MR. LEARMONTH:** And Dr. Bruneau acknowledges that, by the way.

**MR. KEATING:** Yes and so do we. And to be fair, again, I could never – and one thing I didn't want to do in any of this communication was to try to undermine specific numbers because it's no good. I mean, I appreciated the – what he had to work from. And it would make me no better off to attack a particular number, for example, because my numbers would probably have as much uncertainty about it.

But what I did want to be able to do, is bring in as much of the analysis that I knew existed inside my company, and as much as what the global markets would have shared. And maybe even some of the more specific things I knew about how the capital would be deployed on the FPSO. Would you have gas treatment onboard or onshore? That's not such an academic answer; there's technical and commercial reasons for it. So I wanted to make sure that my kind of had their knowledge base set and we came up with our internal analysis. And, of course, we kind of tested it off the different consultants to see if they were either like-minded or we differed.

**MR. LEARMONTH:** So your numbers were not – were in the same range as Dr. Bruneau?

**MR. KEATING:** Our numbers were generally – certainly generally higher than Dr. Bruneau's on an element-by-element basis. But more importantly, I think, we would have included a couple of things that maybe Dr. Bruneau, by his admission, didn't because he said that's best left to the operators –

**MR. LEARMONTH:** Right.

**MR. KEATING:** – and other things that maybe he hadn't considered at all. And so in reality, at the end of the day, it didn't surprise me that our numbers were higher and it didn't surprise me that the apparent economy was worse as a result.

**MR. LEARMONTH:** Right. But – so you did these preliminary cost estimates. Is that a proper way to describe them?

**MR. KEATING:** Yeah, like a screening tabletop.

**MR. LEARMONTH:** Yes, or a desktop or whatever. Yeah.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** Yeah. So if you did these in – did you say 2010 and 2011?

**MR. KEATING:** Yeah, through that time period.

**MR. LEARMONTH:** Yeah, yeah. No, but I just wonder if – I understood your evidence this morning to be that the – you know, the trenching and pipeline would be a showstopper for –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – the oil company. So if that's the case, why would you take the time and put in the effort to do a cost estimate for something that –

**MR. KEATING:** Oh, okay. So as a point of clarification – I don't think we did the direct estimate or the direct route estimate. The only thing, I think, we could have done is assume a hundred per cent trenched and buried six metres deep all the way along. And once you do that, you find it's not so dissimilar from the unburied and trenched –

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** – mostly more circuitous route.

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** So when you balance costs kind of equal to cost, you take a lower risk.

**MR. LEARMONTH:** Okay. And those were all done internally, were they?

**MR. KEATING:** Yeah, we did much internally. And, of course, had the benefit of some history,

some institutional knowledge from my prior employment to have some comfort in the – what those numbers were representing.

**MR. LEARMONTH:** Okay. The – just to return briefly to that development plan which I have at tab 22, that Husky Energy –

**MR. KEATING:** Yes.

**MR. LEARMONTH:** – in the – that's Exhibit 01313, tab 22.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And, once again, turning to page 3, the paragraph that I asked you to consider?

**MR. KEATING:** Yes.

**MR. LEARMONTH:** And there's reference to the flow lines to the SeaRose FPSO.

**UNIDENTIFIED FEMALE SPEAKER:**  
Sorry, what page?

**MR. LEARMONTH:** Page 3.

**MR. KEATING:** The Executive Summary?

**MR. LEARMONTH:** Yeah.

So implicit in this, I suggest, is the SeaRose is going to be in – available for processing, storage and offloading until 2041. Do you agree?

**MR. KEATING:** No.

**MR. LEARMONTH:** Okay, you mean it could be replaced?

**MR. KEATING:** Almost certainly.

**MR. LEARMONTH:** Yeah.

Why do you say that?

**MR. KEATING:** Because the oil window – the productive oil window that we understood at the time would probably get us to 2022 to 2028. And after that productive oil window would go, then the operator, unless they had a commercial gas project that they would have advocated,

would have filed for abandonment and that FPSO would have left the location and they would have had to dispose of or remove all their equipment. So –

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** So the 2041 reference, again, as I come back – and I think as I think through now your question, the 25 years, which takes us to 2041, is the technical, useful life of a structure. It doesn't imply that there's any production through it, through that time.

When, in 2014, that development plan was filed for the Wellhead Platform Project, it considered a start-up to be in 2017 and the end of the oil window in 2028 or 2029 maybe. So I'm fairly comfortable with that and the only difference being that it's shifted simply because of the delay due to the price of oil.

**MR. LEARMONTH:** Mmm.

**MR. KEATING:** So that oil window now maybe in the early 2030s, but certainly back in 2011-2012, I would have had complete confidence to say, even with this Wellhead Platform Project in the field, that that FPSO and all that apparatus to produce oil would not be producing oil beyond 2028 for sure.

**MR. LEARMONTH:** So what will they do with the platform then?

**MR. KEATING:** That's – that has to be abandoned. So there's a –

**MR. LEARMONTH:** Well –

**MR. KEATING:** So there's a series of – and Hibernia is going to be no different and Hebron is going to be no different. When the end of the oil window comes, they need to remove it.

**MR. LEARMONTH:** Yeah, but, okay, two points arising from that, two questions. I'll start off with we're talking about the knowledge that is available in 2012 –

**MR. KEATING:** Yes –

**MR. LEARMONTH:** – not 2014.

**MR. KEATING:** Sure.

**MR. LEARMONTH:** And you referred to a 2014 development plan.

**MR. KEATING:** Mm-hmm.

**MR. LEARMONTH:** So that's the first point.

**MR. KEATING:** Yes.

**MR. LEARMONTH:** The second point is I suggest to you that it's unreasonable for you to suggest that Husky would spend billions of dollars on a concrete platform believing that it might only have useful life of 10 years.

**MR. KEATING:** That's what we did.

**MR. LEARMONTH:** That's what who did?

**MR. KEATING:** That's what we did. That's our decision – our decision we sanctioned.

**MR. LEARMONTH:** Who's we?

**MR. KEATING:** Husky, Suncor and Nalcor. We sanctioned that development for the productive life of about 10 to 12 years of oil production starting – was intended in 2017. It's now going to start in 2022.

**MR. LEARMONTH:** Okay and –

**MR. KEATING:** Then you had, well, just 12 years of production. And failing any new discoveries or any new oil that we find, that's it, that field will be abandoned and that structure will stand there until –

**MR. LEARMONTH:** Okay.

**MR. KEATING:** – such time it's removed.

**MR. LEARMONTH:** But that information was not known or available –

**MR. KEATING:** Yes –

**MR. LEARMONTH:** – in 2012?

**MR. KEATING:** – it was –

**MR. LEARMONTH:** In 2012?

**MR. KEATING:** – because you – well, you point to this project description of May 2012?

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** This is the first public description of what that project scenario looks like –

**MR. LEARMONTH:** Mm-hmm.

**MR. KEATING:** – which, of course, was subsequently followed up with the formal final development plan in 2014 which we discovered –

**MR. LEARMONTH:** Yeah, but we're not talking about 2014.

**MR. KEATING:** Okay, so let's talk about 2012.

**MR. LEARMONTH:** Yeah.

**MR. KEATING:** So I would know, as a co-venturer – the content and intent of this project description would actually only be filed with our approval. And I would know the production profile and the intent at the time of the considerations of the operator, and they would have included the wellhead platform itself and/or maybe a subsea tie-back to exploit the existing oil reserve.

**MR. LEARMONTH:** Well, why didn't you tell us that this morning?

**MR. KEATING:** Because I just remembered it.

**MR. LEARMONTH:** Okay, so we asked – we went over that in detail –

**MR. KEATING:** Yes, we did, and for the life of me I couldn't believe why I stumbled on it, simply because it's years ago and it's a lot of development plans. And so now I'm comfortable that this was the chain of thought.

**MR. LEARMONTH:** Okay, so you're asking the Commissioner to accept that even though this subject was canvassed in considerable detail this morning that you forgot this –

**MR. KEATING:** So I didn't say anything contrary.

**MR. LEARMONTH:** Didn't you –

**MR. KEATING:** What I just said now was not contrary to what I said.

**MR. LEARMONTH:** No, wait 'til I finish the question.

**MR. KEATING:** Yeah.

**MR. LEARMONTH:** That you forgot about this information, and then now, just when I asked the question, it all comes back to you?

**MR. KEATING:** As many things are this morning.

**MR. LEARMONTH:** Okay. Well, anyway, that's your answer.

Now, I have – Commissioner, I got – I want to mention this, that unsolicited and obviously not paid for I got some questions by email yesterday from Dr. Bruneau that he asked me to consider asking, I think, and they are relevant to the terms of reference.

So I just mention that because the questions that I'm going to be asking now are not my own questions, but in the interest of disclosure I wanted to let you know that I received these unsolicited from Dr. Bruneau yesterday. And I wanted to make sure there was no problem in having made that disclosure, asking these questions.

**THE COMMISSIONER:** So are these questions that you've reviewed and you feel –

**MR. LEARMONTH:** I reviewed them and –

**THE COMMISSIONER:** – are relevant?

**MR. LEARMONTH:** Yeah. Yeah.

**THE COMMISSIONER:** All right.

**MR. LEARMONTH:** So until I say otherwise –

**THE COMMISSIONER:** Just one second now.

**MR. SIMMONS:** As –

**THE COMMISSIONER:** All right, go ahead, Mr. –

**MR. SIMMONS:** As long as – as long as they are questions that Commission counsel have considered as appropriate to ask in the discharge of their mandate and are questions that would be asked otherwise, there's no room for any objection. But if it's merely a matter of passing on questions from someone who is not a party and doesn't have standing and is not a participant, then they would be objectionable and we would object to them being asked.

**THE COMMISSIONER:** Right.

**MR. LEARMONTH:** (Inaudible.)

**THE COMMISSIONER:** That's why I asked the question: if he felt they were relevant – which I assume means relevant to the terms of reference – and so did you want to respond to that, Mr. Learmonth? Because I think you indicated earlier that you felt they were – that they were relevant – because I do agree that we're not just – you know, people can't just pass questions to Commission counsel –

**MR. LEARMONTH:** Well –

**THE COMMISSIONER:** – and expect that they're gonna be asked. They have to be relevant to the terms of reference.

**MR. LEARMONTH:** Well, that's why I mentioned it.

**THE COMMISSIONER:** Okay.

**MR. LEARMONTH:** That's why I disclosed that – I thought it was important to disclose that these are not my questions –

**THE COMMISSIONER:** Right.

**MR. LEARMONTH:** – that they were passed on, and I believe they are relevant.

**THE COMMISSIONER:** Okay.

**MR. LEARMONTH:** And if someone feels otherwise, then I presume they'll object.

**THE COMMISSIONER:** Okay. Mr. Fitzgerald?

**MR. FITZGERALD:** Yeah. Commissioner, they may be relevant, but this goes back to the role of Commission counsel. I think Commission counsel has to have a balanced approach in bringing out the evidence, and I appreciate Mr. Learmonth disclosing this to us, but if Mr. Bruneau has questions, I think the most appropriate party for them – those to be put to would have been Mr. Budden, who is – 'cause Mr. Bruneau is a member, I believe, of the Concerned Citizens Coalition and he – he could ask these questions to Mr. Keating in a more adversarial role, as opposed to these going to Commission counsel and then coming from Commission counsel.

I don't think these questions going to Commission counsel is the proper procedure for those questions to be asked.

**MR. LEARMONTH:** Okay.

Well I don't – I, you know, I'm not banging my fist over this. I'm just saying that I disclosed the circumstances. I don't want to be partisan about it. I'll simply leave the matter to the Commissioner, and Mr. Budden can ask whatever questions he wants, so I'll just –

**THE COMMISSIONER:** Maybe to try to dodge this on my part – Mr. Budden, are you – were you contacted by Mr. Bruneau?

**MR. BUDDEN:** Yes, I have spoken to Mr. Bruneau. I actually met with him briefly last night around 9 o'clock. I'm not sure if they're the same questions because what I reviewed with him were – were exhibits that I thought were important and he thought were important. So I don't know the questions of which Mr. Learmonth speaks.

**MR. LEARMONTH:** Well I can give – I don't mind giving them to – he's a member of the –

**THE COMMISSIONER:** One way or – like –

**MR. LEARMONTH:** He's a member of the Concerned Citizen's Group.

**MR. BUDDEN:** Yes, he's not – before last night, I had not met him other than introducing myself here.

**MR. LEARMONTH:** Well what I'm gonna do, then, is to, you know, move this matter forward, I'm gonna give these to Mr. Budden and he can have a look at them, maybe contact Dr. Bruneau and that way I think that'll address all concerns.

**THE COMMISSIONER:** Are you prepared to do that, Mr. Budden?

**MR. BUDDEN:** Yes. But not on the fly – right now – at this moment. Didn't mean to be flip there but I do have my questions prepared and I do have questions I wish to put to this witness. What I propose to do is if – when my turn comes – if it's about to happen I'll ask my questions. That will probably take us up to the break time and then I can have a look at these over the break. And perhaps then, I'll be in a position to put them.

**THE COMMISSIONER:** Okay. So, I think – I think the way I am going to handle this is this – point taken with regards to the role of counsel but –

**MR. LEARMONTH:** Hmm.

**THE COMMISSIONER:** – I think Mr. Learmonth has disclosed that he received this unsolicited from Mr. Bruneau. This is an inquiry. This is an investigation. I think, before anybody cross-examines – I think it's important that those, you know, if they are considered relevant – and they are as I understand it from Mr. Learmonth – I think we should get that evidence out so that every party who is going to cross-examine – particularly those before Mr. Budden will go – have an opportunity to deal with this.

**MR. LEARMONTH:** Yup.

**THE COMMISSIONER:** So –

**MR. LEARMONTH:** Can I say something else –

**THE COMMISSIONER:** Sure, go ahead.

**MR. LEARMONTH:** – before you make your – I'm interrupting you; I'm sorry but –

**THE COMMISSIONER:** No. It's okay.

**MR. LEARMONTH:** But I see on reflection – I see some merit to what Mr. Fitzgerald is saying and I'm content to turn the matter over to Mr. Budden. He can contact Dr. Bruneau on the break and deal with as he sees fit. I think that's the fairest way to do it.

**THE COMMISSIONER:** All right. Well I think what I'm going to do, is ask you to ask the questions. Because I think I'd rather get the evidence out now and then everybody has an opportunity to cross-examine.

**MR. LEARMONTH:** Okay.

**THE COMMISSIONER:** Mr. Leamon.

**MR. LEAMON:** Sorry.

**THE COMMISSIONER:** Barry, can you turn off your mic?

**MR. LEAMON:** Mr. Commissioner. The government doesn't anticipate asking any questions right now – or doesn't anticipate asking any questions so I believe Mr. Budden would be first.

**THE COMMISSIONER:** Would be next. Yeah.

All right. So just a second now. I'm not gonna to leave this out right at the end. So we're going to take a break now and I'm going to ask you, Mr. Budden, to speak to Mr. Learmonth about what these questions are – determine if you're going to ask the questions. If you're not going to ask the questions then – because Mr. Learmonth has told me they're relevant, I'm going to hear those questions and I'm going to hear the answers to them. So one way or the other – but I just want to figure out – let's get it figured out who is going to ask the questions first. So let's take our 10-minute break.

**MR. BUDDEN:** Perhaps just before we do that may I briefly speak to that?

**THE COMMISSIONER:** Sure.

**MR. BUDDEN:** I will do whatever the Commission wants me to do but I – my preference, obviously, is not to simply read out a list of questions that I haven't played any role in shaping. I don't think that's either efficient or necessarily fair to anybody. And while I am prepared to speak to Mr. Bruneau, again, I have no idea his schedule. I haven't even looked at these questions – they go on for several pages.

So perhaps a bit more time than the 10 minutes that we're allowed.

**THE COMMISSIONER:** Okay, so what we're gonna do is take 10 minutes. You can look, you can decide if you want to ask the questions or not. If you're not gonna ask the questions, Mr. Learmonth is gonna ask the questions. Period. We're adjourned for 10 minutes.

**CLERK:** All rise.

### Recess

**CLERK:** All rise.

Please be seated.

**THE COMMISSIONER:** All right.

All right, Mr. Learmonth or Mr. Budden, who's going to go with this? So you're going take care of Mr. Bruneau's questions?

**MR. BUDDEN:** I've just spoke to Mr. Bruneau, Mr. Commissioner and he has been watching the – he's been watching today and, presumably, he's watching right now. He advises me that he believes that much of what he has in those specific set of questions have already been covered by Mr. Bruneau, or he anticipates will be covered in what he and I did discuss last night.

There are other questions there which, perhaps, if they've escaped – if they haven't been covered, can be put to other Nalcor witnesses. He does not believe that they are essential that I should read them here today on the fly, so to speak.

**THE COMMISSIONER:** Okay.

**MR. BUDDEN:** I'm prepared to do that, but from – after speaking to him, I don't think it would necessarily help the progress of the Inquiry to do it that way.

**THE COMMISSIONER:** Well, as I said, you're an officer of the court; you're telling me that Mr. Bruneau is not asking that the questions be asked at this stage.

**MR. BUDDEN:** That is what I'm saying.

**THE COMMISSIONER:** So that's fine.

**MR. BUDDEN:** Okay, thank you.

**THE COMMISSIONER:** All right so – and the Government of Newfoundland and Labrador, no questions?

So Concerned Citizens Coalition.

**MR. BUDDEN:** Yes, Mr. Keating, as you're aware, my name is Geoff Budden. I'm the lawyer for the Concerned Citizens Coalition.

**MR. KEATING:** Yes.

**MR. BUDDEN:** And as I believe you also know, the Coalition is a group of individuals who, for many years now, have been critics of the Muskrat Falls Project.

**MR. KEATING:** Yes, I do.

**MR. BUDDEN:** So I'm going to take you through a number of exhibits, some of which you've seen and a couple of which you haven't.

**MR. KEATING:** Okay.

**MR. BUDDEN:** Perhaps, Madam Clerk, we could call up 01196?

**THE COMMISSIONER:** That's at tab –

**MR. BUDDEN:** Three.

**THE COMMISSIONER:** – 3.

**MR. BUDDEN:** The – this particular sequence is between yourself and Paul McCloskey, and you've already advised who he is. What I'd like you to do is read these to us in the – the



appropriate time sequence, because it's a little confusing to me, given the sequence and the times that are indicated there.

So if you – you're a party to this, if you could read them in the appropriate sequence, I'd appreciate it.

**MR. KEATING:** Correct.

So it would be from bottom to top, and the first email would be from Colleen McConnell, who's a Husky communications person, to Paul McCloskey, Margaret Allan, Martyn Fear, Malcolm Maclean and Ken Dyer – who were effectively the executive or leadership of the St. John's-based Husky team – and copied to Sharon Murphy and Adam Sparkes who were government relations people; Sharon Murphy being the executive in Calgary for Husky Energy as I recall at the time.

And what it seems to be is: "Further details to follow ....

"Government says Ziff Energy has been commissioned to study natural gas, in order to inform Muskrat Falls debate.

"Regards

"Colleen."

Then that was forwarded to me by Paul McCloskey effectively the same day, maybe a couple of hours later.

And subject: For information, Newfoundland government to study natural gas. Sorry, I may have – I think I – now I – yeah, I skipped. That's probably why I see it. The next mail is from Paul McCloskey to me at 5:45 p.m., same subject line, and then he simply says: "OK, now what?"

**MR. BUDDEN:** Okay. Continue please.

**MR. KEATING:** And then my response back to him was:

"Paul

"I should have added that its 'all under control.' The province used Ziff to do a report on LNG.

We had used PIRA. In a public forum, its better to use a 3rd party to dismiss.

"We will work with Ziff so they understand our NG opportunity or lack thereof.

"Jim"

**MR. BUDDEN:** Okay, I'll stop you there for one second.

**MR. KEATING:** Yes.

**MR. BUDDEN:** On my reading, it looks like there might be something missing there, either another email or a phone call.

**MR. KEATING:** It – there would have been likely a phone call –

**MR. BUDDEN:** Yes.

**MR. KEATING:** – where I may have had to leave a message. So because, as it says, I should have added it's all under control. I must have said some words to his message manager and in reflection when I hung up I thought, okay, he's going to be still upset.

**MR. BUDDEN:** So ...

**MR. KEATING:** Because maybe I just repeated what the press release said, they're studying – I think if I can recall. Then I hung up and then I think I added this by –

**MR. BUDDEN:** So stop you there for a second. You're certain it wasn't a conversation? You believe it was just you leaving an email?

**MR. KEATING:** You know, to be fair, I can't exactly recall. Usually – it's very rare to get Paul McCloskey directly, and to me as well.

**MR. BUDDEN:** Yeah.

**MR. KEATING:** So sometimes it's a voicemail. And I – maybe I was just – it could be, I just don't know.

**MR. BUDDEN:** Okay. So I guess my point is, obviously, there's some information here that was conveyed orally.

**MR. KEATING:** There's a little gap, yes.

**MR. BUDDEN:** Okay. Fair enough. Carry on, please.

**MR. KEATING:** Okay.

So then that is me to him. And then Paul responds, I guess, to this email by saying: "Jim, that's a little ... reassuring!"

"Any thoughts on timing and how/if we can help? Just let me know.

"Paul."

**MR. BUDDEN:** Okay.

I guess the very first question – I'll return to this over our examination – but why is this your problem? Why is this your issue?

**MR. KEATING:** Why is this my issue?

**MR. BUDDEN:** You as a Nalcor vice-president.

**MR. KEATING:** Yeah, well, that's indeed a good question. And when it came down to my role in this project, there's effectively none.

**MR. BUDDEN:** Which project?

**MR. KEATING:** In the Muskrat Falls Project.

**MR. BUDDEN:** Yes.

**MR. KEATING:** In all the proceedings and in all the, I guess, discourse and timing and process, I, at that time, was focused, of course, on the new projects we had and building the oil company.

Where I came into play is because when the topic of gas came up as an alternative, in particular to those topics regarding domestic gas, our gas resource, okay, I would have been, inside Nalcor, the senior executive responsible for the knowledge of that particular line of business or resource.

So, in that particular case, the project team – Ed directly – said, hey, listen, what can you do? What do you know? How can you help us in terms of understanding how this can be

communicated primarily? Because I think the project team still was pretty confident in their own reports and their own assessments and the Navigant report. And they asked me, as professional courtesy and as a person on the leadership team, to have look at, I think, the Navigant report first. That was the thing that I saw first. And, again, as I looked at it, not that I disagree with the conclusions Navigant had, but I just knew that the tone and tenor of how people were thinking about gas, that this report was thin. It wasn't gonna be – it wasn't going to satiate the knowledge of why or why not we couldn't develop natural gas.

**MR. BUDDEN:** Okay. That's interesting. I guess I'm thinking of why were you involved in a slightly different way – why – this is Husky's problem, I presume. I mean –

**MR. KEATING:** Yes, it is Husky. It is the operator's problem at the end of the day, yes.

**MR. BUDDEN:** So why are you getting in the middle of this?

**MR. KEATING:** Well, it's a problem that my company, Nalcor, was kinda dragging to its feet. So, in the absence of any other reason, Husky had consistently communicated through their filings, regulatory filings, through any kind of presentations at conferences and seminars what their plans for natural gas would be.

**MR. BUDDEN:** Okay; stop you there.

Husky's not – this is not a mom-and-pa operation.

**MR. KEATING:** Correct.

**MR. BUDDEN:** This is a company – billions and billions of revenue, 5,000 plus employees. Why did they need you? I mean, surely they have people on staff who deal with responding to independent reports. They must do it every day.

**MR. KEATING:** Yes. And they do today. So, Husky is in focus these days.

**MR. BUDDEN:** So why are you reassuring them: Jim, that's a little more reassuring. Like, why is Jim Keating –

**MR. KEATING:** Because it's my shareholder, the government, is saying we're commissioning a study to evaluate your resource. And when I say your, it really is Husky's and Suncor's resource for my – my company's use. So there's a – I don't think that's too great a chasm to cross.

**MR. BUDDEN:** But your loyalty lies to your shareholder –

**MR. KEATING:** Yes, absolutely.

**MR. BUDDEN:** – to the people of Newfoundland.

**MR. KEATING:** Absolutely.

**MR. BUDDEN:** You have no loyalty to – either than –

**MR. KEATING:** I've no loyalty to Husky but to make sure that they, as my partner, in the ongoing operations offshore and all the agreements therein that I'm obligated to, I conduct and execute my business accordingly.

In this particular context, this was a jointly held believe that the domestic use of natural gas for power generation had been discounted some years ago. And now, because of the electricity project that was in discussion, it's come up.

**MR. BUDDEN:** Okay.

**MR. KEATING:** So, in that context, I say, okay, I probably bear a little bit of responsibility to help my partner navigate this.

**MR. BUDDEN:** Okay, we'll get back to the partnership business, 'cause that's important, but there's other things that are important here, too, and one of which – you are aware, I presume, of Hydro's statutory obligations to the ratepayers. It's a –

**MR. KEATING:** Correct.

**MR. BUDDEN:** I'll read, just so we all have it. Section 5 of the Newfoundland and Labrador Hydro act [sp *Hydro Corporation Act, 2007*] and you don't have it in front of you, but it's fairly brief and you probably know it.

“The objects of the corporation are to develop and purchase power on an economic and efficient basis, and, in particular, to engage in the province and elsewhere in the development, generation, production, transmission, distribution, delivery” et cetera of – “and use of power from water, steam, gas” et cetera “or other products used or useful in the production of power, and to supply power ...”

So that is part of the mandate, to do that at the most efficient rate possible. So while you're maybe a – you may be a partner with Husky and one aspect of Nalcor's business, Nalcor's also the owner of Newfoundland Hydro that has the statutory obligation.

**MR. KEATING:** Mm-hmm.

**MR. BUDDEN:** And you're aware of that?

**MR. KEATING:** Yes.

**MR. BUDDEN:** And you acknowledge that is a true obligation –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – on Hydro's part? Had you thought of the possibility that, in this case, the interests of Nalcor, or the interests of Hydro, and the obligation of Hydro, and that of this oil company, might possibly not be in sync? Had that occurred to you?

**MR. KEATING:** Not in this particular case. Simply because, in the matter at hand – and this was related to the pipe-gas scenario – that it didn't make sense to me.

So it's – and as – so even in the absence of Husky, Husky did not exist, and I owned 100 per cent of that gas resource – let's – if I would – and my fellow vice-president Gilbert Bennett sitting next to me in the office said: Can we use that gas? I would say: Here's a series of studies that says, Gilbert, it's likely gonna cost you more –

**MR. BUDDEN:** Okay.

**MR. KEATING:** – than what's going on right now.

**MR. BUDDEN:** It didn't make sense to you. However, the Government of Newfoundland and Labrador didn't commission you to answer this question, did they?

**MR. KEATING:** No.

**MR. BUDDEN:** The commissioned an independent report from Ziff?

**MR. KEATING:** Correct.

**MR. BUDDEN:** And given, I guess, that if Dr. Bruneau, who, as we've all acknowledged –

**MR. KEATING:** Mm-hmm.

**MR. BUDDEN:** – as you've certainly acknowledged –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – is a very knowledgeable person –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – has perhaps greater expertise than almost anybody else on earth in getting natural gas and the possibility of developing it in Newfoundland –

**MR. KEATING:** I wouldn't say that.

**MR. BUDDEN:** Well, he has a lot of expertise. You would say that?

**MR. KEATING:** He has a lot of expertise.

**MR. BUDDEN:** Okay, well, perhaps there's a bit of hyperbole there.

But he's made a proposal. The government saw enough – thought enough of that proposal, thought it was appropriate to get an independent review, and wouldn't Nalcor just stand back? Because if he was right, that surely would be a terrific benefit for Newfoundland and would advance the mandate of Hydro. You see that, don't you?

**MR. KEATING:** Sure.

**MR. BUDDEN:** So why did you guys not just stand back and say let the independent review play out its course?

**MR. KEATING:** Well, I guess for two reasons. I guess that initial one is that the consultant wanted to have our input, and we could've chosen, say, listen, stand back; don't talk to us.

**MR. BUDDEN:** You could've.

**MR. KEATING:** We could have, and that's, indeed, an outcome.

**MR. BUDDEN:** Yes.

**MR. KEATING:** So we could've done that. We chose not to because the consultant was looking for some information, information that had actually – some source of information had to come from Nalcor production – sorry – generation load, some physical characteristics of the Holyrood site. So there's some things that naturally had to flow from Nalcor.

**MR. BUDDEN:** But you're surely not the guy to speak to –

**MR. KEATING:** No, not –

**MR. BUDDEN:** – about those things?

**MR. KEATING:** – to those thing. No.

**MR. BUDDEN:** Yeah.

**MR. KEATING:** I did, in this particular case, facilitate, as a point of contact, those types of queries with other people in the corporation.

**MR. BUDDEN:** Yeah, I'm not concerned about that. That's –

**MR. KEATING:** Right.

**MR. BUDDEN:** – fair enough.

**MR. KEATING:** Right.

**MR. BUDDEN:** That's not why you're here.

**MR. KEATING:** Right.

**MR. BUDDEN:** You did a lot more than that, though.

**MR. KEATING:** Yeah, and I would humbly say it's mostly because there's – very few people would have the broad knowledge to help any assessment of this subject in the time frame that, I guess, Ziff would've had. They wanted to understand things like: How does the royalty system work? And that's a great question. I could say: Ask the Department of Natural Resources, which I'm sure they did.

**MR. BUDDEN:** You could've, or you could've said maybe one of those 5,000 people at Husky could answer this question.

**MR. KEATING:** Yeah, now – and to be fair, that's my first response to anyone who asks about the commercialization of natural gas: Go speak to Husky.

**MR. BUDDEN:** But that's not what you did here.

**MR. KEATING:** They spoke to Husky before they spoke to me, so they already had either questions asked and answers made, or gaps remaining in their (inaudible) –

**MR. BUDDEN:** Let's – perhaps, Madam Clerk, we could scroll back a little bit to your initial – so Paul McCloskey emails you and says: What's this?

**MR. KEATING:** Yep.

**MR. BUDDEN:** And you say – you left some sort of telephone message.

**MR. KEATING:** Yep.

**MR. BUDDEN:** And then just read again what you said in addition to that: “all under control.” And: “In a public forum, it's better to use a 3rd party to dismiss.”

**MR. KEATING:** Always.

**MR. BUDDEN:** That's before you and the man had exchanged a word.

**MR. KEATING:** Absolutely.

**MR. BUDDEN:** So –

**MR. KEATING:** 'Cause that's –

**MR. BUDDEN:** – why are going on about third parties and dismissing? What's that all about?

**MR. KEATING:** Yeah, so, in all cases – in particular, the case of a state-owned enterprise – if you have an undertaking that has some particular significant public interest, you'd ought to – you're well served to have any and all third party validation or insight, as an – everywhere possible, and you'd do that, in the first –

**MR. BUDDEN:** Why?

**MR. KEATING:** – instance, to –

**MR. BUDDEN:** Why?

**MR. KEATING:** – inform yourself.

**MR. BUDDEN:** Why is that important?

**MR. KEATING:** To inform yourself, first off – is there anything in – as we did with PIRA – is there anything in this LNG case that I didn't know, wasn't aware of, that may change my mind? So yes, it's always right and true to engage third parties and – yes, create the – create this sphere of independence, as you can imagine. But I –

**MR. BUDDEN:** You can say that –

**MR. KEATING:** Yes.

**MR. BUDDEN:** After talking about pile driving and all that stuff –

**MR. KEATING:** Yes, yes, yes.

**MR. BUDDEN:** – how can you say that?

**MR. KEATING:** Because it's true. I can still say it, but often times, if you want to make sure that the – the best quality of information is provided and the best understanding, which is most important, is provided, you have to do what you have to do.

If I didn't inform these consultants about the ebb and flow of how different blocks would come on

stream, if I didn't let them know about the capital cost – the operating cost – on an annual basis and the allocations of that, they would have had to have tried to pierce through a – largely a commercially sensitive veil that really a third party like Husky likely wouldn't have made easy –

**MR. BUDDEN:** So your role –

**MR. KEATING:** – or at all accessible.

**MR. BUDDEN:** Your role here, Mr. Keating, was as a sort of disinterested provider of information?

**MR. KEATING:** No, I was keenly interested, and I was a provider, but what I was able to do was provide information that I had possession of, that Husky had possession of, that maybe, under examination from a consultant that they had no interest in, they didn't hire, they didn't pay, they didn't seek.

When a consultant would go in through a private sector company and ask all kinds of questions about how I can make you do something, I don't think they're gonna get maybe the fullest catalogue of information possible. I would see myself having the public interest to see that I can at least provide as much data as I can to give it the fullest picture as it can be.

**MR. BUDDEN:** And that's it – just –

**MR. KEATING:** One hundred per cent, from start to finish.

**MR. BUDDEN:** We're gonna hold that thought. We'll return to that. Perhaps we can move on to 01197, please, Madam Clerk?

And also an email thread, and I'd like you to read this one as well, please.

**THE COMMISSIONER:** Tab 4.

**MR. KEATING:** Tab 4?

**MR. BUDDEN:** And, again, in the sequence in which it was written.

It starts off with an email to you – from you to Paul, April 3, 2012, 9:15 a.m. Perhaps you could read from there?

**MR. KEATING:** Sure.

From me to Paul. Subject: nat gas.

“Paul

“Could I take you up on” the “offer to meet with someone in your shop to get some alignment on piped gas issues. I believe that we that we will be out on this soon.” And: “We will take you through our assumptions and costs and would be interested in your considerations.”

**MR. BUDDEN:** Okay.

**MR. KEATING:** “I would have K Costello” – that's Kris Costello, who works with me – “and our economic analyst Terry O'Reilly joining me. The sooner the better.”

**MR. BUDDEN:** Okay, stop you there. The sooner the better – why the rush?

**MR. KEATING:** Oh, public interest. I think it was in the media, it was in the news. Well, since the minister announced that he's going to do a study, it was topical.

**MR. BUDDEN:** Yeah, this is five days after Dr. Bruneau – four –

**MR. KEATING:** Correct.

**MR. BUDDEN:** – days and 12 hours or something after Dr. Bruneau spoke.

**MR. KEATING:** For sure.

**MR. BUDDEN:** Okay.

All right, scroll up, please, Madam Clerk. And you could, perhaps, read Paul's reply.

**MR. KEATING:** So from Paul McCloskey to me, copy Malcolm and Carol James: “Jim, we will probably line up Malcolm and members of his team but I would like to be in on the initial discussion. I am back Thursday” – and would – “and could find time in the afternoon.

“Please liaise with Carol and she will coordinate.”

**MR. BUDDEN:** Okay, perhaps you could scroll back to the earlier email. Yes, thank you.

Why were you seeking alignment on piped gas with Husky?

**MR. KEATING:** So we would not have jointly studied this, I think, either for some time or at all. And I know I studied in a previous life with a previous company with co-venturers, shared studies, but as a Nalcor executive or team, I don’t know that we’ve specifically studied that piped – that option that Dr. Bruneau referred to.

I would know that there would be in existence some of that analysis.

**MR. BUDDEN:** So you hadn’t previously studied it, but you had – were already convinced it wasn’t viable.

**MR. KEATING:** Yeah, I – we hadn’t – Nalcor hadn’t studied it. I had knowledge of previous studies.

**MR. BUDDEN:** Not done by Nalcor –

**MR. KEATING:** Not done, no –

**MR. BUDDEN:** – done by other parties.

**MR. KEATING:** Done by other parties.

**MR. BUDDEN:** And those parties were utterly incapable of advocating for themselves?

**MR. KEATING:** No, they’re quite capable of advocating for themselves, and they had – in on their – on – in the public view, a series of – again, development plan submissions, public presentations always addressed when asked what the commercialization of natural gas would be.

Through the years, from 2001, ’02 and ’03, it became less and less frequent, and I don’t know but for this 2012 period had it come up in maybe two or three, four years prior. So it would have been residual study work that now I asked my

folks to say: All right, let’s do some tabletop analysis and we’ll come up with some kind of numbers based on the best of our knowledge.

And then, because if I was going to go out on it so to speak, because I’d committed myself to Ed, then I want to make sure that, from my view and Husky’s view, was there – is there alignment? Are we so totally off? Is there a possibility that this is commercial and anything in between?

**MR. BUDDEN:** Is there an email where you’re asking? Is there any possibility this is commercial?

**MR. KEATING:** No, I – I may have, in some of my review, put that question directly and may have gotten a direct answer. When I mean – what I mean specifically, up to this point, the oil and gas industry –

**MR. BUDDEN:** Yeah. A question about –

**MR. KEATING:** – would always –

**MR. BUDDEN:** Anyway, carry on.

**MR. KEATING:** Yeah, so I’m trying to recollect if there was an email and there’s a hundred-thousand emails, I think, between now and then, that I’m in possession of but –

**MR. BUDDEN:** But if you can find one that seems to pose a genuine question to Husky, we’d very much like to see it.

**MR. KEATING:** So I recall one now where Paul McCloskey emailed me back and said he was interviewed by a journalist, and here are the questions the journalist asked and here are my answers. I believe in that email is the response that he doesn’t believe that the piped gas solution is economically viable. I believe that.

**MR. BUDDEN:** So you take comfort from a Husky employee’s answer to a journalist? That satisfied all your concerns about viability?

**MR. KEATING:** No, I took comfort that to your initial question: Where was Husky on this and shouldn’t they be out talking –

**MR. BUDDEN:** Okay.

**MR. KEATING:** – about it. That’s the only comfort I took in that.

**MR. BUDDEN:** All right.

So in this case, essentially, you already testified to Mr. Learmonth you regarded Husky as your partner. You were working with your partner on matters that were clearly within your partner’s interests, the supply of natural gas. Not obviously, I would suggest, was it Nalcor’s, but if I take what you’re saying, as partners, you felt that it was appropriate to advance the agenda of your partner?

**MR. KEATING:** Oh, it’s important to advance the agenda. My primary agenda is the agenda of the company which is the – to execute the agenda of the province such as maximization of value of its resources simply.

**MR. BUDDEN:** And a specific agenda of the province, reduced to legislation –

**MR. KEATING:** Mm-hmm.

**MR. BUDDEN:** – is the mandate of Hydro, the statutory purpose of Hydro existing –

**MR. KEATING:** Mm-hmm.

**MR. BUDDEN:** – to deliver the cheapest power possible –

**MR. KEATING:** Sure, yes.

**MR. BUDDEN:** – and other concerns.

**MR. KEATING:** Correct

**MR. BUDDEN:** Okay, so that’s the agenda of the province.

**MR. KEATING:** Yes, absolutely.

**MR. BUDDEN:** Yeah, but the agenda of Husky may be quite different.

**MR. KEATING:** It – absolutely

**MR. BUDDEN:** They may not want to bother with natural gas.

**MR. KEATING:** Absolutely, I will agree to that. There could be a situation where the agenda of Husky may be at odds with the agenda of the province. And –

**MR. BUDDEN:** Can you point to one place –

**MR. KEATING:** Yeah.

**MR. BUDDEN:** – in these hundred-thousand emails or whatever you have, where there’s any kind of internal Nalcor debate about: Is this the right thing for Newfoundland? Is this the right thing for Nalcor to unhesitatingly side with Husky in resisting this proposal of Dr. Bruneau’s?

**MR. KEATING:** This discussion, this very topic actually, most manifest in 2006 and ’07 at the time the Energy Plan was being drafted.

**MR. BUDDEN:** Yeah, that was years before. In this time frame?

**MR. KEATING:** In this time frame? No, because all the considerations of the technical and the commercial and the economic viability – I think for me, for my part was suitably resolved and it was suitably understood by my shareholder.

**MR. BUDDEN:** So there’s not one point in this whole time where anybody in Nalcor said to anybody else might Dr. Bruneau be on to something, maybe we should step back and let this play out?

**MR. KEATING:** Yeah and one of those occurrences is this mail. So I said to Malcom, we’re coming to see you because I have a set of facts and figures that say I don’t think it’s economic, I want to see if what you say if it’s not economic. And if he says, you know, Dr. Bruneau was on to something, well, we have a stop-the-bus moment and that, you know –

**MR. BUDDEN:** Show me that, please.

**MR. KEATING:** No, I don’t have – that’s not in any document; that’s what the purpose of the meeting was.

**MR. BUDDEN:** Okay.



We don't believe it's economic and we want to share that conclusion with you.

**MR. KEATING:** Yeah.

**MR. BUDDEN:** Do you see that as, like, an honest searching to see if Dr. Bruneau, this expert, may be on to something?

**MR. KEATING:** Sure.

**MR. BUDDEN:** Okay. Fair enough.

So does Nalcor also advocate for their partners in other issues, like the royalty regime, perhaps?

**MR. KEATING:** Do Nalcor advocate on others, like the royalty regime? I'd say almost to the contrary. My role is to maximize the economic rents, if you will, of the offshore. And that may mean – usually it means, 90, 95 per cent of the time whatever's best for the project in terms of ramping up production, accelerating timelines, you know, that's going to be better for royalty taker as well, the tax taker.

But there will be certain circumstances where I can see either, you know, behaviour or decisions that are not optimal for the royalty taker, in which case I've been not a shrinking violet to indicate those. I've recused myself from any kind of joint litigation on behalf of partners to my shareholder. And to the extent that I were able to share any and all information to substantiate or bolster my shareholder's case, I do so.

**MR. BUDDEN:** Okay.

So you are capable, if you feel it's in the best interests of Newfoundland, to standing up to an oil company.

**MR. KEATING:** I do it all the time; I have been one of the leads in all these – all these natural – all these oil development sanction projects from Hebron, Hibernia South and the White Rose expansions.

**MR. BUDDEN:** Okay. Fair enough.

Did it not occur to anybody at Nalcor – well, did it not occur to you to maybe go to Husky and say: Look, you know, we know you're not keen

on this but Newfoundland needs it. So, you know, you're going to have to suck it up.

**MR. KEATING:** If this project was – doesn't make sense – I don't know what I achieved by telling my partner, who knows that I have the fullness of knowledge of the economics or should ought to, anyway, that – I know this doesn't make sense – but the government or the people want it. We ought to make it happen. I don't –

**MR. BUDDEN:** No, that's not what I'm asking. One of the reasons it doesn't make sense, I believe, you know, as you spoke for several hours this morning, was because there was an adequate supply of natural gas for the project that Dr. Bruneau envisioned. That's one of the issues, right?

**MR. KEATING:** No. That's nothing – that's not accurate. There's copious volumes of natural gas offshore. There's not –

**MR. BUDDEN:** In excess to the needs of the oil companies.

**MR. KEATING:** – and exceeds of the needs of the oil companies. Absolutely. And that volume is stored, but the commercial value of those volumes – both the volumes they use now for pressure support to get more oil out, which is a clear value and the volume of – and the gas that they store for next phases, which is of blatant value. Their – they prescribe to a philosophy of keep your options open. There are likely better options than the domestic use of natural gas.

**MR. BUDDEN:** So, Husky preferred not to make its natural gas available.

**MR. KEATING:** That is a way to express it. Husky will prefer not to make its natural gas available.

**MR. BUDDEN:** Okay. Stop you there 'Cause that's a way to express – that's the –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – way to express it. And it never occurred to you, as you did on other occasions, to say to them: Look, if this Bruneau

thing is viable, you guys, as our partners, should come through.

**MR. KEATING:** Yeah. I could say that.

**MR. BUDDEN:** Was that even articulated?

**MR. KEATING:** I have no problem with saying exactly those words: If that Bruneau thing is viable, we should make it happen. I would have no problem saying that.

**MR. BUDDEN:** So, even without the availability of gas, you'd already determined it was not viable.

**MR. KEATING:** No. It is – No. What the statement was, if this Bruneau thing is viable, we should. The Bruneau thing –

**MR. BUDDEN:** Yeah.

**MR. KEATING:** – wasn't viable.

**MR. BUDDEN:** For reasons other than the availability of natural gas you made that determination.

**MR. KEATING:** The commercial availability of natural gas –

**MR. BUDDEN:** Other than for that.

**MR. KEATING:** No. And the strength of the analysis – the Ziff reports –

**MR. BUDDEN:** That came later. I'm talking about now.

**MR. KEATING:** Yeah. Yeah. So again, I will say that the 2001 report, if that's the only thing in the public domain, which Navigant relies upon, Navigant would have said that that consultant and that time would have looked at a wide range of scenarios –

**MR. BUDDEN:** Sure. Ten years before.

**MR. KEATING:** Ten years before and was satisfied that –

**MR. BUDDEN:** And five days before Dr. Bruneau, an acknowledged expert, had determined otherwise.

**MR. KEATING:** No. He didn't determine otherwise.

**MR. BUDDEN:** Well, he –

**MR. KEATING:** He made an – he made an –

**MR. BUDDEN:** He proposed –

**MR. KEATING:** – an assumption.

**MR. BUDDEN:** – he suggested otherwise.

**MR. KEATING:** He suggested –

**MR. BUDDEN:** He proposed otherwise.

**MR. KEATING:** He didn't prove otherwise. He suggested otherwise.

**MR. BUDDEN:** Oh no, and – but he'd, you know, he advanced a serious proposal to government. Your shareholder, obviously, took it seriously enough –

**MR. KEATING:** Dr. –

**MR. BUDDEN:** – they went off and commissioned Ziff.

**MR. KEATING:** So, Dr. Bruneau, to be fair – and to Dr. Bruneau, actually – he would've said he didn't do any economic analysis. He mostly provided some capital costs and some projection of load and some – it's a benchmark – figures. But I don't think he had it – had a fulsome – because he doesn't have – there's no deep resources in order to do that, so he – I don't think he was making a full-on proposal –

**MR. BUDDEN:** Okay, well –

**MR. KEATING:** – he was suggesting.

**MR. BUDDEN:** – that's for the Commissioner to determine. But just to wrap this up, did you at any point suggest or even contemplate suggesting to Husky: You folks, should make that excess natural gas available rather than store it indefinitely for other purposes.

**MR. KEATING:** So, I have had in my history, since I've been at Nalcor –

**MR. BUDDEN:** At this time.

**MR. KEATING:** At this time? Not for that purpose, no.

**MR. BUDDEN:** Okay, fair enough. Perhaps we can call up P-01200 please, Madam Clerk. This is the email exchange between yourself and Mr. Martin. And the tab is 7.

**MR. KEATING:** Seven? Okay. So it's –

**MR. BUDDEN:** So again, if you could – it's relatively short – between yourself and Mr. Martin, "Re: Ziff" – and you can perhaps read this to us in the sequence in which –

**MR. KEATING:** Okay.

**MR. BUDDEN:** – it was sent.

**MR. KEATING:** So from Jim Keating to Ed Martin, "Spoke with Ziff 3 hours. Real good. Ziff said," – quote – "Husky says they are considering using gas for pressure support in the future. That's it. End of story." end quote. "I pile driven another dozen issues. They most like the one that," – quote – 'oil runs out in 2023 or 2028 at latest'. End of pipe option."

**MR. BUDDEN:** Okay. Stop you there. We'll get the rest of it.

You were challenged on this by Mr. Learmonth. I'll challenge you again. Are you really saying that this was an exercise in informing them rather than persuading them?

**MR. KEATING:** Yeah because these –

**MR. BUDDEN:** Them being Ziff.

**MR. KEATING:** – these are facts. This is not an interpretation or these are – this is not a – this is my feeling. This is not even – it's – they said, we said. This is, Husky has gone on the record to say that they're using the gas for pressure support. No, there's no quibble. And then we say that the oil does indeed run out 2023-2028.

**MR. BUDDEN:** Okay.

**MR. KEATING:** There's no quibble.

**MR. BUDDEN:** Stop you there. What do you mean by "pile driven"?

**MR. KEATING:** Pile-driving – that's my use of term here in this particular case, because it was a three-hour phone – teleconference. We went through a myriad of issues, and pile-driving means – not that it was – they resisted or didn't understand or totally disagreed with me. Pile-drive was a deep – I need to go deep in terms of how the royalty structure works.

**MR. BUDDEN:** That's not what pile-drive means.

**MR. KEATING:** In my context, in this particular sense, pile-drive means I need to make sure I hammer home all these particulars.

**MR. BUDDEN:** Yeah, persuade them.

**MR. KEATING:** Yeah – oh – yeah, persuade or inform. I would not say persuade.

**MR. BUDDEN:** Do you go around, like, pile-driving people if you're just trying to inform them? Is that your style? It doesn't appear to be.

**MR. KEATING:** I'm probably not a good piledriver, no.

**MR. BUDDEN:** Well, you were sort of boasting to Mr. Martin that you were –.

**MR. KEATING:** He's my boss.

**MR. BUDDEN:** He's your boss. And you said to him – you're saying to your boss – obviously, you're being honest with your boss: "I pile driven another dozen issues". What were those issues?

**MR. KEATING:** Okay. If I can recall – 'cause I don't have –

**MR. BUDDEN:** Yeah.

**MR. KEATING:** – evidentiary proof, I didn't list those. It mostly was around the operability – and I go back to say operability means that in a scenario whereby gas and oil is produced together, there's a sharing of costs on the platform. It is a more economic situation.

There is a circumstance – because this White Rose field is actually – it’s small and it’s running out oil – that the need for gas goes on many years after the end of oil production. That was not fully understood by Ziff in this particular case. And then as they understood, as they – ‘cause they’re gathering information, they’re looking at production profiles – and then they said: Oh yeah, I see that.

And then, they say – I remember they said to me: Well what happens then? And I said: Well, that’s the question. Because I said – I even said simply: It costs \$250 million, \$250 million a year to run that FPSO. And it’s one thing to spend that money, when you are making a billion and a half – which they kinda are these days – but it’s entirely another, when, maybe, you’re only making between 60 and 200 –

**MR. BUDDEN:** Okay.

**MR. KEATING:** – from the sale of gas.

**MR. BUDDEN:** Stop there for a second.

**MR. KEATING:** Yeah.

**MR. BUDDEN:** So, you basically pile-driven all these points home.

**MR. KEATING:** Just like I did here.

**MR. BUDDEN:** In this realm of conversation.

**MR. KEATING:** That’s right. Almost similar to how I had this conversation right now.

**MR. BUDDEN:** You also said to Mr. Learmonth –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – that they were already persuaded. They already had –

**MR. KEATING:** Yeah.

**MR. BUDDEN:** – their mind made up.

**MR. KEATING:** They largely got it. They largely understood the particulars of the field. They largely understood the distance. I think the one that they mostly understood was the route of

the pipeline. The – because really it’s a mystery to everybody. Every consultant comes to Newfoundland wanting to know about the icebergs and the implications of all that.

**MR. BUDDEN:** Where does it say that here?

**MR. KEATING:** It doesn’t. I’m reliving the three-hour –

**MR. BUDDEN:** You’re reporting to your boss –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – on what I presume are the highlights. You talk about using gas for pressure support.

**MR. KEATING:** Right.

**MR. BUDDEN:** Talk about when oil runs out in ’23 or ’28.

**MR. KEATING:** So, you did ask me though, I thought, what were those issues. And I ran through a list of issues.

**MR. BUDDEN:** Then we moved on.

**MR. KEATING:** But I already said it wasn’t a list – I didn’t have a list of issues in print, so I was going from memory.

**MR. BUDDEN:** Okay.

**MR. KEATING:** Yeah.

**MR. BUDDEN:** And you’re now informing your boss about this conversation. I mean, my question was where in this do you tell him: Look, they already have their minds made up?

**MR. KEATING:** I don’t think I expressly said that at all.

**MR. BUDDEN:** You didn’t say it implicitly either, let alone expressly.

**MR. KEATING:** No, that’s probably right.

So if I were Ed Martin, if I were – got some question for Ed Martin – but when he receives this letter, this note from me – an email, I say: “End of pipe option.” “Spoke with Ziff ... Real

good.” I would have to assume that he realizes that maybe Ziff is satisfied that it’s covered bases – that I fill in any gaps of knowledge and then they would go off and complete their story.

**MR. BUDDEN:** Okay.

You’re an oil and gas man.

**MR. KEATING:** Yes.

**MR. BUDDEN:** You’re here giving evidence. Are you prepared to stake your professional reputation on the accuracy of this statement, quote: “oil runs out in 2023 or 2028 at latest”? You know, cast your mind back to 2012, was –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – that a correct and accurate statement?

**MR. KEATING:** That is a correct and accurate statement, based on my knowledge then.

**MR. BUDDEN:** And you would’ve regarded yourself as quite knowledgeable at that time, I presume, as a VP for oil and gas for –

**MR. KEATING:** Completely –

**MR. BUDDEN:** – Nalcor.

**MR. KEATING:** – because I would’ve had to run economic analysis – or not me directly, my staff would’ve had to run economic analysis with production profiles, and that would drive the economic outcomes of the decisions I would’ve had to take in and around –

**MR. BUDDEN:** So –

**MR. KEATING:** – the developments.

**MR. BUDDEN:** – to revisit my question: You would stake your professional reputation on the truth as was understood in 2012 by knowledgeable oil and gas people, quote, that: “oil runs out in 2023 or 2028 at latest”?

**MR. KEATING:** Yeah, in 2012, that would’ve been my consideration.

**MR. BUDDEN:** And that would’ve been the state of knowledge in the field, at the time, that any –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – person at your level of knowledge –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – would be expected –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – to believe.

**MR. KEATING:** Yes.

**MR. BUDDEN:** Okay.

Perhaps we can scroll up to see the top of that email, please.

What did you take that first sentence, I guess that only sentence, to mean: “Bingo”?

**MR. KEATING:** From Ed?

**MR. BUDDEN:** Yeah.

**MR. KEATING:** From Ed. “Bingo. Are they definitely done? We ... need your stuff, with a bow. I have learned that winging doesn’t work.....”

Okay. At that time, Ed was largely out in the media, maybe on radio and print, or maybe even asked to speak at any number of – I don’t – situations. And he was looking for content regarding natural gas. He had a lot of other issues, as you’d expect, on the go, and he was looking for me to sort of concisely describe both the pipeline and LNG.

When I said that the government commissioned consultant Ziff were on the way to completing the report, they seemed to understand everything real good. He said, excellent.

“Are they definitely done?” Meaning: Okay, do they have any more work to do? Any more conversations? Actually, I don’t know that I responded. I may have saw him in the hallway.

But to that, I didn't know, I don't know the answer. And we need your stuff – that means: Okay, I'm relying on you, Keating, to give me this – some of this gas stuff for communication purposes.

**MR. BUDDEN:** Okay.

He's a busy man; you're all busy people.

**MR. KEATING:** Pretty much.

**MR. BUDDEN:** So here we have this – all in the days following – Dr. Bruneau, who's a professor at the university, gives a talk at the Harris Centre on the 29th. Over the next two weeks, everything we've talked about so far, this last half hour, pretty much all unfolded within two weeks.

**MR. KEATING:** Correct.

**MR. BUDDEN:** So we have – and I, you know, from the emails that were sent and people copied on them – I have, you know, Ed Martin, Gilbert Bennett, Paul Harrington, Brian Crawley, Paul Humphries, Dawn Dalley, yourself, presidents, project directors –

**MR. KEATING:** Everybody.

**MR. BUDDEN:** – VPs at Nalcor.

**MR. KEATING:** Yeah.

**MR. BUDDEN:** Everybody seems very, very invested in shutting down Dr. Bruneau's proposal.

**MR. KEATING:** Correct.

**MR. BUDDEN:** Why?

**MR. KEATING:** Well, because it was –

**MR. BUDDEN:** Why this level of engagement?

**MR. KEATING:** Well because, I guess, it's wrong. The proposal was wrong. It's not fungible. There existed, in the public domain, no other discourse or no other counter-argument, no other – effectively, we had – I almost felt like, at the time, the only thing I think was in the public

discourse then was some PUB submissions, which Dr. Bruneau had – the PUB submission –

**MR. BUDDEN:** No, I'm not saying that this is not –

**MR. KEATING:** I'm –

**MR. BUDDEN:** – important but –

**MR. KEATING:** I'm just thinking that this was –

**MR. BUDDEN:** – but why this level of engagement? Like why –

**MR. KEATING:** Oh, because every – everybody –

**MR. BUDDEN:** – is everybody piling on here?

**MR. KEATING:** – everybody wanted to know that – hey, certainly this natural gas thing doesn't work – 'cause it – it's almost as if – it's almost if I said we can start the iron ore mines on Bell Island again.

**MR. BUDDEN:** And Ed Martin's gonna be emailing you at 8 p.m. at night about that?

**MR. KEATING:** Well, if I went out and said that we should and that people were standing in the way and it's gonna hurt (inaudible) people are gonna wanna kind of (inaudible) –

**MR. BUDDEN:** Yeah, but that's nothing to do with what's happening here. We have a professor at the university saying: Hey folks, you know, there's a big debate on in Newfoundland about how to keep the lights on –

**MR. KEATING:** Yeah.

**MR. BUDDEN:** – and we should consider natural gas. And everybody who's anybody at Nalcor seems really wound up about that.

**MR. KEATING:** Yes.

**MR. BUDDEN:** Agreed?

**MR. KEATING:** Yes.

**MR. BUDDEN:** Okay.

**MR. KEATING:** From my perspective.

**MR. BUDDEN:** Might it possibly have something to do with the fact that this was right in the middle of the sanction debate?

**MR. KEATING:** (Inaudible.)

**MR. BUDDEN:** Might that be possibly related?

**MR. KEATING:** Certainly.

**MR. BUDDEN:** Now, might that be the entire reason or presumed case?

**MR. KEATING:** It would likely be the entire reason.

**MR. BUDDEN:** Yeah.

**MR. KEATING:** Yeah.

**MR. BUDDEN:** Because nobody at Nalcor could stand the possibility that any other option could be given consideration other than the dam.

**MR. KEATING:** No, that would be conjecture. I think –

**MR. BUDDEN:** Well, I – it's – I'm putting it to you as an assertion. Do you agree with or disagree?

**MR. KEATING:** No, I don't agree with that assertion.

**MR. BUDDEN:** Okay.

**MR. KEATING:** I do believe that it's in the middle of this process and there's a lot of public attention to it. And this natural gas pipeline issue – I don't know that anyone else, but Dr. Bruneau, ever advocated for this or spoke to it. I don't know that Dr. Bruneau actually looked at any other scenarios to consider himself that this was the right one. I see this as a dangling artifact of a professor – well-meaning, well-intended professor who sees some real opportunity, based on his experience, to say: Hey listen, did we look at this?

And that's what I see it as.

**MR. BUDDEN:** And the government commissions the report and everybody at Nalcor falls over themselves to coach you in interfering with that report.

**MR. KEATING:** I don't think they coached me to interfere with that report. That report was going to be written by Ziff in any way that Ziff felt appropriate –

**MR. BUDDEN:** Really? Okay.

**MR. KEATING:** Yeah, Ziff wanted to know from me what I thought about the issues, and I told them.

**MR. BUDDEN:** Okay, well, we'll get back to what else you did.

Perhaps we could have a quick look at 01198, Madam Clerk? This is the email thread between yourself and Mr. Harrington.

**MR. KEATING:** Which tab?

**THE COMMISSIONER:** Tab 5.

**MR. BUDDEN:** Tab 5 – I apologize, I keep forgetting to reference the tab numbers.

Perhaps you could scroll down to what Mr. Harrington had to – well, read the whole thing, it's pretty short – perhaps, if you could.

**MR. KEATING:** So from Paul to Jim, gas report subject:

“Jim

“Ed is seeking clarification on what is going to be available by June 7th 2012 to inform the debate on MF. Can you pls let me know what the scope of the Natural Gas and LNG reports are and when are those reports going to be complete and issued.

“Thanks Paul”

**MR. BUDDEN:** Okay, so he was obviously concerned, and he explicitly put this into context of the Muskrat Falls debate.

**MR. KEATING:** Yes.

**MR. BUDDEN:** And your response was?

**MR. KEATING:** And my response was, from Jim Keating to Paul, gas report:

“By June 7th there will an independent report from Ziff Energy regarding both LNG and piped gas options. Ziff would have a draft ready for review by the middle of May.

“We will not have a report here per se, but we will have a series of commentaries that may find their way into blogs and letter to editor. Target is to have these written by the end of the week.”

**MR. BUDDEN:** Mr. Learmonth asked you about this, but I’ll ask you again: What’s the purpose of commentaries finding their way into blogs and letters to an editor?

**MR. KEATING:** Oh well, I think everybody would’ve fully expected Nalcor to be communicating its decisions regarding concept selection and what was screened and what was not screened, and be competent in understanding the various issues that could take form of speeches and letters to editor, whatever, blogs.

**MR. BUDDEN:** Who’s expecting that? I mean, the government are commissioning an independent report; they’re not asking Nalcor to (inaudible) –

**MR. KEATING:** This had less to do with the independent report; this had more to do with Nalcor needs to have its statements or its presentations, and I would suggest that they were probably well informed and well documented on, maybe, the Island – Isolated Island and of course, Muskrat Falls. But I think piped gas is not something they would ever contemplate –

**MR. BUDDEN:** Nothing –

**MR. KEATING:** – that they would actually have to defend.

**MR. BUDDEN:** Nothing to do with the report? Read that sentence again: “We will not ....”

**MR. KEATING:** Yeah, so remember, go back to the original –

**MR. BUDDEN:** Read the sentence, please, Mr. Keating.

**MR. KEATING:** Okay.

“By June 7th there will an independent report from Ziff Energy regarding both LNG and piped gas .... Ziff would” – like – “would have a draft” – report – “ready for review by the middle of May.”

We will have a report here –

**MR. BUDDEN:** “... will not have a report here ....”

**MR. KEATING:** “We will not have a report here per se, but we will have a series of commentaries that” – will – “find their way into blogs and letter to editor. Target is to have these written by the end of the week.”

**MR. BUDDEN:** You just said that had nothing to with the report. It has everything to do with the report.

**MR. KEATING:** No –

**MR. BUDDEN:** It’s right there.

**MR. KEATING:** – no, I think you’re – you took – you misunderstood my context.

**MR. BUDDEN:** Perhaps I did.

**MR. KEATING:** Yeah. Okay. So let me, one more time, say that the original letter from Paul was to say: we have it to deadline. We – the project – has an internal deadline of June 7 to inform debate, and that wasn’t inform on Ziff.

**MR. BUDDEN:** It was inform on Muskrat Falls

**MR. KEATING:** It was inform on Muskrat Falls. So –

**MR. BUDDEN:** And then the next sentence is: “Can you pls let me know that the scope of the Natural Gas and LNG reports –

**MR. KEATING:** Right.

**MR. BUDDEN:** – are and when are those reports going to be complete and issued.”



**MR. KEATING:** Correct.

**MR. BUDDEN:** And you say –

**MR. KEATING:** Yes. So –

**MR. BUDDEN:** You say: “We will not have a report per se, but we will have a series of commentaries that may find their way into blogs and letter to editor.” So –

**MR. KEATING:** Yes.

**MR. BUDDEN:** It clearly – you must acknowledge that it has everything to do with the report. I mean, just read the thread again.

**MR. KEATING:** What is the subject of your question? What has everything to do with –

**MR. BUDDEN:** The blogs and –

**MR. KEATING:** Yes. Oh yes. Sorry.

**MR. BUDDEN:** – letters to editor. Yeah.

**MR. KEATING:** I misunderstood. Yeah.

**MR. BUDDEN:** You did.

**MR. KEATING:** The content of the blogs and letters to the editor would likely have content that we could derive from the Ziff report if we didn’t have the report in our hands.

**MR. BUDDEN:** So who’s going to do these blogs, these letters to editor? Like, are you – do you have a blog?

**MR. KEATING:** Do I have a blog? No. And I don’t have – I don’t – well, we have a communications group, but they would ask me for content or to read over things and what have you.

**MR. BUDDEN:** So it would inform the debate. You would feed – or other Nalcor employees would, sort of, do letters to the editor or blogs or –

**MR. KEATING:** Yeah.

**MR. BUDDEN:** – something like that.

**MR. KEATING:** They – and I believe they had to a certain extent. Yes.

**MR. BUDDEN:** Okay. Perhaps we can call up P-13 – 01313.

**THE COMMISSIONER:** Tab 22.

**MR. BUDDEN:** This was, if I understand correctly, released in – was this when – yeah, May of 2012. So that was just a couple of months – really, while you and Mr. McCloskey were having this dialogue, somebody was preparing this thing.

**MR. KEATING:** Yes.

**MR. BUDDEN:** And I believe, if I understand correctly, that when you were questioned by Mr. Learmonth he asked you a few questions about the development of the – development plan for Newfoundland with respect to natural gas. The degree it’s discussed in here. You remember –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – when you were asked that this morning? Did you have anything to do or any advance knowledge of the contents of that report and when it was being released?

**MR. KEATING:** Not personally, but I believe, some of my staff would attend partner meetings, would have been given notification that we’re going to file a project description and, maybe, they would have received a copy of it for review before.

**MR. BUDDEN:** To what degree was that intended to shape the debate?

**MR. KEATING:** Zero, as far as I’m concerned. I’m pretty sure about that.

**MR. BUDDEN:** So it was just a massive coincidence –

**MR. KEATING:** If –

**MR. BUDDEN:** – that it was released in the middle –

**MR. KEATING:** This – oh, 100 per cent. This was a project that probably was being assessed

two or three years earlier. The timelines – I can absolutely, unequivocally state that Husky Energy did not file a project description with the Canadian Environmental Assessment Association on a multi-billion dollar project because it informed the debate of Muskrat Falls.

**MR. BUDDEN:** I'm not saying the whole thing did, but I'm saying that particular discussion of the natural gas development.

**MR. KEATING:** No.

**MR. BUDDEN:** How can you be so unequivocal? You're not Husky.

**MR. KEATING:** Because –

**MR. BUDDEN:** You do realize that, right? You're not Husky.

**MR. KEATING:** Well, it could be. Well, that would be a question to ask for Husky. If you're asking my opinion, my belief is that wouldn't have anything to do with it.

**MR. BUDDEN:** Okay.

Perhaps we could call up Exhibit 01205, Madam Clerk.

**THE COMMISSIONER:** Tab 12.

**MR. BUDDEN:** Again, this is another short email. Can you please read this to us? Again, bottom to top, I believe, Mr. Keating.

**MR. KEATING:** Paul – am I – tab 5? Paul Harrington? Is that –

**MR. BUDDEN:** No.

**MR. KEATING:** – the same one –

**MR. BUDDEN:** This is Exhibit 01205. It's tab –

**THE COMMISSIONER:** Twelve.

**MR. BUDDEN:** Tab 12.

**MR. KEATING:** Sorry. Okay. From bottom to top. Okay.

**MR. BUDDEN:** Yeah, I don't need that whole excerpt.

**MR. KEATING:** That excerpt?

**MR. BUDDEN:** Just the wording is fine, I suppose. The actual dialogue between yourself and Tony Curtis –

**MR. KEATING:** So you'd like me to describe it?

**MR. BUDDEN:** – and so forth. Yeah. Well, just read – no, read that, and we'll come back to it.

**MR. KEATING:** Okay, sure.

**MR. BUDDEN:** Yeah.

**MR. KEATING:** This is from Tony Curtis, who at the time, I believe, was a Husky business manager or asset manager or commercial manager, one of those titles. So he would have been a senior manager likely directly reporting to the vice-president. Subject, Ziff excerpt. "Ziff energy's discussions with representatives of Husky ..." Okay, so this is an excerpt from the report.

"Ziff energy's discussions" – I'm gonna be looking at the screen because my eyes are not that great – "Ziff energy's discussions with representatives of Husky reveal that the operator has studied monetizing the gas –"

**MR. BUDDEN:** I'll stop you there. I don't actually want you to read that.

**MR. KEATING:** Oh.

**MR. BUDDEN:** It's the email exchange I want you to read.

**MR. KEATING:** Sorry. Okay. So there's the Ziff –

**MR. BUDDEN:** (Inaudible.)

**MR. KEATING:** – excerpt.

**MR. BUDDEN:** Our preference.

**MR. KEATING:** Okay. Sorry. So then from –

**MR. BUDDEN:** So actually read the email, the one that begins Jim, our preference.

**MR. KEATING:** Jim.

**MR. BUDDEN:** Yeah.

**MR. KEATING:** “Jim,

“Our preference is the sentence in the middle starting with ‘The Operator asserts...’ be removed. Otherwise the remainder of the text looks fine.

“Regards,

“Tony

“Tony Curtis.”

**MR. BUDDEN:** So let me get this straight. Husky is writing you about the editing of this independent report?

**MR. KEATING:** Yeah.

**MR. BUDDEN:** Okay. Let’s scroll up and see what your answer was.

**MR. KEATING:** Sure. Oh, sorry. “See what I can do...maybe too late.”

**MR. BUDDEN:** Okay. So why was this phrase being edited out? Did you even ask Husky why they wanted it edited out?

**MR. KEATING:** And what I believe is, because of in the Ziff report – I was – I looked at that –

**MR. BUDDEN:** Maybe we can scroll down so we can see that paragraph –

**MR. KEATING:** Yeah. In the –

**MR. BUDDEN:** – Madam Clerk?

**MR. KEATING:** – in the excerpt, they directly reference Husky and its representatives and some kind of outcome from a discussion or meeting. So Husky is asserting something that Ziff is conveying. So out of courtesy, I believe the government folks – maybe, I don’t know, Charles or – Charles Bown or Wes Foote –

asked me to have Husky look at that, ’cause it directly relates to them, and see if it’s acceptable.

**MR. BUDDEN:** So you didn’t even ask them why they wanted this out. You’re just sort of the messenger, you went and said –

**MR. KEATING:** That’s – that was –

**MR. BUDDEN:** – yes, Sir, yeah.

**MR. KEATING:** Absolutely. It’s – because it’s their prerogative. It’s – they were speaking of Husky, and their –

**MR. BUDDEN:** Whoa, whoa.

**MR. KEATING:** – their interest.

**MR. BUDDEN:** It’s Husky’s prerogative –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – to edit this report?

**MR. KEATING:** No, no. It’s Husky’s prerogative to understand how their engagement with government’s consultant has been characterized.

I think they will have to have, to be fair, some input or say as to say, that is or isn’t what I said.

**MR. BUDDEN:** Why?

**MR. KEATING:** Because it’s important to get it right.

**MR. BUDDEN:** But don’t you think Ziff are capable of getting it right? Like, do they need you –

**MR. KEATING:** Yeah, so that’s their effort. That’s their best effort. Would have – that’s a good question; I don’t know the answer. Maybe Ziff supplied Husky –

**MR. BUDDEN:** Did it occur to you to ask? Like, did you not go back to Husky and say, guys, is this commercially sensitive, this phrase –

**MR. KEATING:** Yeah, so that would –

**MR. BUDDEN:** – the operator –

**MR. KEATING:** – be part – and I didn’t expressly say that. It was simply: I got it. I forward it to Tony, have a look at it and come back, and –

**MR. BUDDEN:** Did you even think about why this might be excluded? Did you vet it at all?

**MR. KEATING:** Yeah, so when I read this, this – why would Husky want to exclude any of it?

**MR. BUDDEN:** Or this phrase. Why would Husky want to exclude – this is an example we have –

**MR. KEATING:** No, yeah, so when they – as I read that sentence, the operator asserts, so let me look at it. So “The Operator asserts that, at the time of writing, White Rose natural gas is not being considered for any use other than the enhanced oil recovery as they assess the technical and commercial viability.”

So I’m – for me that’s an okay sentence.

**MR. BUDDEN:** But you realize the effect of that is to transform an assertion by an interested party into a disinterested fact? I mean, that’s the obvious intent, or at least the obvious effect of that change.

**MR. KEATING:** It could be, and they want it –

**MR. BUDDEN:** Well – now, that’s –

**MR. KEATING:** – removed.

**MR. BUDDEN:** – could it be. Of course it is.

**MR. KEATING:** Yeah, it could be, or maybe they’re sensitive to the fact that, as they assess the technical-commercial viability, maybe they’re not assessing any technical or commercial viability. It could be. We’re just circumspecting, now, what Husky may have thought of that phrase and why they wanted to remove it.

I didn’t have a discussion with them as to why they wanted to remove.

**MR. BUDDEN:** You just –

**MR. KEATING:** I didn’t –

**MR. BUDDEN:** – forwarded –

**MR. KEATING:** – challenge them.

**MR. BUDDEN:** – the message.

**MR. KEATING:** I did not challenge them of why they wanted to remove. I didn’t insist that it stay in. I didn’t do anything. I just said, okay, that’s sensitive to you, and then I said we’ll see what we can do.

**MR. BUDDEN:** Do you not think that this in any way at all compromises the independence of this independent report?

**MR. KEATING:** No. Again, I think an independent report, first and foremost, should be accurate and right and reflective.

If an independent –

**MR. BUDDEN:** Well, is a –

**MR. KEATING:** – report writer has –

**MR. BUDDEN:** Is an interested party the best judge of what is accurate and –

**MR. KEATING:** Okay, I see what you’re saying.

**MR. BUDDEN:** Did you not see it at the time?

**MR. SIMMONS:** Commissioner.

**THE COMMISSIONER:** Yes, I’m sorry.

**MR. SIMMONS:** I was waiting for a pause. Mr. Keating’s been cut off a couple times in this exchange in the midst of answering a question and not being given an opportunity to complete his sentence. So that might be worth keeping in mind.

**THE COMMISSIONER:** Yes, try to bear that in mind, if you can.

**MR. BUDDEN:** I will try to bear that in mind. Thank you.

Just so again I'll repeat: Did you not see at the time how this – that essentially you were allowing an interested party to edit an independent report?

**MR. KEATING:** In fact, that's what we did.

**MR. BUDDEN:** Exactly that's what you did.

**MR. KEATING:** (Inaudible) so – but, again, I didn't see at the time that that would be, what did you say, a conflict or –

**MR. BUDDEN:** Well, I'm saying you allowed an interested party –

**MR. KEATING:** Yes.

**MR. BUDDEN:** – a party who had an interest in this game –

**MR. KEATING:** Mm-hmm.

**MR. BUDDEN:** – to edit what the Newfoundland government commissioned as an independent report.

**MR. KEATING:** Right. And I will suggest that in the first instance this was government asking me to convey to – so it wasn't me facilitating and enabling this party to alter a report, the report owner is the government. The government felt that it wanted to have Husky's consideration for that clause. I was the conduit.

To the extent that that is probably not an ideal situation or not, I can't say that I considered at the time. And I just would believe that all three parties in the line, government, Nalcor and Husky, wanted to make sure that the independent consultant understood the exchange in information they had with Husky.

**MR. BUDDEN:** Okay. All right, I think I made my point.

Perhaps we can move on to Exhibit 01206. And perhaps you just briefly – we don't need to go through this in great detail.

**THE COMMISSIONER:** Tab 13.

**MR. BUDDEN:** Yeah.

I'd suggest to you that this is yet another example of the editing of a report. Would you agree?

**MR. KEATING:** So this is from me to Wes, October: Yes, Wood Mac should say there was – “that they were to comment only on the pipeline piece.” Wood Mac should say that they were only pipeline. Rational for focusing on pipeline was that we believe (inaudible).

Okay, so in my regard here I'm saying, yes – what exhibit number was this? I'm just looking (inaudible).

**THE COMMISSIONER:** 01206.

**MR. BUDDEN:** 01206, which is –

**THE COMMISSIONER:** Tab 13.

**MR. BUDDEN:** – tab 13.

**MR. KEATING:** Tab 13.

Yes, okay. So as I follow the trail of emails, the one below was Wes Foote's comment to Charles about comments on Wes Foote – I'm sorry –

**MR. BUDDEN:** Wood Mackenzie.

**MR. KEATING:** Wood Mac –

**MR. BUDDEN:** Yeah.

**MR. KEATING:** Wood Mackenzie report. And then he sends – he copies me and I say: Yes, so basically agree with what Wes was saying. And I said Wood Mac “should say that they were to comment only on the pipeline piece” as I understood the scope of their assignment.

**MR. BUDDEN:** Okay.

So would you acknowledge the effect of this is you now are, along with others, editing an independent report, which was intended to be – or intended to be an independent report of another independent report, which was self-edited?

**MR. KEATING:** Yeah, that's – it's quite remarkable, isn't it? We have an independent –

**MR. BUDDEN:** It is rather, yeah.

**MR. KEATING:** We have an independent review of an independent review. And, apparently, I am making sure everybody is all lined up, I guess.

**MR. BUDDEN:** Yeah, you certainly were.

I'll move on, I think, from that. I don't have a lot more.

You – there's a fairly lengthy discussion between yourself and Mr. Learmonth about the – you know, the obstacles posed to pipelines, natural gas pipelines offshore.

**MR. KEATING:** Mm-hmm.

**MR. BUDDEN:** And the term iceberg scour was used. A couple of brief observations out of that: The LIL from Muskrat to Soldiers Pond also has to contend with iceberg scour, doesn't it?

**MR. KEATING:** Yes.

**MR. BUDDEN:** Okay, that didn't stop the project being sanctioned.

**MR. KEATING:** Of course not.

**MR. BUDDEN:** And, likewise, the technical challenges of running that LIL were formidable weren't they?

**MR. KEATING:** They were somewhat unique. I wouldn't say they were unprecedented.

**MR. BUDDEN:** Nor was the pipeline – would be a pipeline from the offshore.

**MR. KEATING:** So very key similarity from what I said this morning about the redundancy. So there are two lines coming in from across the LIL. And in most of this line's journey, albeit a shorter distance, we have the first sections not trenched, actually drilled to get them below –

**MR. BUDDEN:** Yeah, yeah, sure, at the Gulf. Yeah.

**MR. KEATING:** Yeah. And then the balance are actually laid very similar to the philosophy

of the 620-kilometre pipeline route. They are laid not in a straight line, they're laid – they're laid in a serpentine to take the contour of the Strait in (inaudible). So I would say exactly the same as the rationale of to avoid –

**MR. BUDDEN:** Sure.

**MR. KEATING:** – the direct route of the pipeline.

**MR. BUDDEN:** And in each case, either the LIL or what Dr. Bruneau is proposing, we essentially had a challenging technological project in difficult terrain and some ways something hadn't done before.

**MR. KEATING:** There would be some certain commonalities. Would there have been, in my knowledge, a pipeline on a shallow seabed in iceberg-infested waters? I would have to say you would have to get, maybe, to Northern Russia, Northern Norway, in which case, maybe those pipelines were laid and that water is much deeper.

But if I were to think that there was a chance of iceberg scour and a pipeline, I don't know that I'm aware of many pipelines, or any pipelines, certainly not then, that were in place.

**MR. BUDDEN:** Okay.

**MR. KEATING:** I just don't know.

**MR. BUDDEN:** Well –

**MR. KEATING:** I'm pretty sure there aren't – there weren't.

**MR. BUDDEN:** A brief follow-up question to that: Do you believe that natural gas from the Jeanne d'Arc Basin can be produced for domestic use entirely through a subsea development, thus requiring no permanent platform at all?

Are you aware of a similar –

**MR. KEATING:** Yeah.

**MR. BUDDEN:** – development in (inaudible)?

**MR. KEATING:** There could be a scenario where that could happen, yes.

**MR. BUDDEN:** Okay. Yeah.

Last thing, perhaps, Exhibit 01207, Madam Clerk. And before we go there, I guess I'd suggest to you, Mr. Keating – sort of wrapping up what I'm saying here – that when you bring all this together, the real purpose of Nalcor's engagement with Ziff was to kneecap Dr. Bruneau's report so it wouldn't compete with Muskrat Falls.

**MR. KEATING:** I would – that's pretty harsh language.

**MR. BUDDEN:** It is.

**MR. KEATING:** I wouldn't wish that on anyone.

But at the same time, my sense is what needed to be done was to have a fulsome document which explores some of the – not only the theory that Dr. Bruneau put forward, but certainly the gaps. And I think Ziff's report accomplished that and was accepted by our – Navigant – or, sorry, it was accepted by the Grant Thornton and all industry people.

And I would say, without exception, no one has ever come to me and asked, professionally or otherwise, how real that – the pipeline scenario would have been. I think the industry is generally satisfied –

**MR. BUDDEN:** Well, you're being asked here today.

**MR. KEATING:** Absolutely.

**MR. BUDDEN:** Sure.

Perhaps you can read this email – it's a little long, but I think it's important – beginning at Karen. This is at tab – 01207, that would be tab 17 if it's easier to read it that way.

**MR. KEATING:** 01207 –

**MR. BUDDEN:** Yeah.

**MR. KEATING:** Oh, sorry, 17.

**MR. BUDDEN:** Yeah.

**MR. KEATING:** Oh, I got different – something.

**THE COMMISSIONER:** 01207 is tab 14.

**MR. KEATING:** Fourteen?

**THE COMMISSIONER:** Are we –

**MR. BUDDEN:** So –

**THE COMMISSIONER:** – on the same one?

**MR. BUDDEN:** So it is, tab 14.

**THE COMMISSIONER:** Tab 14?

**MR. BUDDEN:** My apologies.

**MR. KEATING:** No problem. So you want me to read this?

**MR. BUDDEN:** I would.

**MR. KEATING:** Sure.

From Brian Crawley to Karen O'Neill, copy Gilbert Bennet, Dawn Dalley: Thank yous. This is December 3.

“Karen: Some thoughts for consideration:

“Steve Goulding played a major role in preparing the DG3 package and should be acknowledged accordingly.

“I would also be remiss if I did not put forward the names of the MHI report team. This was a significant piece of work which required a great deal of after hours commitment. This included Gilbert, Paul Harrington, Paul Humphries, Rob Henderson, Carla Russell, Auburn Warren, Steve Goudie and myself. Paul Stratton and Bob Moulton were also instrumental in providing critical data and review, as was Jason Kean and an individual who works in Rob Henderson's shop. I believe” his or “her name was Joanna Barnard – Gilbert might know her her name for sure. I understand she provided much of the data on the wind analysis. There were at least ... 5-

10” – other – “people involved in the process but these are the key names.

“Jim Keating was instrumental in the Ziff reports.

“This might be a stretch, but Auburn, Carla, Steve Goulding, Steve Goudie and Chris Kieley were all involved in the net benefits analysis requested by Ed. There may be others but I’m not familiar with their names. I’m not sure if this group is what you are looking for but I offer it for consideration all the same.

“Brian.”

**MR. BUDDEN:** Sure. This is an email that’s sent out to a number of people who were key in the process leading up to the sanction of Muskrat Falls.

**MR. KEATING:** Mm-hmm.

**MR. BUDDEN:** Correct? You got your own paragraph there. Read it to me, please?

**MR. KEATING:** “Jim Keating was instrumental in the Ziff reports.”

**MR. BUDDEN:** And please scroll up to subject line again?

**MR. KEATING:** Thank you.

**MR. BUDDEN:** That’s all my questions. Thank you.

**THE COMMISSIONER:** Right. Edmund Martin?

**MR. SMITH:** Mr. Commissioner, no questions.

**THE COMMISSIONER:** Kathy Dunderdale?

**MS. E. BEST:** Hi, Jim

**MR. KEATING:** Hi.

**MS. E. BEST:** Erin Best, counsel for Kathy Dunderdale; we’ve met. I just have, really, one quick question following up on my friend, Mr. Budden’s, questions.

So, if government had gone ahead, based on Dr. Bruneau’s suggestion, and tried to develop natural gas in that way and you just sat back and didn’t say anything, I mean, would you feel responsible for that if it had failed? How would that play out?

**MR. KEATING:** Entirely my belief would be, first of all, Husky – there would be a chilling effect for any investment in the offshore for government to compel, or otherwise, an operator to do an – not only an uneconomic project, but likely a project they had disinterest in. It would be a much – a very big and broad and chilling effect on investment. Number two: I think we would likely be here talking about that.

**MS. E. BEST:** Right. Okay, thank you. Those are my questions.

**THE COMMISSIONER:** Okay. Former Provincial Government Officials’03-’15?

**MR. T. WILLIAMS:** Good afternoon, Mr. Keating.

My name is Tom Williams. I’m representing a group known as the Elected Government Officials from 2003 to 2015, with the exception of former Premier Dunderdale.

I just have – I know it’s late in the day, I just a couple of questions, more of a general nature. First of all, with respect to your division, that is solely oil and gas. Am I –

**MR. KEATING:** Correct.

**MR. T. WILLIAMS:** – correct in that?

**MR. KEATING:** Yeah.

**MR. T. WILLIAMS:** So, while we’re here discussing aspects pertaining to, you know, the Muskrat Falls Project, aspects of that development would not pertain to your department, except to the degree that, I guess, we’re speaking here today with respect to the influence of natural gas?

**MR. KEATING:** That’s correct.

**MR. T. WILLIAMS:** So would it be fair to say that your division would not be a proponent of



the Muskrat Falls Project, or take any position with respect to moving that side of the division ahead?

**MR. KEATING:** I would agree, and I could probably even circumspect that. Some of our analysis on the LNG route may have not have been so welcome for us to pursue, because simply we were providing deeper level of information than currently existed.

And as we discussed earlier, there are scenarios whereby if you were available of certain quantities of LNG at certain low prices, that could challenge the second best alternative. And, of course, that caused some consternation, but we wouldn't – I wouldn't shy away from that discussion.

**MR. T. WILLIAMS:** So the whole discussion over natural gas and LNG, that existed prior to Muskrat Falls, am I correct?

**MR. KEATING:** Correct. Absolutely, for years, for decades, since the discoveries.

**MR. T. WILLIAMS:** Okay. And then that's a good point, what time frame will we be talking that the consideration of the development of natural gas would've been an issue (inaudible)?

**MR. KEATING:** Initially, it would've been with the early days of the concept selection of Hibernia, because Hibernia has a good deal of gas. And, of course, a good deal – a much better deal of oil. It was initially considered that gas, because of its miscibility – its ability to better clean or sweep a reservoir – was ideal in certain blocks of Hibernia, whereas water was better in other blocks. And then quickly, the proponents, the oil companies at the time says that, no, we're likely going to be using all that gas for pressure support, and they still do to this time. Then the next –

**MR. T. WILLIAMS:** On what date would that be, if you don't mind me –

**MR. KEATING:** Oh, that would've been in – sanction there was like 1990 or something.

**MR. T. WILLIAMS:** Okay.

**MR. KEATING:** So we're talking late '80s, early '90s, those kinds of considerations were first emerged.

**MR. T. WILLIAMS:** So during the period of 1990, we'll say to 2000 –

**MR. KEATING:** Yes.

**MR. T. WILLIAMS:** – would there have been consideration with respect to whether or not there may be viability to a separate natural gas development?

**MR. KEATING:** Yeah, so it would always have been in the minds of, not only the investors because they want to make money, they want to sell their commodities, they want to be able to book those resources and they want to be able to get them to market. What they would have to look at, though, is the realities of the market and the realities of the technology.

And at the end of the day, for the first mover, which would have been Hibernia, they devised a gas injection scheme, which largely accounts for now utilization of the resource, that we'll get to a place, at the end of Hibernia's life, where we go through a phase of what's called blowdown, when all that gas is injection in reservoirs, and, of course, which pushes like a piston that oil up. Those will be depressurized because there's no more oil.

**MR. T. WILLIAMS:** Mm-hmm.

**MR. KEATING:** And then that will provide some gas. That's a significant Hibernia opportunity, which will come at the oil – end of the oil window.

**MR. T. WILLIAMS:** So – and as we do more developments in oil and gas – the gas side, I should say, becomes more prevalent in terms of review –

**MR. KEATING:** Yeah.

**MR. T. WILLIAMS:** – and consideration

**MR. KEATING:** Yes.

**MR. T. WILLIAMS:** So that would have continued from 1990 –

**MR. KEATING:** To present day.

**MR. T. WILLIAMS:** – up to 2000 – right up to – so let's take it up to serious consideration of Muskrat Falls Project in the evaluation of viable options.

**MR. KEATING:** Yes.

**MR. T. WILLIAMS:** Which is, I'll say, use the time frame 2010.

**MR. KEATING:** Yes.

**MR. T. WILLIAMS:** So, natural gas was always out there –

**MR. KEATING:** Correct.

**MR. T. WILLIAMS:** – being considered, regardless of Muskrat Falls or not.

**MR. KEATING:** Correct.

**MR. T. WILLIAMS:** And am I also correct, that in the considerations of that, up to that point in time, it was always rejected as not being an economically viable project or a profit-making project that could be better utilized for other reasons in terms of the development of oil.

**MR. KEATING:** I would say that is largely correct with this distinction: that there could have been circumstances in that time period when, say, the domestic market for natural gas was pretty high. I can remember 10 and \$12 MMBTU or MMBF, you know, these are the (inaudible) prices. That there could be maybe, in particular, the CNG technology.

By the way, the oil companies at the time, in 2002 to 2004 supported a Centre for Marine CNG, a global centre for compressed natural gas in the marine environment here because they thought that would be the leading or first mover for the commercialization of natural gas.

So there would've been a time when the North American market had a price opportunity that maybe economic models show, hey, we may have a commercialization opportunity, and, yes, in earnest – and you can then the reflections in the Energy Plan itself. We want to get to the bottom of what that opportunity looks like.

As it would evolve, two things happen. One you mentioned was we found a lot more oil and we found a lot more thing to do with that gas to produce more oil, and the gas markets – the robust ones, the big ones, the valuable ones – they declined – the price of gas declined and those opportunities disappeared.

**MR. T. WILLIAMS:** And I'm just going by memory, myself now, but, I mean, have there not been serious considerations by international players who've come to Newfoundland, who've spotted out lands for potential developments –

**MR. KEATING:** Yes.

**MR. T. WILLIAMS:** – whether it be refineries –

**MR. KEATING:** Yes.

**MR. T. WILLIAMS:** – other development potential – serious consideration of gas development here prior to the Muskrat Falls Project that never took off.

**MR. KEATING:** Correct. I have been party to – in my pre-Nalcor days and in my Nalcor days – maybe five to eight serious international companies: European gas purchasers, Asian gas purchasers, technology companies, a myriad of companies all interested in the commercialization of natural gas.

**MR. T. WILLIAMS:** And in your private life outside of Nalcor, previous life before Nalcor and Nalcor, are you aware – or if you could give me just a number of –

**MR. KEATING:** Yeah.

**MR. T. WILLIAMS:** – how many studies you would think have been completed with respect to the prospects of natural gas development in this region.

**MR. KEATING:** Don't have at my fingertip, but I did do an inventory of studies back in this time, 2010 and 2011, and I believe there may have been on the order of a dozen or so studies, maybe only three, four in the public domain. The balance would have been in the private sector companies' hands.

**MR. T. WILLIAMS:** Okay, so when Mr. Learmonth says you didn't go back and study natural gas again, were you satisfied that there had been studies done?

**MR. KEATING:** Yeah. Personally speaking, from my professional experience, there was enough robustness in those studies that I knew the significant factors that would change, that would need to change, to force an economic opportunity, and those opportunities did not materialize.

**MR. T. WILLIAMS:** And I trust nobody went back and studied the viability of coal development?

**MR. KEATING:** No.

**MR. T. WILLIAMS:** Or nuclear development?

**MR. KEATING:** No. Apparently they – it was okay for those to be discounted.

**MR. T. WILLIAMS:** Okay. And biomass or solar or a wave and tidal?

**MR. KEATING:** Correct.

**MR. T. WILLIAMS:** Combustion turbines? None of these were reconsidered over and over and over again?

**MR. KEATING:** They would have been – again, maybe to the similar level of a detailed review by Navigant. They would have maybe made an assessment with – you know, in peat, for example, maybe look at the volumetrics or something, did some cursory tabletop view and maybe discounted it. Wind power may have been a little more engaged simply because we had wind regime – we had wind power projects here.

So there's going to be an approach to all those alternatives that it's fit for purpose to the veracity of the opportunity. And I believe they're adequately, you know, discharged.

**MR. T. WILLIAMS:** And until such time as either market changes or market price or significant developments with respect to these, it wouldn't warrant going back every year or two years to re-study all these possible options?

**MR. KEATING:** No, it wouldn't.

**MR. T. WILLIAMS:** Okay, and are you aware that Grant Thornton in fact gave consideration – which is a consultant hired by the Commission – gave consideration to Nalcor's review of natural gas and they felt their dismissal of that option was a reasonable consideration?

**MR. KEATING:** Yes, I am.

**MR. T. WILLIAMS:** So are you satisfied that government's decision not to pursue natural gas as a viable option with respect to consideration of the Muskrat Falls Project was a reasonable decision?

**MR. KEATING:** Absolutely, and I'm proud of the work we did, and I think it stands up to those tests.

**MR. T. WILLIAMS:** Can you speak to the level of engagement at government in considering the natural gas – and I know there's – we've seen references to Minister Kennedy, who was the minister of Natural Resources around that period of 2012, but can you speak in a general way to the engagement of government and the seriousness in terms of the consideration of the natural gas option?

**MR. KEATING:** Natural gas is always an important resource that any minister, when they assume the portfolio, is interested in. And I tend to believe it's not long after a minister is in place that I kind of give some kind of overview with the minister's staff.

So I don't think there was ever, and to this day, any lack of desire to pursue the production of natural gas, and I have seen nothing in my experience through maybe six or seven ministers and four or five premiers that would cause me to believe otherwise. They've all been interested in the commercial monetization of natural gas.

**MR. T. WILLIAMS:** Okay.

Just at another vein, I just wanted to canvass one other area before I finish.

Obviously, one of the more contentious issues that have arisen with respect to the Muskrat Falls Project and the development is the impact

and the costs that this project is going to have on rates.

We heard evidence early in the Inquiry with respect to the plan of government in terms of the development of renewable resources, and the Energy Plan, in fact, has – and I’m quoting from the Energy Plan – it stated that: “Leverage” of “non-renewable oil and gas wealth into a renewable future by investing a significant portion of our non-renewable resource revenues in renewable energy infrastructure and development.”

Meaning, taking the money that we may earn from the non-renewables and putting it and injecting it into the development of renewables like a Muskrat Falls –

**MR. KEATING:** Yes.

**MR. T. WILLIAMS:** – and hence – to bring that to a full circle, is that if we’re having cost overruns, well, maybe we can use money coming from the non-renewables.

Where I’m leading to is there’s been much debate – we have a tendency to look on the negative, the pessimistic side – there’s been much debate in the last six to 12 months, and discussion with respect to the potential of the offshore, and I don’t mean the existing four projects –

**MR. KEATING:** Yes.

**MR. T. WILLIAMS:** – but what lies out there, and I just think of Bay du Nord –

**MR. KEATING:** Mm-hmm.

**MR. T. WILLIAMS:** – in particular, that there’s been tremendous discussion of the potential and the impact that may have, and I think it’s very relevant for the Commissioner, and obviously for the public, to know that is there hope that there’s renewable – there’s more non-renewable resources and sufficient potential out there that may be able to address the concerns that people have?

**MR. KEATING:** Well, I – the best route to that answer is to highlight some of the recent resource assessments that have been taking place

in our offshore for the last several years. I won’t get into the details, but I can summarize to say that there has been a series of investments – actually, by Nalcor, on geoscience work – that has now led to \$3.8 billion worth of work commitments by, now, some 14 different oil companies.

**MR. T. WILLIAMS:** A lot of those are new companies coming –

**MR. KEATING:** Over –

**MR. T. WILLIAMS:** – in, are they not?

**MR. KEATING:** – half of them are new companies, and all driven to the prospectivity of which you speak to.

So what for me that means, is that is an unprecedented level of investment, an unprecedented level of plans that have been submitted – five for development drilling over the next two or three years

And invariably, statistically speaking, with the size and scale of our offshore, there will be A, many disappointments. There will be many dry wells. That is the case of offshore oil and gas where maybe up to 80 per cent of what you do doesn’t come to fruition. But in the balance of the 20 per cent in which you will likely find commercial resources, I would say that we are likely not to see the last of development projects.

There are likely to be more discoveries. And with the level of investment and the timing of those licence rounds and the timing of the schedule in which those companies have to liquidate those investments, we should see in the next five to seven years – I think the province postulates up to 80 wells or 100 wells, and invariably there could be commercial discoveries at scale.

**MR. T. WILLIAMS:** Okay. And in fact, I think in the last six months we’ve had a record bid in terms of a potential licence for some \$600 million, a new player has committed to.

**MR. KEATING:** Unprecedented, \$621 million BHP. But I guess one other thing that I should say about that is, a lot of those big bids that came in in 2014 and ’15 came in at a time when

the global price of oil was sunk; was in a tank. And exploration budgets globally shrank by 75 per cent. But yet, they looked at Newfoundland and Labrador and bid disproportionately. And that's even a better indicator of what those oil and gas companies see in our prospectivity.

So it is a good news story. You know, obviously, I am not a geophysicist, I'm a civil engineer; but all the geophysicists I know, very – let's say conservative of view – and they'll say we'll find out through the drill bit. But the good news is we will – we have created a situation where there's gonna be now a lot of drill bits turning.

**MR. T. WILLIAMS:** Okay. And we've spoken with – about optimism bias.

**MR. KEATING:** Yes.

**MR. T. WILLIAMS:** But I mean I know Noia has commissioned a chief economist to do a study –

**THE COMMISSIONER:** Okay. Let's stop this right here.

So, I get it. There's all kinds of things going on in the offshore. We'll see what's produced – it has really nothing to do with (inaudible).

**MR. T. WILLIAMS:** I'm just trying to bring some good news –

**THE COMMISSIONER:** Well –

**MR. T. WILLIAMS:** – to what has – tends to be a bad news story.

**THE COMMISSIONER:** You brought good news to it and that's enough of it.

**MR. T. WILLIAMS:** Well that's – and that's what I wanted to do, accomplished – mission accomplished. Thank you, Mr. Keating.

**THE COMMISSIONER:** Okay. Now, I want to try to figure out where we are for the rest of the day here. And I don't want to change – shortchange certain people here. So Mr. Fitzgerald, where – how long do you expect to be with this witness?

**MR. FITZGERALD:** Ten minutes.

**THE COMMISSIONER:** Okay. Mr. Coffey is there – none? Todd Stanley – not here. Todd Stanley is – are you here for the – with the –

**MS. J. MORRIS:** I'm here for the Former Nalcor Board Members.

**THE COMMISSIONER:** Oh, Former Nalcor Board Members, okay.

**MS. J. MORRIS:** But we don't have any questions.

**THE COMMISSIONER:** Okay. Sorry, I thought you might be there for Ms. van Driel.

Consumer Advocate?

**MR. HOGAN:** I'll have some questions.

**THE COMMISSIONER:** Okay.

And – Former Nalcor Board Members, I just did. Okay.

So your choice, we can either – and Nalcor, obviously.

No, you know what, I think what we'll do is come back tomorrow morning at 9:30.

So we'll adjourn now until 9:30 tomorrow morning. And –

**CLERK:** All rise.

**THE COMMISSIONER:** – next up will be Julia Mullaley, Charles Bown.

**CLERK:** All rise.

This Commission of Inquiry is concluded for the day.