MFI – Interview Summary		
Date:	• May 17, 2018	
Location:	Conference Call	
Attendees:	 David Malamed (Interviewer) Scott Shaffer (Interviewer) Angie Brown (Note taker) 	 Bob Card (Interviewee) Sheilagh Murphy (Ext Legal Counsel) Melanie Proulx (St John's NL, Legal Counsel in house) Janet Oh – In house

This document contains summary notes of the interview held with the above noted attendees. These summary notes are not intended to be an official transcript of the interview. These notes were based on the taped recording of the interview. These notes are for discussion purposes only and should be shared only with the interviewee and his/her legal counsel. The purpose of these notes is to determine if the interviewee believes any responses are factually incorrect based on the interviewee's recollection of the interview. Based on feedback from the interviewee revisions will be made if determined necessary.

Date of summary: May 25, 2018

Note: Bolded items represent questions asked by Grant Thornton LLP with the interviewee's response immediately following in point form. Where the response was provided by legal counsel it has been noted.

- Start at 11:30 am (NST)
- Legal Counsel Note for the record that Mr Card is making himself available voluntarily
- Maybe you can tell us about your involvement with the LCP
- When I took over October 1st 2012
- Project was a highlight for SNC Lavalin at the time became quickly aware
- Nothing was brought to my attention early on
- Somewhere in late that year and early the next year our people became concerned about the risk and approach on the project and our relationship with Nalcor, not in a personal sense, in a roles and responsibilities sense
- Scott Thon had shortly after the first year become the interim president of Power and this became a major focus for him
- Somewhere in the January-ish time frame we set up a meeting in April with Nalcor executives to have a face to face discussion about our concerns about the project which then occurred.
- After that meeting the project features highly on SNC Lavalin's radar even though our role was being reduced from EPCM to engineering design performer
- We continued to be significantly concerned about the risk of the project at that point Nalcor was clearly incharge and responsible for the outcome
- That Meeting, it took place April 2013?
- Yes
- · Who attended that meeting, if you recall?
- If you just give me one second I can give you the precise names

- Ed Martin was my counterpart focus there. So Gilbert Bennet was there
- What I'm reading off of , I don't have access to my former SNC archives but I do have my contacts and but in my contacts I kept track of who was at that meeting. Gilbert Bennett was there, Lance Clarke was there and Paul Harrington was there
- I can't, I can't say that all three were there with Ed at every part of it
- The Meeting involved a dinner I believe the night before. I'm not sure if all three were there and the there was a meeting at Ed's office the next day
- Ed Martin, Gilbert Bennett, Lance Clarke and Paul Harrington on the Nalcor side that attended that meeting?
 - Yeah
- And who on the SNC side beside yourself?
- Well there was Scott Thon there and Normand was, could have been there for some of it. I know one of the things that Scott and I were trying to make sure is how they felt about our project manager Normand. They said things were good, they liked him.
- But I can't specifically recall what parts of the meeting, he was, Normand Bechard, he was included in and what he wasn't
- It could have been he was in all of it and we asked about him over dinner or some other scenario
- Do you have the exact date of this meeting?
- No but SNC could provide that
- What, if you recall besides Normand's input about him, what else was discussed with the folks with Nalcor at that meeting?
- Our principal concern was over the success of the project
- Another bit of background, as you might guess our historic principal client Hydro Quebec was desponded over our choice to aid Nalcor and this activity
- Desponded would be putting it emotionally lightly and this had happened shortly before the decision
- This was a decision to join forces with Nalcor over the strenuous objections of Hydro Quebec
- It was important for this to work out
- We were chosen because of our experience
- Our key client was really upset so the last thing we wanted was both an upset client and a failed project at the same time
- It became clear to us that Nalcor's approach was rapidly evolving, this was in the again December-January time frame, was rapidly evolving into a self-perform mode
- In my experience in many multi-billion dollar projects is that while it's not always successful to have a the contractor be the program manager, it is rarely successful for an owner to be the program manager - that was red light number one for me
- The way they were approaching, I think it's been described in an SNC Lavalin risk assessment, the way they were approaching their contracting in general and oversight on the project was a concern to us
- We discussed our concern over the risk posture of the project with Ed and the team
- We discussed what we felt were advantageous to us playing a more prominent role in helping them deliver the project, and Ed and his team left the impression of strong comfort in their approach and capability to deliver the project as then advertised I think at \$6 billion dollars, I probably remember the exact date they were talking about but They were quite confident they could pull that off

- Did you say the April meeting was set in January?
- Yes
- A Nalcor executive visited the office to check on the design in January
- It may have been gilbert but I am not sure
- I don't have access
- You mean the office in Montreal at SNC?
- It was always my intention to have a meeting
- I was trying to visit all of our clients as fast as I could while also dealing with the issues at SNC Lavalin
- I can keep looking but I believe it was Gilbert
- Legal Counsel Can you explain to counsel what you are looking at?
- I have my outlook contacts
- I have a contact for Ed Martin says my first contact was 2012, probably exchanging pleasantries then meeting in April with a list of attendees at the meeting
- One of the concerns SNC had was approach to contracting. Can you explain that?
- They had strong ideas about who they were contracting and how
- One or more of the key contractors they were looking at were not the profile you would look for, for a project in the middle of nowhere - an area with difficult labour situation even in calm times
- Given the off shore work and mining projects in the Province
- I believe Fluor was having significant issues on their project and the province had pretty strict rules around the local use
- They seemed to be pretty set on certain contractors
- I'm sure they did some research but the names they identified were not the names that would have been on the top of my list
- Was one of those Astaldi?
- There was another European name but I can't recall
- Valard?
- Could have been I am hesitant to get specific because I don't have my notes
- Those are the kind of companies we would be talking about
- The notes you are referring to are with SNC?
- Yes by notes I mean there are a whole set of notes and documents about the project
- Anything I had got left with the company
- Would those notes document your concerns about the contract execution?
- Might have been
- Scott was staying on top of the project so I may have recorded less because he was staying on top of it
- If it existed it would be in those files

- You said there were two meetings? At night and then a day meeting. Is that right?
- Yes
- If it was planned in January would an agenda have been set?
- I wouldn't have recorded an agenda
- It's possible that there was one
- We knew what we wanted to address
- If there was a written agenda I can't recall
- The dinner was fairly light just getting to know each other better before the meeting the next day
- In terms of the contents of the April 2013 SNC risk report when would that have been discussed in the meeting? The evening meeting or the day meeting?
 - Are you referring to the risk review?
- I believe that is what it's called. The one that indicated I think in the end what was it? \$2.4B that SNC Calculated
- The contents, there was not a time in my recollection where a report was laid on the table and we said now, chapter one, chapter two, chapter three
- The discussion was, the general perception of risk around the project, the approach to managing the contractors, the labour issues
- The issues in in the risk report would have been reviewed throughout that whole process. So that issues left contentious might well come up over the dinner and the balance of the issues would have come up in the meeting
- In terms of the issues in the risk report did you indicate in that meeting that you actually had a report?
- I can't recall exactly the written materials that were discussed in the meeting
- But I can recall the various subjects in the risk report having been discussed
- With the four gentlemen from Nalcor?
- Yes, most likely
- I mean, again, one might have stepped out or something but yes that would have been the plan
- Aside from stepping out of the room, from what you remember, they're in a room and you were talking about the issues that were contained in the report?
- Yes but my goal was not to make sure I went down every point of the report because I had my own views
- See the report didn't really feel as I recall and the management what I call the 50,000ft level management of the project - it dealt more with specific risk
- I was also concerned about the overall management approach of the project
- The role of the owner verses the role of project managers verses the role of contractors
- I had in my own mind what I thought were the key risks which dovetailed with the other risks
- But it would not have limited my conversation to that report or wouldn't be
- My style in the meeting to whip out a report and go down here's point 1 point 2 point 3
- Did you ever say to them, "Hey guys, we think there's another 2.4B of risk here that you're not counting?

- I can't for sure say that I said that
- At the minimum we would have said we think it would be extraordinarily difficult to deliver this with the promised budget and schedule with the current approach
- In fact it would be difficult even if the current approach was changed to something that I would be more comfortable with in my experience with large project management
- You said you had concerns with the owner?
- I've personally done two projects bigger than this
- I've been the executive sponsor and key player on a bunch more
- This reminds me of the Panama Canal. It went 30 + % over budget
- The client started behaving similar to how Nalcor was behaving
- When an owner tries to deliver a project like this unless they have a long term steady stream of mega projects like this - like Hydro Quebec for instance
- You have trouble getting the world's best and brightest to come and that's what you need
- You can't get them to St. John's they will only go for a few years
- If they work with Nalcor they need to figure out where their next job is where as a firm like SNC would help place them somewhere else after that
- The project might have a section of the project which is very political in nature so the bare knuckles person might not be a good perform well in that environment. But a firm has a pool of talent and we can shift things around to meet specific requirements
- The client can request different skills and SNC moves the staff around
- The client can't do that with their own people, they can't change them out or discipline them well
- They can't staff up and down to respond to changes
- I could go on and on
- But unless you have a steady stream of big projects that are happening over decades so someone could make it their home there
- I'm going to tell you what we heard from the other side. They signed SNC up as EPCM and you were sending in the B team. They were not happy with the people SNC was sending to them? I want to hear your side of that
- When I was there they had high praise for our design
- Thought it was good and the people on it
- They expressed some concerns about that
- Normand went on and successful managed other projects we proposed him as the key person
- We were in the process to search for talent to boost the team ourselves
- But we wanted to ensure their intent before we shifted the organization to put in a new team that might be more interesting for them
- We were planning to adjust the team but it became clear that sort of headed off on plan B so there wasn't really a point in perusing that
- Was there ever any discussions about the 2011 issues being the reason for the change? The fraud that hit the papers?
- We had frank conversation about it

- I expected the clients to have concerns
- If they didn't have concerns I would question
- Meeting with Charles Bown and Ed Martin specific to discuss the ethics issues
- Ed never said the ethics issues were the reason for the change
- Ed seemed like a straight forward person I might not have agreed with his approach
- I don't think he was disingenuous
- I understood they had concerns with the team from a project management standpoint and the new model was what Ed had experience with in oil and gas and that was the model he preferred regardless
- In terms of the risk report that was drafted. Who initiated it?
- The expectation I set when I came in was that every project needed to have a risk register and a regular review process - which was a key to managing any project
- I don't recall specifically calling for one on Nalcor specifically
- This was something required on all projects
- Nalcor was a high risk project
- I don't know the exact origin of the report but the discussions we had at the executive level were frequent I would be disappointed if it didn't exist in other words
- When you say at the executive level, you mean SNC?
- Would Nalcor have been involved in those discussions?
- Those meeting would have been about a number of our clients
- I don't recall a specific risk meeting with Nalcor other than the meeting in April
- Normand and Scott would have discussed risk with Nalcor
- They have indicated that they never received that report?
- Yeah and I don't know if there's a specific transmittal that clarifies they got it
- But to me, it's somewhat irrelevant whether they saw it or not because the issues were clearly discussed at that meeting and by the impression I got from my ongoing dialog with Scott Thon and others is that the issues were being discussed frequently
- between our project leadership and them whether or not they saw a written report.
- In April for the dinner and meeting was this report already written?
- I believe so, for sure the issues in the report were already understood and were part of our discussion framework at the meeting
- Did you have a one on one meeting with Ed about the report?
- I don't recall a one on one meeting with Ed over anything other than how you are feeling about the people you're dealing with at SNC Lavalin if it would have happened
- So you don't remember handing Ed the report and him refusing to take it from you?
- No, I couldn't imagine Ed having refused to take it
- We weren't having the relationship while we disagreed, I would classify as cordial and adult like.
- It would be hard for me to conceive me handing Ed anything and him saying I don't want that

- Was the report given to Ed or anyone either electronically or via courier?
- You know, I don't know- the most likely person to have delivered it would been Normand or Scott in my view
- It would be rare for the CEO to send this report to the CEO of a client unless there was something horribly missed in the organization somewhere
- So I don't recall doing that
- Following that April 2013 meeting were there other follow up meetings about the report? Or just risk and the project in general that you were involved in?
- My sense is that there were many follow up conversations after that
- That meeting represented the departure point where we were being told to stick to the design Nalcor had it figured out
- The motivation to continue with this issue would have been less because Nalcor was saying we've got this don't bother us
- Do you know if SNC's contemplation and preparation of the report was discussed with Nalcor?
- The preparation of this report would be typical of this type of project
- It wouldn't surprise me if it was discussed
- It would surprise me if a project like this had no report like that
- Normally the client would insist on it
- If you didn't have it they would wonder what you were doing
- So that report was made to be eventually shared with the client?
- I don't know it's possible that there was something there for internal purposes
- But there is nothing that is top secret or particularly disturbing
- These big projects usually have these concerns it's what you do about it that counts
- If anyone would have delivered the report to Nalcor (to Ed, Gilbert, Lance or Paul) it probably would have been Scott Thon or Normand Bechard?
- It could have been me but I can't recall
- But it wouldn't be my style to walk into a meeting and throw a report on the desk
- Generally we would have wanted that to be issued earlier if we wanted it to be a topic of the meeting
- When Nalcor learned that the report existed were they upset?
- The report didn't become the core discussion topic the risks were
- They weren't upset over the risks they acknowledged some and felt they had it figured out
- It was a different perspective on what was manageable and what wasn't
- But a report was known to them?
- I assume so but I can't recall specifically
- Did they explain to you why they thought they had it under control?
- No
- It's generally not the suppliers job to interrogate the client to make sure they provide good answers to that
- I surmise the reason they thought they had it under control was because the oil and gas has a lot of experience in projects of a similar nature - large projects in remote location

- I assumed that if they could successful do a project in off shore Newfoundland then they could do this project
- I assume they were going to use their contacts for oil and gas projects to deliver
- While there are similarities there are some significant difference
- Nature of work and resources
- Without getting too technical can you give some examples of the differences at a high level so that we know what they are?
- In oil and gas the resources are faster and more significant
- Very expensive supply chains
- Speed is of the essence and its mostly mechanical
- You go to Korea and do a modular development for top side like White Rose
- For hydro it's all about bulk material same with mining
- Productivity and quantity risk is huge how many days per year can equipment operate
- You have to get a lot of material to a remote area
- Quite a different perspective on the two projects
- Can you just go back to the Astaldi contract? What was SNC's involvement?
- I think we had very little involvement talk to someone closer to the action to be sure
- We had experience with Astaldi before with other projects and experienced similar issues to this project
- Similar to the Panama Canal they had lower tier European contractors and not the major civil contractors
- I am sure Astaldi did great work on other projects but SNC was not having a great time with them
- Was that concern shared with Nalcor?
- We discussed in the meeting
- Not necessarily Astaldi directly but the contracting approach on how they were selecting their contractors
- You said they had specific contractors they wanted?
- They seemed to have strong views of the pool of contractors they were interested in
- It wasn't like they were going through a qualifications package and sifting through that
- My view is that they had kind of picked who they wanted
- Were notes taken at the meeting?
- I don't recall
- I usually would take notes on scraps of paper and produce something afterwards
- Scott Thon might have that wouldn't have been unusual
- It's not clear in my memory if there were notes in the meeting
- Sheila do you know if that's being produced or if it was even asked for?
- Legal we have been asked to produce all emails, notes, memos relating to the project or all persons involved. We have been undertaking a review and going through servers to find whatever documents exist. So the course of that production is still ongoing. We hope to have it by the end of the month.
- Is Scott Thon still with SNC?
- Legal No

Do we know where he is?

Legal Counsel – I don't have any contact information for Scott Thon – I know he's no longer with the company. I can follow up later. I have no way to get in contact with him.

We would like to talk to him about this

Legal - We know where he is in Calgary Alberta but he is not affiliated with the company anymore so we are not able to compel him obviously – we can talk about it more offline.

Sorry Mr. Card

Bob - when you leave that meeting did you feel it was a success?

- I was willing to increase personal time myself was to have a shared key role with Nalcor to apply the same principles as the London Olympics
- It was clear to me that wasn't going to happen my business imperative was to make sure we re-casted our contractual role to be in alignment to be what we were actually going to be as a design engineer

What was the concern there? Why the need to change?

- We felt Nalcor wanted the shield of SNC's reputation on the project to protect them
- We did not want to be labelled as the EPCM if we didn't have responsibility for the project
- The contract was based around give SNC the keys and they drive the project and take credit or blame depending on how the project works out
- Since we were no longer going to be driving we were more like in the third row of a minivan
- So we didn't want to be given the credit for the driving especially since we didn't think the project would be successful

Do you know what success was for a project?

- Oh yes we would have agreed to cost and schedule parameters
- Successfully operating project
- Delivered the contract on schedule
- Several years of delivering power without issues

Was schedule part of the April meeting?

- Oh yes cost and schedule go hand in hand
- If you meet the schedule you minimize your cost exposure
- You might have an overrun but it would be limited if you blow the schedule you have expensive equipment out there charging by the hour

Did you ever say guys this schedule is way too aggressive?

- I don't recall a quote like that
- Certainly the issue of cost and schedule would have been a prominent discussion
- These types of discussions and disagreements over risk and schedule are not uncommon
- Even though I think Nalcor made poor decisions and the outcomes have not been surprising to me its rare for these types of projects to not have disagreements in this stage
- It's how you respond to it that matters
- In this case we were correct and Nalcor wasn't but the discussions are gentlemanly

- It would be surprising not to have this sort of conflict
- Would it be good practice to constantly look at the risk and adjust the contingency?
- Yes
- Going back to the Olympics
- We had a dozen staff on risk and it was the centre of meetings with the client
- The risk register was a prominent discussion in every key meeting
- It was inclusive would the project manager fail or have bad management, will the client fail or have bad management, will the clients government cause a problem
- You have to look at risk from a high level and look at what could go wrong
- In a good project its successful and its usually the focus in the meetings
- Clients aren't as willing to put key risks on the table
- If you have a constructive tension between a supplier and a client it is easier to identify the issues and address

You mean owner bias?

- Not owner bias political reality
- It's no similar than if Grant Thornton was to redo IT at a big health system and its all you guys assigned to the project is Sally who had a great run ten years ago and hasn't done a thing since and everyone knows it, but she's been made project manager and no one can say anything because the CEO says that's what should happen - it's that kind of stuff
- If you don't have a governance structure to deal with those issues than it's not going to work out
- Typically projects fail over institutional issues and not technical issues

Institutional issues?

- Politics, the client and the stakeholders
- Was there any concerns expressed over Nalcor not wanting the report because of ATIPP requests?
- Normally we don't like to put a client in a corner at this stage in a project especially since it's not irrecoverable
- They can say that the report might have been suppressed typically a client might say if you give me this report I have to put it in the public domain and I would rather not have it, there are times we might honour a request like that if we felt it would get fixed
- I don't know if that is what happened in this case
- A client may not want to be embarrassed and therefore we would hold on to something we are working for them at the end of the day
- This report if they had dealt with it head on, would that have had an impact on Nalcor decision making?
- The question of risk management what was Nalcor's system?
- Gilbert Bennett, Lance Clarke, and Paul Harrington very bright people
- All of them could have come up with the same risks at the same time if they were asked to do a report
- There is nothing that I recall as shocking and stunning in the risk report other than the institutional bias's tied to them

- One of the things I have seen is different draft versions of this April report. I'm seeing earlier versions before the report is signed and then versions after it was signed. Do you know why that happened?
- No I don't know why any report goes through revisions
- I wasn't involved in the drafting of that report
- But it wouldn't surprise me that the report goes through revisions
- Would there have been any action items or undertakings for anyone or things to delegate coming out of that meeting?
- Not to my knowledge
- When we had the role of EPCM, our risk responsibility would be different than when we were the design engineer
- Have you heard terms P50, P75 in terms of calculating contingency?
- Yes, common
- What is best practice for what your P should be set at?
- It depends on the sophistication of the risk assessment
- The best projects would have a model where you look at contingencies and evaluate the probabilities and aggregate them together
- It shows you where your unknowns are and you set teams to quantify that and account for probability and things you don't know
- Legal counsel do you have much left? We are at the end of the hour. How much further do you need to go?
- On these large projects Mr Card. It is typical that the majority are P50, P75, and P85?
- It depends on the client if the client has to meet a schedule or cost, you would customize for that requirement
- On a semiconductor plant where speed is everything they may expect a high P on cost but low P on schedule
- Once you announce a cost and schedule in a public project it's important to meet both
- Typically you spend more time on the engineering and planning to improve P values before announcing
- This project we understand was 40% designed when the estimate was made. Any thoughts on what the P should have been?
- No just speculation
- On the ranges? Do you have any ideas on what the ranges should have been?
- Yes if between 25-50% that means 25-50% of the costs being exceeds or exceeded by 25-50%
- I don't want to mislead you
- I would have to know the context
- Legal Counsel I'm not sure it's fair to ask him that he was CEO of the company he was not involved in engineering, preparing estimates
- Yes I'm just trying to understand best practice
- Legal Counsel yes but perhaps you should talk to the people who are involved in estimating
- She is right, you should talk to someone who knows what they are doing
- Legal Counsel we know class 3 was a contractual requirement in this case
- Legal Counsel Are there any other questions gentleman

- What follow up meetings were there?
- I don't recall but my impression is that there was a lot of further dialogue
- Probably more focused on resettling our roles as opposed to the risk of the project
- Our focus from the executive level was to best serve them in our new role
- End 12.36pm (NST)