

D. Sturge Comments  
February 4, 2019

<b>MFI – Interview Summary</b>		
<b>Date:</b>	June 20, 2018	
<b>Location:</b>	Grant Thornton– 15 International Place, St. John's NL	
<b>Attendees:</b>	David Malamed (Interviewer) Scott Shaffer (Interviewer) Lisa Walsh (Note taker) Steve Power (Interviewer)	Derrick Sturge (Interviewee) David Buffett (Legal Counsel)

- **Start at 9:00am**
- **What's your involvement with Nalcor**
  - I had two stints at Nalcor
  - Hydro from 89-96
  - Left for 10 years, for the private sector
  - Came back March 2006
  - Came back hydro was changing – oil and gas, Lower Churchill
  - Ed Martin just came in as CEO
  - I came in March 2006 as VP of finance and CFO of Hydro at the time
  - Been in that job ever since
  - Today it's called executive VP and CFO
  - My role with Nalcor and hydro from 2006 on was Gull Island – Muskrat was going to be the second project
  - My mandate was financing this thing
  - We were probably a \$2B company back then
  - Relatively small
  - Looking at doing GI which was 3-5 times the size of the company
  - It was a significant task to Finance this thing
  - The day I started that was the primary focus
- **Starting when?**
  - Lower Churchill in terms of financing – from the day I got there
  - When I arrived at Nalcor there were many previous efforts to develop Lower Churchill in the 70's
  - The premier kicked off the process in 2004
  - The premier would go to market and look for proposals
  - They were exploring options – 2004-2005
  - When I got there the decision was made to shelf all of those proposals

- If all their pots were filled and they had an extended outage, they had major problems, we had major problems
- We finished ~~the~~ aluminium piece
- Around the end of 2008 we put PWC on hold a little bit
- We knew what the issues were that we had to deal with in financing
- We really needed to know what project we were building and what the customer base was
- 2009 became the year were focused on the customers – still looking at Gull Island
- So then Ed asked me if I could look at the Maritimes looking for potential customers
- Around 2009 the focus became exploratory discussions with New Brunswick and Nova Scotia and Emera
- Still looking at Gull Island so we had a large amount of power
- I wouldn't call it negotiations at that point – exploring future needs
- Around the end of 2009 (October) Hydro Quebec made an offer to export our power
- All of a sudden New Brunswick was preoccupied by the Quebec deal
- New Brunswick as a market disappeared for a period of time
- We were concerned about HQ in the Maritimes blocking our access to the US
- That brought us to the end of 2009 – we got together with Emera
- Agreed to continue to explore the maritime market
- We entered into an MOU with Emera
- They were going to study three options for the maritime link
- They had system planning folks to effectively model a joint maritime system and what it would look like (benefits) – until June or July of 2009
- They got the results from that
- Aug 2009 – regatta day – we went to Halifax to start negotiations with Emera – which is the start of what ended up being the term sheet
- Backing up a bit
- Around October or November 2009 – New Brunswick as a potential large customer seemed to be shaky, the transmissions applications through Quebec were looking shady
- I think they got the results back and it wasn't good
- Aluminium wasn't a viable options
- Oct 2009 was when Muskrat really came on the table – no decision yet
- From then until May 2010 we weren't sure if we were going with Gull or Muskrat
- We filed some complaints on transmission applications around then
- Around May 2010 we got the final results of that – they threw out our complaints
- **Prior to 2010 was the isolated island still an option?**
  - Yes if we didn't do Gull that was the option for hydro
  - So May 2010 we found out our application was rejected – we couldn't pass through Quebec
  - That really made us pass on Gull Island
  - Emera still in the mix

Acquire NB Power Assets and provide their Future power requirements

2010

shaky

- System planning were doing their thing
- We needed a new form of generation for the island
- Still had to make a decision for the island
- Muskrat was a better fit for the island but still bigger than needed
- If Muskrat was the solution to replace Holyrood, we will still have excess power
- How do we use the excess power? – that's where Emera came in
- August 2010 – really was the start of the discussions with Emera
- We were with Emera for 4 months (intense period) – led to the term sheet in November 18, 2010
- You mentioned that October or November 2009 you kind of made the decision to look at Muskrat – had load forecasts been done showing there was a shortage in electricity?
  - Yeah System Planning were regularly running their load forecasts
  - There were two pieces – if you look at the block of power that Hydro bought, it wasn't just about future load growth, it was also about replacing Holyrood
  - Holyrood was a significant plant on the system
  - So just to replace Holyrood was still a pretty big piece of what they were going to do
- What would have driven the need to replace Holyrood?
  - Holyrood was a plant that was developed in 1970 (2 units) and a 3<sup>rd</sup> unit was built in 1979
  - The plant was ~~not~~ 40 years old and it was at the end of its life
  - A decision had to be made on Holyrood – there were environment issues with it
  - Did we have a plant that was reliable enough to sustain future needs?
  - Holyrood has become the Achilles heel on the system
  - Dark NL 2014– Holyrood was a big aspect of that
  - It is the weak link on the system still today
  - Very important piece of the system
  - Provided the winter peak
  - Where was it? – 2009 - 2010
  - Back to the negotiations with Emera
  - Now going through DG2 – concept selection
  - There is a presentation kicking around that the project team did that was called bringing Muskrat forward October 2009
  - What needed to be done in 2009 to bring that forward
  - Through 2010 – System Planning would have been updating CPW analysis, generation expansion
  - The way Ed would describe the project decision we had to make a decision on hydro – Muskrat was the solution for Hydro
  - Assuming that there was no export sales, then take Muskrat as a plant and compare it to the isolated island option
  - That analysis showed that Muskrat was the least cost option and that's if we didn't sell the excess power
  - Then if we justify Muskrat as the least cost option – any money we get from export sales is gravy

- We looked at the Emera structure
- Talked about building the Maritime link ourselves
- Emera said we will build the Maritime link – and for that we would give them a block of power 1TWh
- That was the logic
- Couple of drivers for that negotiation – we wanted access to the market for the excess power
- Nova Scotia and Emera created a path – worked within their system to get us through Nova Scotia
- Transition rights with New Brunswick
- Effectively it created a path – and we already had a path from Lab to New York for 250MW – effectively we had a circle

Transmission

- Ed wanted that access
- Would Emera buy the power from us – probably more opportunities
- I think Politically and from a commercial perspective
- That was 2010 - We had Emera done, gone through DG2
- In 10' we needed PWC – placeholder for financing
- Financing at DG2 was about 10% – the real effort on financing was once we got DG2 in place
- I think we just cleared through DG2 in Dec 2010
- It was really our first pitch on the FLG *so we could*
- We structured the whole project – we couldn't get the financing without the loan guarantee
- We needed to be focused on commercial financing – which is what we did
- Heavily engaged with Canada in 2011 – FLG *and*
- From then on 2011-2013 was financing of the loan guarantee - three solid years
- Early 2011 politically, Harper indicated that if they got elected they would do the loan guarantee
- February – April 2011 we went through a due diligence process with Canada – they had a lot of questions
- Helped us see what the financing would look like
- By May 2011 the government was re-elected – so we were ready to talk to the feds about the loan guarantee
- What we ended up with was – first agreement it was August 2011 – called an MOA
- Two page doc – not very bankable
- Did three things that became important
- They were giving us a guarantee with three conditions
- One is that the project economically viable
- Two: that it was a regional project
- Three is that it had environmental benefits
- Those three drivers dictated right until the end of 2013
- We had our MOA in hand
- Heavily engaged in getting the financing together
- The next step was that the feds brought in their financial advisor which happened October 2012

- They were on the file to the bitter end
- We had intended to do the 2011 credit ratings
- Sort of merged with Canadas thinking
- What they wanted to demonstrate was - go back to the three criteria
- They wanted to demonstrate that the project was economically viable
- Had the project rated without the Federal loan guarantee
- Never a public rating – confidential
- Got good ratings
- That crystalized a lot of things in 2011
- A lot of key things happened in 2011
- We needed clarity on commercial structure , equity ratios and so on
- Leading up to the rating agencies November 2011 - you should have that presentation, a big deck
- May onwards we were in preparation mode for the credit ratings
- We had to clearly understand what the project commitment was going to be
- What regulatory framework, structure put in place with legal entities, commitment on equity, clarity on commercial arrangements between project entities and Hydro
- Through the summer of 2011 we were heavily engaged with the province
- Letter the premier signed in October 18 2011 – saying that the province would provide the equity required – both base equity and contingent equity
- The province would put in place the necessary regulatory regime
- Create the entities needed
- The forth piece was the commercial arrangements
- In addition to the commitment letter in 2011 – it was called Memorandum of principles
- What would be the principles of the PPA between Hydro and the project entities
- All that was in place 2011
- Canada was asking the same questions
- Breaking down some of those pieces
- The equity was a no brainer – couldn't move forward without
- The province couldn't provide base and contingent – it couldn't go forward
- We went through a period of what could be contingent equity
- It was irrelevant because whatever it ended up – we ~~projected~~ *had to provide that equity*
- And that became a key piece dealing with Canada
- So the things Canada was looking for and credit ratings was exact same as private sector
- The regulatory structure was important
- There had been a lot of discussion with the PUB
- There were two pieces
- Bringing the project to the PUB initially for the PUB to say yes you should do it or not

IF

- That wasn't part of my finance *Financing*
- What the financing was, once you sanction the project and finance it – at that point you had more certainty on collective costs
- There was no sense at that point in saying we have to keep it in with Hydro and leave it up to the PUB
- If that was the scenario no one would lend us money
- We needed 100% certainty on PPA which recovered the rates
- We needed a PPA with Hydro that was locked down
- That drove that
- The PPA was linked to the financing
- We had a PPA with hydro *line of sight on*
- That same commitment was caught up in the regulatory structure
- We needed ... on site of the revenue from effectively NL power, back to Hydro, and back to the project team *entities*
- Two streams
- Line of sight of cash flow to the customer after the project ended *sight*
- Then there was the equity to the province *From construction*
- Those were the two fundamental pieces that were the focus
- The other thing happening in 2011 – the province had made the decision to make the referral question to the PUB this was April or May
- June 2011 they referred to the PUB
- Fast-forward to end of 2011 we have met with all the credit rating agencies
- January 2012 the report came out
- All solid ratings
- You should have them – particularly S&P and Moody's
- 2012 - Canada was happy about the credit ratings
- The stuff presented to the agencies – strictly focused on Lower Churchill?
  - Yes
  - The other thing I did over that period – concurrent with this financing work going on with Canada we had the term sheet with Emera. Fairly detailed
  - A 40 page term sheet came out to be 14 agreements
  - Heavily involved in the term sheet in 2010
  - Rob Hull who worked for me became the lead in the commercial piece
  - I continued to be involved in the commercial piece at least once a month in CEO meetings
  - That process went from 2011-2012 – the Emera formal agreements took about 18 months to complete
  - That was an important piece for Canada as well
  - Our next step is to memorialize the two page MOA
  - That was the focus in 2012 – the Federal Loan Guarantee term sheet
  - Went from 2 page to about 20-30 page document

- Tough negotiation – days we didn't think it would happen
- As you think of 2012 – DG3 work was getting refreshed
- All came together November 2012 then it sanctioned in December
- 2012 the capital costs got a refresh in the summer – \$5B to \$6.2B
- Had to introduce that into the financing process with Canada – created another due diligence process
- Had to go back and get ratings refreshed
- Happened October 2012
- Ratings didn't change – came out November 2012
- 2013
- Got the term sheet
- Canada has now brought in a legal advisor – Cassels Brock
- Allison Manzer – which was a really good move because she understood the financing
- Now we have the term sheet, and the updated non FLG ratings
- January 2013 - Focus became solely on financing from FLG perspective
- Worked out the form of guarantee
- We had to make sure the guarantee that Canada was giving us would convert with the ratings so we would get the whole credit substitution
- Collectively agreed on what the structure would look like
- Went to the three rating agencies – with this guarantee and structure would that give us full credit substitution
- They don't care about the project anymore – more legal assessment
- We knew we had the right structure to move forward
- January or February we got that
- Now focused on financial close
- Astaldi had been selected at that point
- Our focus was to get the financing done by Q4
- The FLG term sheet Nov 2012 – there were two lists: A list and B list
- Our focus through 2013 was meet weekly to check in on those
- None had to do with finance much – all encompassing
- **Back in 2011 with the MOU – were the events at default defined? What would happen at default?**
  - Yeah
  - Some of it played into 2012 in the term sheet
  - Canada wanted the deal to look like a commercial deal
  - They didn't want us to say we got the FLG we can get 100% financing on this
  - That wasn't our intentions either
  - They structured it to look like a commercial deal
  - That's why they wanted the credit ratings

*the way the bullets flow it could seem that Astaldi had been selected in Jan/Feb – when in fact it was Oct 2013, prior to financial close*

- If a commercial deal said we could get 75% debt financing – that what they would give
- They didn't want the financing deal to look any different from what we could get ourselves
- With the exception that we were getting credit substitution and their credit rating
- A lot of discussions in 2012 was what would the conditions be for default
- Conditions of default would be our benchmark for all the pieces. They could be if you change legislation, debt service coverage ratio, typical things that would cause default
- **How about deciding not to sanction the project?**
  - That would be default
  - If we did private sector financing we would have the same deal
- **This was known 2012 or 2011?**
  - 2012 – basic structure ended up in the term sheet
  - I don't think there were any conditions on the table in 2013 from financing perspective that that we wouldn't have known at the end of – which is largely why we felt comfortable sanctioning
- **Was there a point where you could cancel the financial loan?**
  - I guess any point before financing was in place
- **Hypothetically you could have cancelled the deal November 2013**
  - Yes
- **Once financial close happened you were locked in?**
  - Yes
- **If you decided to back out, the Canadian government could come in and finish at your cost?**
  - There was a memo prepared April 2016
  - Implications of cancelling vs delaying the project
  - You are right, up until the end of 2013 we had no financial commitments
- **Was all this presented to the board members?**
  - Yes
- **So they would have signed off?**
  - Yes
  - As we got into the latter half of 2012 Ed was scheduling board meetings more often
  - As we got to sanction they became more frequent
  - From a finance perspective – we had a session on loan guarantee
  - Once we got into 2013 the project had been sanctioned so the focus really became on that
  - We had updated the board on many occasions
  - There is a good deck you probably have November 2015 – all the boards financial agreement – had the entire group in one room
  - Presented commercial agreements
- **Is it fair to say the board knew the terms of the FLG and knew that the government could step in and force completion at the cost of Nalcor?**

*Possibly something missing. Sanction was a condition precedent to get FLG/financing, but it was prior to financing so more of a CP versus default. The linkage to default would be if we abandoned the project after sanction - that would be default*

*2013*



**Yes they knew the terms of default**

- **Were you at those meetings? When the terms of default were talked about?**
  - Yeah I would have been there
  - Anything to do with finance I would be there
- **Any concerns brought up by board members?**
  - Not that I can recall
  - No one likes things to default
  - Our view was that we wouldn't be in any different position
  - We continued to anchor back to what was the market
  - Times we thought they were stretching
  - We think we know what the market was but the market could have been tough
  - We based it on what our advisors knew about other deals – a fair place to land
  - Events of default are ugly but it's the nature of it
- **What would have changed – on your financing you got all the money on day one. If it was financed in sections what would impact it?**
  - The loan guarantee gave us a lower borrowing rate
  - It allowed us to borrow up front
  - We likely wouldn't have been able to do that otherwise
  - When we went for the ratings we didn't do it that way
- **What would be the benefit of getting it all up front?**
  - We had a lot of discussion with Canada
  - The benefit we saw was certainty
  - We weren't trying to do it as the project transpired
  - 2013 the forecast was that interest rates were going to go up a lot
  - We didn't want to regret not taking it up front
- **So that takes us to financing 2013**
  - Our focus came on conditions president
  - Tangly piece of work – because we didn't control many
  - Nova Scotia, the province, and Emera controlled a lot
  - Ultimately the last condition president – we were at serious risk of not getting financial complete
  - The second focus was the guarantee in hand we needed to go get financing
  - Request for financing May 2013 – sent to 18 institutions. 12 or 13 were in, the other 6 couldn't do the deal at that size or couldn't do a Canadian deal
  - We wanted someone who would underwrite the full deal
  - Someone who would lock down the price for us
  - A lot of discussion because people might say we wouldn't get that certainty
  - We felt we were on good enough ground

with

precedent  
Financing

- We asked for proposals to come in end of July
- Some of the banks teamed up
- Scotia, RBC teamed up, etc.
- They were the only ones meeting all the conditions
- As the process went on through July, a couple of things happened
- The UARB report came up with the Maritime link
- That became an uncertainty for us -- as you recall the project was all linked with this regional aspect
- Environmental assessment
- What we did was go to the banks in July and defer submission for financing until October 1<sup>st</sup>
- Probably a good decision
- Gave us some time
- Fast-forward to when the financing submissions came in-- 6 or 7 came in and only three met the requirements
- Locked down as a team Canada, the province was engaged right through
- Initial evaluation of proposals
- Three groups back in St John's
- Told them they were all terrible -- it was a competitive process
- TD was the leader right from the get go -- they didn't know that
- Came back multiple times
- Did an evaluation -- largely done on net present value -- quantity and qualitative piece
- TD was the clear winner
- Recommendations needed to be approved
- Canada had to agree with the decision
- The Province had to agree
- Then board decision
- All that happened in a few days -- I think the 28<sup>th</sup> of October
- Good news was we had our winner
- Execute financial commitment with TD
- Had them squared away
- A lot of pressure because we had to deal
- We wanted financing done for a few reasons -- Canada had a big deal closing just before the middle of December
- They wanted us in and out
- December 1 was the normal maturity for Canada bonds
- We thought people who had Canada bonds would put it into our bonds
- Early December was really the sweet spot
- If we missed that, the capital market would shut down

out

this comment not meant to refer to RBC/Scotia only

Feels like something missing here? maybe "deal with conditions precedent?"

- Probably into the middle of January
- US debt ceiling was going on which would effect January
- We wanted to stay clear of January – get it done in December
- It wasn't really our decision
- The focus for November became – we had finalized project financing
- Independent engineer report was still playing through the system
- A bunch of them still outstanding
- UARB came out in July 2013 and effectively said they would approve it but they wanted Emera to have access to this economy block of power
- Emera went into negotiations with Nalcor on that
- I was at the table very early on that
- They ~~financed~~ that deal in October *Finished*
- Then they filed that application with the UARB
- Issued a report
- One of the conditions was outstanding until the bitter end was approval by the UARB
- It was touch and go if we were going to get it – once we did everything fell into place
- Then we were into execution mode on the financing
- **UARB – this all revolves around the energy access. UARB 154 - how did that change the structure that was originally contemplated? 20% cost for 20% power – how would that EAA change that structure?**
  - There was an add on to it – it didn't change
  - This was a separate block of energy
  - When we were negotiating the term sheet in 2010
  - One of the blocks they were pushing to sell was a block similar – maybe an extra watt than we would have available *Comment not making sense. Possibly "extra energy we would have available"*
  - if we had it available and they provided us with market price we would sell it
  - We didn't put it into the term sheet
  - Politically they didn't want that level of commitment with Emera at that point
  - Right through the formal agreement – there was discussion by Emera for more blocks of energy
  - *Out* mandate was take the term sheet and put it into a set of agreements
  - This concept of Emera having access to another block of energy – that wasn't a fully committed block that was on the table *UARB*
  - Then *UARB* came along and were involved in this other block of energy
  - I am not the best one to speak to what's in that
  - But from what I understand it's not a committed block
  - In actual fact they are paying us a little better – do better because there is sharing and receiving
- **I may have more on this later**
  - Wasn't really a new concept

- So that brings us 2013 again
- Largest single commercial issue infrastructure deal ever
- One of the things we were focused on was their ability to execute the deal without distorting the market
- One of the ~~good~~ things about putting that amount of money in the market in one day is the sheer volume of it
- That was probably a risk
- How much of the 5B people who were buying the bonds were the same people selling
- Combination of all that in the market could have created chaos
- One thing that could smooth the market - TD had already had part of the market spoken for
- Hedges in place offset the effect of the bonds - protected our interest rate
- Had a smoothing effect on the market
- Executed the deal Dec 10<sup>th</sup> and the market didn't move at all
- Largely that was the end of the financing - the deal was closed 3 days later
- The focus ~~became~~ having 5B reinvested ~~✓~~ ✗
- Reinvestment rates - gauging cash coming out in the next few years to fund construction cost
- Then it was done
- Then for me the focus became cash calls
- We had a protocol with Canada as to how the funds got drawn
- 100% equity financed so far
- Now we have the debt in place
- Canada dictated that the equity be put in place first
- Market would dictate once you get to financial close you sort of rebalance
- First period of time we were drawing down the financing
- Now the province put in equity so everything could be drawn out
- That continued for more of the period
- Important thing in financing - Canada wanted the equity all up front
- They said they wanted COREA - probably something we didn't agree on
- We weren't really happy with it but we accepted it
- When we sanctioned the capital costs were 6.2B
- Had to certify at the end of financial close, the latest schedule of capital costs
- Gilbert and Paul had to do a capital costs update and went to 6.5b
- That was the basis for the COREA calculation
- Any increase in costs would be equity financed
- Debt was locked down
- December of every year we had to do an estimate of forecast of costs
- Had 4 years left of construction we had to put in 250m each year in the COREA account
- At some point that money would come from the equity

then became

looks to be a piece missing here. It seems like it was given an example of how COREA have said "Based on a common IB cost question".

- 2014 cost update
- 2015 there was another cost update
- December 2015 we put more money in the COREA
- 2015
- Two cost updates
- Mid 2014 the price of loans dropped
- The provinces ability to fund equity was dropping
- These things are starting to converge end of 2015
- Government changed at the end of 2016
- We had a lot of discussions with the province on where we were and what we could do
- The government said <sup>to</sup> if you want to you can go back to the feds to reopen the loan guarantee
- Effectively we proposed FLG2
- We were able to put 75% debt into Gull Island and 65% in Muskrat
- We went back and ask if we can bring the debt back up to those levels
- We weren't changing the risk profile
- That came into play early 2016
- Started negotiating the term sheet in 2017
- The original guarantee was no guaranteed deal
- The second one there was one -- that was at the political level
- Through the process Canada tried a lot of things on for size
- Ultimately they backed off on all of it
- Place the additional finance May 2017
- Capital costs were 9.1B at the time I think
- Subsequent to placing the financing, another capital cost was in place
- How the financing would end up now is a lower target debt equity ratio

*AS written it looks like two cost updates in 2015 - but it has to be new 2 cost updates (1 in 2014, 1 in 2015)*

*oil*

*We proposed to*

*LIL*

*Fee*

*Financing*

*Placed*

- **Cost estimates - after negotiating FLG2 I am assuming there would be some capital cost re-estimate leading into FLG2?**
  - No FLG 2 wasn't renegotiated in March it was negotiated in basically January 2017
  - The latest cost update was from June 2016
  - \$9.1B at that point
- **A month or two after that was signed, new capital cost estimates were-**
  - Deal with Canada was done based on debt levels
  - Previous capital cost updates
- **So in terms of time you had the FLG 2 was signed then financing was put in place, then capital cost increased a couple months after?**
  - Yes

- **Astaldi – April 2013 all the bids were coming in for that package. You already know that the lowest bidder (Astaldi) used all the contingency?**
  - I didn't know any of that
  - The evaluation of the bids takes place within the team
- **Astaldi came in at about 300M higher, the contingency was blown. At that point were there discussions about going back and looking at how much these things will cost. Basically rebaseline this thing because our number on contractor is already so high?**
  - I wasn't involved in their capital cost discussions – I was briefed on it
  - Where they landed on cap costs was important to me
  - 2013-2014 I was aware they were slow starting
  - The board was briefed and there was recovery plans
  - The first time I really got involved in the Astaldi file was the end of 2015
  - Started to get briefed – because the realization was there that this wasn't a problem they were going to work through
  - The solution was going to be something that was financial
  - At that point they felt the need to involve me
  - ~~Not~~ it was to the point where it could have a big impact on Nalcor
  - My first real exposure to what happened – 2015
- **Astaldi at a slow start – ICS says the structure doesn't work. Any discussions that the schedule is blown and we need to rebaseline this whole thing.**
  - In 2013?
- **Yeah or beginning 2014? You know at that point the costs will increase because the schedule is blown.**
  - I am assuming they had discussion with Ed
- **You weren't part of them?**
  - No
  - I needed to know my impacts (financing)
  - One thing that did play out that we were pushing Ed, Gil, and Pardy to a cost of schedule update in 2013
  - I don't know if Astaldi would be impacted at that point
- **You were pushing throughout 2013?**
  - I wasn't party to what drove that cost update
  - I was the one pushing to get it
  - Subsequent to sanction there as some cost updates
- **Going form 6.2-6.5?**
  - Yes it wasn't a public update
- **Break 10:35AM**
- **Email Nov 15 2004 – there is a schedule attached, the last page is taking it from 6.2-6.5 and then there is a spreadsheet titled material costs**

Now

Not sure what Pardy is - does not seem like something I said

2004 does not seem correct. maybe 2013

- So what was going on here was that we got the additional cost increase and were asked by Canada to break that detail out into material contracts
- This is the break out of those contracts
- Look on that spreadsheet – third line down. See that 90m transfer?
  - Yeah
- Looks like that costs being transferred from other work packages?
  - For me this would have been an input that we were passing on so I was less focused on what they had in it
- What does that mean
  - It was one of these things we were waiting on for a while
  - Problems with these emails is you never know they are going to be -
- Did you want to continue?
  - Up to 2017 with the financing in place
  - Subsequent to that there was another cost update
  - Once we locked down the value from Canada
  - Once we locked down the value of the initial debt they can guarantee
  - Would have kicked off early April
  - No one knew the cost increase
  - It's unfortunate that we had a cost increase after we had our financing
  - Had it happened before it would have been different
- That takes us to?
  - Where we are today
- That was very comprehensive, thank you for that
  - You live it for 12 years
- I want to show you the sensitivity analysis from the CPW. DG2 there was analysis done at the time increasing capital costs by 20% and reducing costs by 20%. I want to show you the DG3 one and I don't see that sensitivity analysis done on Astaldi – was that left out on purpose?
  - It might have not been done in the same format
  - There is an increase in capital costs for 5%
  - And low fuel
- This is saying capital costs went up 25% and the low fuel goes down you are going to have the interconnected option being 1B higher than the isolated option
  - The base case was 2.4B if you took the low fuel being a bigger drop and you are losing 584m in CPW and capital costs you are losing 1.8B
  - You are pretty well evened up
- If you increase cap costs by 25% the base case goes 8.3 to 9.6?
  - That's correct
- If you go with the low fuel option with interconnected it goes from 8.3 down to 8?
  - Yes

*the Astaldi part is not making sense as Astaldi has not even known a foot of DG3.*

- **What's your knowledge?**
  - You have an equal chance of being higher or lower with your estimate
- **Who would choose the P50?**
  - I guess the team
  - They would brief Ed at some point
- **Anyone else?**
  - Gilbert
  - It's not that I wasn't interested in capital cost
  - My interest was that I needed to know what it is so I could incorporate
- **There is rumours that you have heard that the cost were stable at 7b is that true?**
  - I can't confirm
  - If you used P50 as opposed to P75 or P90 it would have been a higher number
- **Discussions you were having with Canada at the time – what would have happened if you said capital costs were 7.5B instead of 6.2B**
  - I don't know what would have happened
  - We worked through it and it all came out in the end
  - Had the number been 7B I am sure it would be a similar process
  - Whatever the cap cost needed I was willing to go forward with that cost
- **Ed and Gilbert were giving those numbers?**
  - They would have been the ones closer to the team
  - I was briefed at some point
  - But I wasn't involved with contracts or higher or lower inputs
- **Were you aware of any disagreements between team members and Gilbert Bennett regarding capital costs**
  - No
  - I don't know, no
- **The lower Churchill was talked about in the 70s, 90s and now conditions have changed. What made it more achievable now?**
  - Interest rates were lower
  - Fuel prices hadn't sky rocketed
  - Our load had been growing
  - Holyrood was 20 years older
  - Other factors but those come to mind
  - The willingness for Canada to step in was helpful
  - The other piece is the fiscal condition of the province
- **Load forecast – what would your role have been in terms of oversight?**
  - None

*this word doesn't seem to make sense. possibly "incorporate it in the financing" is "stable" the correct word?*



- We worked a solution that was acceptable
- Like any negotiation
- You don't always get what you want
- Water Management Agreement has gone through the PUB – did Hydro Quebec ever agree to the Water Management Agreement?
  - What happened is - They didn't need to sign off on it
  - It had to be an agreement with the legal entities CFLco and Nalcor
  - They negotiated the agreement
  - Then they had to go to both boards for approval
  - There was certain things in the shareholders agreement that Hydro Quebec directors had to have
  - CFLco didn't approve it
  - Either party could take the agreement and put it in front of the regulator
  - Hydro didn't vote for it at the CFLco
  - Went to the PUB and they reviewed it
  - It got imposed
- Emera – the additional block of energy – what impact did that have? Over time the load forecast growing – how would that impact the financial analysis of the CPW if some of that power is now redirected to Emera?
  - I don't think we would find ourselves in that situation
  - We have rights to clear a block of power every year
  - if we need the power we don't need to do that
  - there wouldn't be a situation that we are making power for them that we need ourselves
  - There is something in there that our needs trump everything else
  - I wasn't involved in the negotiations so I am not sure
- Press release stating that Emera's equity is 59% - can you tell us about that?
  - Emera's equity investment has no impact
  - Their equity investment in LIL came on the table
  - The deal in our minds was in two pieces
  - The regulated piece of the deal is that we would have to provide Nova Scotia a block of power and they would have to regulate the maritime link
  - Anything that they would have to do in New Brunswick is outside their regulatory piece
  - As was their investment in LIL
  - The initial view was we probably didn't want to – waited until we had to
  - It was meant to be the non-regulated piece of the deal
  - The way it was structured was that we could always say that we own 51% of all the transmission
  - If you look at the three pieces, they own 100% of the Maritime Link, nothing of LTA and this swing piece of LIL
  - If you add all those pieces together their investments would total no more than 49%

Quebec

Build

- Coming out of the model was the PPA payment
- Gave it to system planning to put into CPW – just for Lower Churchill Project
- **Would you be involved in discount rates?**
  - Not specifically
  - Hydro has standard discount rates
  - This is a process that can't be recreated
  - Anything done in WACC
- **Same discount rate would have been used for Muskrat Falls and isolated island?**
  - Yes
- **Would there be any impact on FLG for the Muskrat option if that played into the discount rate?**
  - I don't remember any discussion
  - Comes back to the fundamental – because we were looking at it from Hydro's cost perspective
  - What was going on the background was just a piece of the PPA
  - I couldn't say if there was discussion
- **Interest cost for CPW – would it be the same cost in terms of rate under both scenarios?**
  - No because we would have evaluated this option for the federal loan guarantee
  - Actually I shouldn't answer that question
  - That's a better question for Oliver *possibly "Auburn"*
  - I am pretty sure the PPA incorporates actual cost of ~~findings~~ *Financing*
  - On the isolated side you would have an assumption on equity finance
- **DG2 and DG3 the front page have signatures, can you tell me what they mean**
  - There was a deck November 21 2012
  - It lays out what each signature means
  - For mine it means that activities that I am accountable for were completed satisfactory to move forward
  - I was signing off on financing structure etc.
  - Others were signing off on CPW and options
  - Ed was the only one signing off on everything
  - There is a deck on that – you should get it
- **DG3 what information do you call upon before signing?**
  - In my case I had to focus on my piece which was a financing piece, NL agreements
  - So I knew for each of my pieces, where the status was
  - I am sure everyone else had a different process
  - LCP team had a lot of deliverables
- **Independent engineer – can you remember his role?**
  - Their role is to look at everything around the capital cost estimate, execution, and schedule

- **Would -10/+30 have been on there would it have made a difference?**
  - No because if the gatekeeper says that's the basis we are moving forward my view are irrelevant
  - These guys should know better than me
  - My view on if it should be higher is irrelevant
  - I have no basis
- **In the process of reviewing these documents – who would make the final decision on these changes?**
  - Not me
  - I am not sure about Ed and Gilbert
  - Jim Meany was coordinating a lot between Canada and MWH so he may have better insight
  - I am not sure if he was feeding Paul's comments
- **If someone saw that doc and saw that the cost could go to 8B – should that have been considered in the CPW calculation?**
  - I can't help you much on the capital costs
  - Those decisions were made elsewhere
- **Another section – lines that were crossed out “due to the significant overruns... contingency fund is considered to be spent at this time...”**
  - This was after sanction
- **Before financial close**
  - I know the schedule you are talking about
  - I know that the contingency shrunk
  - The previous email you showed me showed a low remaining contingency
- **That sentence was taken out**
  - I can't say why
- **Is it fair to ask would that Change your mind?** *unless*
  - My only option at that point was that they were going to un-sanction the project
  - The project was sanctioned so I had to put the financing in place
- **Do you know what would have been the motivation to make these changes?**
  - Don't assume that because there were changes made that there was an ulterior motive
  - The IE would change something if it wasn't factually correct
  - You could take any of our documents with first drafts and finals and there are a lot of changes
- **There is an email on page 2 – the CC line – included in this email is Nalcor, Fasken (?), and Allison on behalf of Canada. I would have thought they would both get drafts and both give feedback. Is there anything you know about this process?**
  - All I know is Jim was managing the process and I wasn't really involved
- **You said you weren't involved with Astaldi?**
  - I was involved with it once it was clear they couldn't manage their way through it
- **Did you have anything to do with the Astaldi package decision team?**

- Rob had some concerns and that was in the creditworthiness process and another process after, a due diligence process
- A sequence of events
- Went through due diligence then he signed off
- **Creditworthiness – when I read that they didn't want it communicated. Had others known that there was an issue, would it have changed this?**
  - I don't read that into this
  - Everything was tight lipped with contracts
- **When I look at the FLG it talks about major contracts. You have to bring it to the attention to the government?**
  - I am not sure – I can't recall
- **One of the things I saw (term sheet) – default ex: MF, PPA, LIL, would Astaldi be a key project or agreement**
  - It doesn't sound to be
  - There was another set of project financing agreements subsequent to the term sheet
- **I guess I would like to know the definition of a key project is?**
  - I can't help you with that
  - Jim could
  - He interfaces with the project team and oversight committee
- **Independent engineer – Nick Argorv – do you speak with him directly?**
  - I met with him 2013 with meetings with Canada
  - Jim meets with him
  - I don't have a direct relationship
- **Do you know if the IE left MWH?**
  - There was something about that
  - I think he went on his own but we kept the same individual
- **Did anyone from Nalcor assist him?**
  - I don't know
  - I hope not
- **You said he went on his own. There was a team before?**
  - Yes
  - There seemed to be
- **Break 12:08**
- **12:36 start**
- **This email – you can start to read through**
  - (Reads email)
- **Who is Murden?**

myrden

- They would have other reports from Westney that I wouldn't have either
- Not unusual
- **Based on your experience what do you think happened?**
  - I don't know if I have a view on what happened
  - Not trying to dodge the question
  - From an execution perspective I wasn't in the middle of execution
  - Jim Meany wasn't involved either
  - The Project team was directly reporting to Ed – he was briefed more than we were
  - I wasn't doing much in that perspective
- **Has anyone at Nalcor asked you to do anything that made you feel uncomfortable?**
  - The only thing was when we were awarded financing (I didn't do it)– I was asked by Ed if we could offer it to CIBC with the same terms as TD and I said no
  - That's the last I heard of it
- **Why would he ask that?**
  - There was an undertone
  - Lead hand at CIBC was Jim Prentice former federal cabinet minister
  - All the banks were coming to us giving us free advice
  - Somewhere along the way the premiers office made a connection with CIBC
  - There was pressure on the province from CIBC not to bother with the RFF process
  - At the end of the day they didn't win it – nothing against or for CIBC
  - They asked could we do it and I said no
  - That afternoon we met with the premier and approved TD and no one ever mentioned it again
  - That's the only time I felt that way
- **Are you aware of anyone else that was asked to do something by Ed**
  - No
- **By Gilbert?**
  - No
- **By Paul Harrington?**
  - No
  - There was another discussion
  - There was a question and I think the project team was behind this
  - The LTA was designed and built to accommodate Gull
  - At one point they came to Ed and he brought it to me could they carve out a couple million and put it towards Gull Island
  - I said no
  - To me it was an effort to try and carve out costs
- **So that didn't happen?**

*not sure if this right as the amount they wanted to allocate to Gull was over \$600 million.*

- No
- No one pushed it
- **There may be a chance for addition questions – can we reach out?**
  - Yes
- **Anything we should have asked today that I didn't?**
  - I really had no expectations
  - If you hadn't talked about finance I would have been surprised
- **Is there any areas we should be looking at?**
  - You are on the right track
  - You are deep enough now – you know
  - You look at it after the fact when things don't go as planned - as a result there must be a causal reason
  - My observation is that it's all plan
  - Ed made good decisions
  - He didn't make rash decisions
  - We would talk about it for hours and days
  - Constantly cross checking
  - He wasn't a risk taker
  - People say he rolled the dice
  - He was thoughtful – painstakingly sometimes
  - I think that's important for you to know
- **He was conservative – collected info?**
  - Yes
  - Sometimes he would drive people crazy because he would talk it through so much
  - This thing took place over ten years
  - There was no one instant decision
  - It's hard to look in the context of where we ended
- **We are just telling a story**
  - Yes I know
  - I am not saying in hindsight that we couldn't have done something different
  - I don't think anyone was forced to make any decision
- **Couple things we asked for**
- **Legal – capital cost at financial close, signature roles, value of contracts committed at financial close. shouldn't be a problem to get those**
  - The only other thing about the IE – the key issue is that Canada was to be happy with the contents
  - Whether they were Paul Harrington comments or not – the IE had to be satisfied with the comments
  - His professional integrity wasn't violated by changing something

Financing

This is referring to IE