

**Hebron Public Review Commission**  
Hebron Development Application

**Record of Proceedings**

Public Review Sessions, Day 8:  
Human Safety and Summary Session

1 December 2011

Holiday Inn  
St. John's, Newfoundland and Labrador

## **Public Review Commission**

Commissioner: Mr. Miller Ayre

Official Clerk: Ed Foran

## **Proponent:** **ExxonMobil Canada Properties**

Senior Project Manager for Hebron Project &  
Vice-President of ExxonMobil Canada Limited: Geoff Parker

Hebron Project Technical Manager: Dave McCurdy

# **Public Sessions, Day 8**

General Session

1 December 2011

Holiday Inn

St. John's, Newfoundland Labrador

## **List of Speakers**

(In order of appearance, with page number of first appearance indicated)

COMMISSIONER (Miller Ayre):.....	1
GEOFF PARKER (ExxonMobil):.....	1
ED FORAN (Offical Clerk): .....	3
KENNETH LeDEZ (CC-UHMC):.....	3
RICK DALTON (Resource Trades Council):.....	17

## COMMISSIONER'S OPENING REMARK

**COMMISSIONER (Miller Ayre):** Good afternoon, everybody and a special hello to the pillar. It's still with us; dedicated spectator. (Laughter). I think we're going to minimize the opening presentations which usually would have taken place in the morning. And, Geoff, I think you wanted to show a couple of slides, and we will just get right into Geoff's presentation, and then we can move on with Ken's.

## PROPONENT'S PRESENTATION

**GEOFF PARKER:** Good afternoon. First, on behalf of the entire Hebron team, I would like to thank you for the opportunity today, and in the coming days, to talk about the Hebron Project. We are very proud of the project and the work that has been done on it to date.

During the sessions we'll talk about our fundamental commitments to safety and protecting the environment, as well as our general approach to the proposed and potential development of the petroleum resources within the Hebron Significant Discovery Area.

We will outline the framework that ExxonMobil has created to put these commitments into action. That framework is called the Operations Integrity Management System, or OIMS for short. OIMS is a structured and rigorous approach to identifying hazards and managing risks. We'll also cover the tremendous benefits the Hebron Project represents for the people of this province and the entire country, and we'll explain how the project will meet the requirements of the Benefits Plan.

But before we get into all of that, I'd like to give you a little background on myself and my colleague joining me today at the table, Dave McCurdy. I'm Geoff Parker, and I'm the Senior Project Manager for the Hebron Project and Vice-President of ExxonMobil Canada Limited. I'm an engineering graduate from the University of Western Australia, and I've been with ExxonMobil for more than 20 years. During that time, I've worked on gravity-based structure projects in Australia, Western Europe and Russia.

Dave McCurdy is the Hebron Project's Technical Manager. He's a Mechanical Engineer who has spent nearly 30 years working in the international oil and gas industry with ExxonMobil, and he has lived and worked in the United States, Canada and Italy, and has been with the Hebron Project since early 2009.

A lot of work has been undertaken and substantial progress has been made since the Hebron Agreements were signed by the province and the Hebron co-venturers three years ago. You can see the names of our co-venturers on the slide. They are Chevron, Suncor, Statoil and Nalcor. And we're very pleased to be working with these companies who share our commitment to responsible development.

Our Development Application, which we submitted earlier this year, lays out our plans for the life of the project. We are confident that we have a strong project. Our plans for engineering, construction and operations are being developed to ensure the safety of everyone involved in the project. We've conducted a detailed Environmental Impact Assessment which included significant interaction with external stakeholders through the Comprehensive Study Report process. We have worked diligently to ensure that our project is having a positive socio-economic impact.

The Hebron Project Development Application has been assessed by the Board and deemed to be complete for the purposes of this Public Review. That scrutiny will continue during the Review Process and throughout the remaining Regulatory Process.

The Project Application has been shaped to a significant degree by the input received from a number of parties. The project team consulted with the supply community, postsecondary institutions, municipalities, provincial and federal government officials, the Offshore Petroleum Board, as well as local organizations and other interested parties during the extensive public consultation that led to the filing of the Development Application.

The Hebron Project has a number of direct benefits for the people of this province. First and foremost, it will provide meaningful jobs and careers for Newfoundlanders and Labradorians; diverse jobs for a diverse workforce.

Furthermore, our investments, combined with the Province's equity in the project, plus the royalties and taxes generated from the operation, will help fund provincial infrastructure, social programs, research and development, education and training and services for decades to come. And it is very important to recognize that the Hebron Project will offset projected declines in oil production offshore Newfoundland and Labrador, and will help meet global energy demand for many years into the future.

During this Review Process, we should keep in mind that the Hebron Project is in the defining stage that occurs prior to detailed engineering and detailed execution planning. Now while all details have not been developed at this stage, we can confirm that the engineering and execution plans will be consistent with the Regulations, Development Application and Benefits Agreement.

Commissioner, I'm here today with members of the project team to walk you through our plans and answer your questions, as well as the questions from other interested parties. This project is an important one for everyone in the room. If the Development Application is approved and the co-venturers sanction the project, it will benefit virtually everyone in the province.

Thank you, Commissioner.

**COMMISSIONER (Miller Ayre):** Thank you, Geoff. At this stage I'll hand things over to our trusty clerk. And I wonder, Ed, if you could introduce our first presenter.

**ED FORAN:** Thank you, Commissioner and it's glad to be regarded as trusted or trusty. So this afternoon we will have two presentations. The first one is from Dr. Kenneth LeDez, and he is presenting regarding hyperbaric issues and topics. And Dr. LeDez if you could proceed please.

## ORAL PRESENTATIONS

**KENNETH LeDEZ:** Okay. I know time is short. I am going to try and connect a bunch of dots for people, and if I run out of time then we'll just have to deal with anything in questioning. I am a physician. So perhaps I bring a different perspective than has been heard here up until now. I am anesthesiologist and also recognized as a specialist in diving and hyperbaric medicine.

The context in which I'm speaking, of course, is the one we all know, the crash of the Cougar Flight, the Wells Commission of Inquiry, recent loss of a bunch of saturation divers, offshore divers in the Persian Gulf. And also, we're in a context where we don't have a proper form of certification for physicians working in this area, and at the same time people work in the offshore in Newfoundland and Labrador are working in very extreme environments where there is a definite safety hazards, if there was a need, for instance, for a helicopter to ditch. And the same time as a physician in my perception - I am sure someone will tell me I'm wrong - is that most of the benefits of these types of projects seem to always go to engineering. One of the things I want to be talking about today is the need to consider human safety and other aspects in terms of benefits. So I'm going to talk about two main areas: diving hyperbaric and medicine and humans in extreme environments.

First of all, hyperbaric chambers, might surprise some people to know, play a very important role in offshore development at this time. Divers live under pressure for extended periods of time and they undergo potential risks of a whole bunch of medical problems. And just to decompress from the typical working depths offshore in Newfoundland and Labrador at the moment takes about four days. They have a risk of a variety of things: decompression illness or arterial gas embolism.

This is what offshore diving saturation chambers look like. And the inside, pretty comfortable to live there for a few weeks at a time, and this is how the divers travel down to the worksite at the bottom of the ocean in a diving belt.

The C-NLOPB, the Canada-Newfoundland and Labrador Board diving regulations, their medical requirements or medical kit, their regulations are grossly outdated and they have been not

been revised for decades. As a physician who I'm currently right now on-call for the diving going on offshore in this province, that's of concern to me.

Some examples about how these things are updated that have come into place since the regulations were done: pulse oximeters, the ability to transmit a 12 electrocardiogram, whole bunch of changes in medical equipment, automated defibrillators, even the use of offshore e-mail and internet.

I can tell you that in diving operations, the average teenager or even preteen is making greater use of information technology than occurs in offshore diving operations in some regards. I can't, for instance, see a patient, see a diver inside the chamber if I need to try and provide a medical opinion often going through, second third and fourth hand, and that's a concern. And I think we can do a lot better with that.

Not to mention the fact that our divers are getting older and older, and a lot of divers now in their forties and fifties, and yet, if I want and need a 12-lead electrocardiogram to assess a situation, I can't get one. I think there is a problem there. And wearing one of my many hats, I am the president of a new organization, the Canadian Chapter of the Undersea and Hyperbaric Medical Society. This is an organization of hyperbaric medicine in Canada. It was established last year. And we're federally registered not-for-profit corporation, and based here in Newfoundland and Labrador. And I'm the president.

And our organization is doing a lot of work trying to development standards for hyperbaric physicians, training programs and what have you. And we have an important role to play if decisions were made to update the offshore regulations in the province; particularly, as it pertains to diving medicine and other diving related matters. And such an update is urgently required.

But I told you that I was diving a hyperbaric medicine physician. I am recognized by myself and by the C-NLOPB, but we don't even in a system of proper certification in Canada for physicians like me, or even any properly structured training program. And so we're trying to correct that by seeking to have a diploma in diving hyperbaric medicine from the Royal College of Physicians and Surgeons of Canada; but, of course, all these things cost money.

There is really a minimum availability worldwide of physicians, dive physicians for the medical issues related to saturation diving. We are trying to do something about that with our new organization, and I would like to see that in the development of Hebron that maybe there is some support and assistance for these types of efforts.

I want to start to tie this into some of the other issues that go on offshore right now, by mentioning the concept of Cerebral Arterial Gas Embolism. That is one of the things that are treated in a hyperbaric chamber. It is a dramatic and awful event that can lead to death,

paralysis, loss of consciousness and drowning, of course, if it's in water. And the treatment for it is hyperbaric oxygen. And I'm going to tie that together a bit later on with what it has to do with travel offshore. And so basically, air bubbles, go to the brain, up the main blood vessel of the body and obstruct the blood flow.

Now, I do also want to, before tying that in, I want to inform this group of an initiative within Memorial University related to extreme environments. I am part of a group that is doing work in this area. The intention is to develop and deliver courses related to the safety and performance of humans in extreme environments, including research and development. And this effort involves medicine, engineering, the Offshore Safety Survival Center of the Marine Institute and other groups within the university; such as environmental science.

So the conditions offshore are pretty extreme, and one of the key points I'm trying to make to this group is that investment in research and development, education and training will have specific benefits to human safety in the offshore development of the Hebron field, particularly if there is support for some of the start-up initiatives of this extreme environments group because in the long term we believe this group and its courses will be self-sustaining.

There is a whole bunch of new developments that are possible; such as remote monitoring of location, or even vital signs of people who, for instance, have had to ditch in the ocean, and the potential for developing smart tools for improved effectiveness of rescue assets.

So, one of the proposals I'm going to be making today is that there is a need to establish an offshore research safety research program here.

Now, I'm going to tie this now together more directly with the issue of helicopters. Right now, people going offshore have to undertake helicopter underwater escape training; essentially, once you're immersed in cold water, you can't hold your breath for very long and, therefore, most people, as in the most recent helicopter crash die from drowning. However, there is a recognized need for HUEBA, helicopter underwater emergency breathing apparatus, and the current training with this equipment is being undertaken at the Foxtrap Survival Center but it's being undertaken in a very unrealistic fashion - I'm going to show you that in a moment - that doesn't simulate real conditions.

Suffice to say the Wells Inquiry made it clear that helicopter ditching would result in some ... that the helicopter being immersed and upside down and descending at the same time, and strongly endorse the concept of emergency breathing systems and the proper training in the use of this type of equipment; but did also highlight that just the availability of that equipment on its own would not be sufficient. That training needed to be realistic in the types of conditions that people would encounter if they were trying to escape from a ditched helicopter.

It was certainly highlighted that the one soul survivor was someone who was quite used to being submerged in cold water. And one of the conclusions from the Wells Inquiry specifically said that there was a need for the regulator to be involved with studies and research on training improvements. And I think that's something that I would like the Hebron Project to hear and to heed. Even out of the Wells review of the Transport Canada recommendations, again, said that supplemental underwater breathing apparatus be mandatory and it can make the difference between life and death.

So here's what HUEBA looks like. It is a small cylinder and a mouthpiece, you can see. I am sure most people see. The mouthpiece is up there and the small tank, and this is what's being used offshore now. And however, the training for this involves people sticking their face in the water like this, or sitting on a chair and being rotated and just having, basically, their head and shoulders immersed; a situation which is very far from realistic training. The reason for this --

**COMMISSIONER (Miller Ayre):** Ken, you can slow down a little if you like.

**KENNETH LeDEZ:** Okay.

**COMMISSIONER (Miller Ayre):** I know we put pressure on you but we don't want you to run out of breath.

**KENNETH LeDEZ:** I understand.

**COMMISSIONER (Miller Ayre):** Especially on this topic.

**KENNETH LeDEZ:** I understand.

**COMMISSIONER (Miller Ayre):** Yes, okay. Thanks. Now I did you a disservice.

**KENNETH LeDEZ:** The primary reason ... no, no, don't worry. That the primary reason that we're not doing actual helicopter escape training that's realistic is that there is a risk of air embolism from such treatment. So they are not putting people in the helicopter simulation trainers, submerging them, turning upside down like they do normally and having them use this equipment because of this risk of air embolism. And I'm going to explain that. And but in order to provide more realistic training, we have to have the people who are traveling offshore using this equipment in more realistic circumstances. So the reason for the air embolism, the reason someone like myself, as a hyperbaric diving physician, is interested is essentially Boyle's law. If you take a breath of compressed air at depth and hold your breath and ascend up in the water, just ascent of four feet is enough to cause rupture of lung sacs, and all these lung sacs, these are just represented diagrammatically here, they have a very rich blood supply. That's how the body gives up carbon dioxide and takes up oxygen. So when these lung sacs tear, then it creates a path into the bloodstream of gas that's in the lung. And then that gas

travels to the left side of the heart and to the brain, like I showed in that previous diagram. So this is why we're not having realistic training here at this time.

So, just four feet can do it. In fact, people have been witnessed to squat down underwater, pick up a heavyweight, and stand up and to have cerebral arterial gas embolism from nothing but that. Obviously panic during stressful situations can contribute to breath-holding too.

So but the whole area of research on HUEBA, or emergency breathing systems, is comprised in the scientific literature of just three publications, and none of them were from Newfoundland. And they're very, very limited publications. But there is no question from the evidence that is available is that people have a much better chance of escaping from an underwater helicopter - this is the first publication - if they are able to breathe because of the cold water gas reflex which causes people to, once they're emerged, to take a deep breathe. And most people, if they're not experienced in being in cold water, simply can't fight that drive. And there is clear evidence, at least from this paper, that subjects who are trained in scuba diving actually do much better in terms of holding their breath. And there is just one publication that's actually looking at the use of HUEBA in helicopter escape training, and there is various problems, for instance, with nose clip.

So what happens if there is an air embolism today? I want to tell you, for example, we know that these emergency breathing systems are currently deployed. Everybody has got them on their suit, their Helly Hansen suit, as they're going offshore. And so if there was a ditching and someone had to do an escape, well, right now, as of today, we are not able to treat a patient with cerebral arterial gas embolism. We can't even treat a single patient; never mind multiple patients. And of course we know that helicopters don't fly with just one person. The hyperbaric capabilities in the city, in this province, have been considerably degraded.

But if we were to have a ditching or even if we were to have enhanced training, we would need to have the ability to promptly treat air embolism, and promptly treating these patients are going to be unstable, they may be paralyzed, unconscious, seizing and have unstable vital signs, might need to be on an artificial ventilator. But this is what we're treating people in right now, a small single-place hyperbaric chambers, and we're going into our second winter outdoors in a trailer. We do have a larger multi-place unit that is suitable for patient treatment but these units are just way too small for effective critical care; although we have coped with it for years. But this unit is out of commission at the present time for a whole variety of reasons.

And even when we do get this back on stream, hopefully in the not too distant future, we have to understand that treating critically ill patients in this facility is very, very difficult. The systems are outdated, they are too small, and there is an absence of physician coverage because of remuneration; a whole bunch of issues.

So our capabilities for treating people who suffer from an air embolism, either from being offshore in a ditching helicopter or from on the training for the use of the underwater breathing equipment, is substantially graded at this time and I'm concerned about that. The university is not even supporting the hyperbaric facility any longer. We have no physician on-call system, for instance, and, as I said before, we don't have a proper method for certifying of physicians even for being qualified to do this.

So, what I'm saying is that we need to have such facilities. We need a newer larger chamber. We need to be able to manage more than one patient at one time. We need physicians to be on call for that.

This is what a more modern chamber looks like. This one is in Vancouver. You can wheel a stretcher in. You can have more space for treating critically ill patients. And there is another example of a rectangular chamber. Again, you can see a drastic difference in terms of managing a critical patient and you can see no difficulty treating two or even three critical patients in a facility like this.

So, the whole thrust of my talk is that I think as time that, as we develop further in the offshore, that we need to consider having a focus on diving and hyperbaric medicine; including assistance with developing physician standards, enhanced hyperbaric treatment facilities. We need a review and revision of the Canada Newfoundland and Labrador regulations. We need advanced and more realistic helicopter escape training that involves the use of underwater breathing apparatus during escapes and other research and development.

So the specific proposal is that we develop into an Offshore Safety Research Center which will tie together the different groups that have an interest in these areas. Perhaps having a small onsite hyperbaric chamber; a cold water pool for research and training; updated helicopter simulators; the use of this breathing equipment; the ability to remotely monitor the vital signs and the stress of people undergoing the training and perhaps even people who are heading offshore; a new hospital multi-place chamber and enhanced telemedicine capabilities.

We have, for instance, an unused hyperbaric chamber that's capable of being refurbished that could be re-sited to the Foxtrap Safety Center. And but I think that there will be tremendous opportunities to develop expertise in this province related to offshore safety and survival by having such a research center, and opportunities to recognize the role and contributions of the companies involved in doing so.

So the steps again, to repeat: consideration of assistance with the new multi-place hyperbaric chamber, the possibility of a self-contained hyperbaric chamber at the Marine Institute Safety and Survival Center, encouragement for the development of physician qualifications.

But to have more realistic helicopter escape training, we need to build on the success of the

current programs and support scientific research into changes and innovations in that training. That would include such things as the helicopter training in cold salt water, training participants more in snorkel, and snorkeling and scuba mask; get them to the same degree of comfort and capability that scuba divers typically obtain in their certification. We don't have to turn everybody into a scuba diver but there is evidence to suggest that scuba divers have a better chance of survival.

We need to consider exposing subjects to depth because helicopters will sink quickly, and that involves a whole bunch of things like ear and sinus pain, if they don't expect it. And they would be straightforward, I believe, to have people breathing from this HUEBA equipment at a depth of 10 to 20 feet; get them familiar with the concepts. And then as you progress up the enhanced type of training, you could, then, move on to the inverted HUEBA helicopter escape training in cold salt water and if you really want to have the icing on the cake you could consider it in darkness for very advanced training.

So all of that involves some more elaborate, in some cases, medical screening and not everybody necessarily would be fit for this; but we need to keep in mind that we have clear recommendations from the Wells Inquiry and just common sense tell us that this is the way we have to go. That escape training that involves turning someone upside down in a chair and immersing their face only is not going to give people an idea of what it's like to escape from a helicopter.

Is any of this feasible? Well, the Professional Association of Diving Instructors certifies scuba dives at the age of 10 years old, and so I think that we can categorically state that at least some more advanced underwater breathing training is a feasibility for the adults who are working offshore.

So we now have an opportunity, I think, to focus on human safety in the offshore, and that's the purpose of my presentation here today; is appeal that we look to have a world-leading facility for research, education training and treatment, to develop "Smart systems" for search and rescue, enhanced hyperbaric services, advanced realistic helicopter escape training, diving, medicine expertise and excellence, and we need to keep in mind the need to update medical requirements and the regulations related to the offshore diving.

So in conclusion - just as the red light goes on - I guess where I'm advocating is that of the many millions of dollars offshore development and in royalties, relatively little has been spent on research to improve safety. It is my view that investments in research and development related to survival and an improved education and training of offshore workers, and, in fact, of hyperbaric physicians will make offshore oil and gas production and exploration safer, and that such investments in human safety should be a priority.

Thank you for your time.

**COMMISSIONER (Miller Ayre):** Well, thank you. I know, you've worked extremely hard to get the key issues on the table in your presentation, and this is, as it turns out, the second presentation we've heard which touches on some of the same topics, but not, of course, in the kind of detail and focused medical way that yours has.

If you could talk a little bit about the training, and you indicated that with the cold salt water as opposed to chlorine pools there are certain types of limitations that exist with the type of training we do now. Is there anything immediate that we could do that might ... another form of training or aspect of the training that we could do right away that might help with some of the difficulties that offshore workers face, and provide more realistic training? Or given what we're using, is this the best we can do?

**KENNETH LeDEZ:** I would want to stress that a big positive of the programs that they have at the Marine Institute ... I mean, I'm a physician. I don't work at the Marine Institute. The Marine Institute doesn't employ physicians, but a big plus of what they're doing, they are giving people an exposure, actually, in ocean water at the other facility that they have. And I think that is important and I think that's valuable. Salt water stings when it gets in your eyes, for example, and if your first exposure of that is when a helicopter is ditching, that's going to be hard to cope with. And I think that a simple measure is training people to use a mask and snorkel in actual ocean conditions. I mean, I think that would be a huge plus, getting people familiar with actual ocean conditions, cold water mask and snorkel.

The mask and snorkel, one of the problems that people have in scuba training, or use of breathing equipment, is this separation of the breathing between nose and mouth. It seems like it should be like falling off a log but for some people it's not. But there is no question, this is one of the sort of things that does cause some people difficulty when they're learning to scuba dive is that some people struggle with this, but I think you could do far worse than to train people to snorkel because it is going to teach them that. And there is a huge plus potential of ditching, escaping from an underwater helicopter wearing a dive mask because you can see what's going on. And the experience of learning how to snorkel will teach you that mouth/nose separation that's so critical; because, otherwise, if you're having a mouthpiece and you got a nose clip on your nose that could easily get dislodged and come off, and then you got water going up your nose, and if you can't separate it adequately and the nose clips come off, you're taking a breath, you're getting something in from your nose, too, and you're going to drown. So the use of training people to snorkel would be a good step in the ocean.

**COMMISSIONER (Miller Ayre):** You also indicated that our diving regulations may be out of date. Now yesterday we heard from a person called Phil Towers, who's with Sea-Force, and he discussed the IMCA code of practice. Are you familiar with that standard?

**KENNETH LeDEZ:** I am.

**COMMISSIONER (Miller Ayre):** So, how does that relate to your CSA diving standards or other, some of the things you indicated?

**KEN LeDEZ:** Now, I do want to make clear that the CSA is currently undertaking an initiative to revise the Sat of the standards that pertain to offshore saturation diving. And I think that's going to be helpful.

In one of my hats as the President of the Canadian Chapter of Undersea Hyperbaric Medical Society, we have a close liaison, obviously, with the CSA. And that will handle much of the diving aspect but that work still needs to be done. It can't just be assumed, and a close eye needs to be kept on that. But, in addition, we need to look at the medical requirements. I'm getting calls every week about divers offshore, and it is a fact that the medical kit and the medical requirements for vessels, dive support vessels working offshore have not been revised in decades and that's a concern.

Now, some of the companies are, without regulated requirement, will and do add on such things as a pulse oximeter, et cetera, but it is a mixed bag as far as what I actually encounter when I do an inspection of a dive support vessel. And I think that those standards need a close look at and who's going to do that. I think that needs to involve people like myself, Atlantic Offshore Medical Services who provides much of the diving medicine support, and my organization, because the world has moved on a lot. A lot of divers in the North Sea, even a significant number of here, they're in their fifties, and they have, for instance, cardiac problems out of the blue. They're presenting with having had a coronary stint and what are you going to do with those? But if a 54-year-old diver or a 56-year-old diver experiences chest pain offshore now, then I can't, at this moment, say that I can get even an electrocardiogram on that diver, e-mailed or faxed to me because most of the dive support vessels do not have that equipment on board, as just one example; and nor can I have a look on the internet to see a streaming video of a situation affecting a diver inside a hyperbaric chamber and that's basic stuff. Because teenagers and even preteens do that on a daily basis, but right now there is no requirement for such types of communications, and there is absolutely no reason. If I can have, for example, have electrocardiogram monitoring inside a chamber at a hospital, even though that chamber is 35, 40 years and it is completely unsuitable and antiquated, there is no reason why we shouldn't be able to do a 12-lead ECG on a diver in saturation because at times it's going to be needed.

So, I'm just saying not just the diving regulations, and the CSA is starting to work on updating the Sat standards, but there needs separately, with medical organizations and medical experts, to be an effort to review what's suitable for this province. And the situation here is quite different than that of the North Sea, where there is way, way more infrastructure, for example; a lot more facilities, a lot more medical backup than we have available here.

**COMMISSIONER (Miller Ayre):** The presentation we had yesterday, you'd be interested if you don't know already, but it looked like Sea-Force was bringing in a hyperbaric reception facility which looked very much like what you showed here in which there was lots of room inside for, once you bring the patient in, presumably under pressure, the small chambers you bring them in and there was lots of room for medical people to move around in the apparatus itself, I guess, under pressure, as well, but I don't know if you're familiar with what they were proposing.

**KENNETH LeDEZ:** Yes. I haven't seen their specific chamber. But I want to draw a distinction between a hyperbaric facility designed specifically for offshore diving operations and one that's intended for medical purposes. They are not the same. I've walked around inside of many, many offshore saturation systems. They are much bigger chambers than what I have at the hospital right now, but they really are a horror show as far as trying to resuscitate somebody. There is a lot of very complex issues because the hyperbaric chamber is sitting in a warehouse over at Sea-Force - and I know all about Sea-Force, excellent company - is not going to help a bunch of the situations that I've told you. When you've got a person who's seizing, paralyzed, comatosed, you're not going to be taking them to a warehouse. That's not going to help you very much. These patients are critically ill. They need to be in a hospital; and, so, if, for instance, from an air embolism during helicopter escape training, that's one thing.

Now, there is a benefit. If you got a facility, a chamber onsite right there and put him straight in, okay, re-pressurize him, try and gain some time, and they might, a patient, a victim might wake up immediately. So if you can get them in there in a minute or two, that's one thing, but these are critical patients in which case you might be able to free someone up, like myself, out of the OR, to go over there, walk into the chamber and help out. But this raises, these are very complex questions is what I'm trying to say. It is not just physical chamber itself, it's how it is outfitted for emergency medical care, it is where it's located, and the infrastructure and other things around it. But I can tell you that treating a critically ill patient outside of a hospital setting is extremely difficult. To get someone who is very ill, for instance, or traumatized, in an offshore saturation system, that's going to take that person four days to safely decompress so we can mobilize him to a hospital. Now, there is no current requirement or capability to keep that person under pressure and transfer them to a hospital. So, right now it is much more likely that if that situation arose, and for goodness sake let's hope that it doesn't, it is much more likely than someone, like myself, and right now it would be myself, who's going to fly offshore, and go into one of these chambers offshore and try and make do. And when I'm making do with a hyperbaric chamber facility in a dive support vessel that has only the most rudimentary capabilities, and I can't even monitor an electrocardiogram or a pulse oximeter inside the chamber, for example, these are complex issues, and we won't get to the bottom of all those things right now, but in terms of process, what I'm saying is that there would be benefit for human safety in setting up a medical review of these things so that we can have good advice to companies. Because right here, right now, if I'm out of town, then there isn't

anybody who is experienced going inside a hyperbaric chamber. Nobody else. That's it. So if I'm out of town on a holiday, then there is not somebody available. Now through Atlantic Medical Offshore Medical Services there is somebody else on-call, but that person on-call is not going to have experience of treating a critically ill patient inside a hyperbaric chamber, and nor is there even any formal training requirements or training programs. That's what my organization is working on, and it is not easy setting up a new organization and trying to start from scratch to have a new medical qualification in this country, but we need to go there.

**COMMISSIONER (Miller Ayre):** I always think that someone in your position is the only one who can save some other person but there, is fact, never anyone to save you.

**KENNETH LeDEZ:** There is not. Not right now.

**COMMISSIONER (Miller Ayre):** No. It really creates I'm sure a nightmarish situation to some extent. But, I mean, we are interested in this and hearing about it. I mean, I don't know that I've described adequately what they were proposing or how that would work but.

**KENNETH LeDEZ:** I didn't see theirs.

**COMMISSIONER (Miller Ayre):** No. And we have a copy of what that's all about, which we can certainly make available to you. I mean it may be that something like that is possible to help the package that you ... you looked like you had something that was now of, next to the hospital, but out of condition or out of commission, as it were. So I don't know if there is any ....

**KENNETH LeDEZ:** I understand there is CSA standards that require onsite hyperbaric chambers for a variety type of operations, even where a saturation is not involved. And most likely the Sea-Force chamber is designed for that type of operation because they are not providing a medical case.

**COMMISSIONER (Miller Ayre):** No. They were focused on saturation diving, I know that.

**KENNETH LeDEZ:** But there is non-saturation diving that goes on; for example, when they do, or there is even air saturation diving that goes on too. So when they are doing so work on, I'll say, an FPSO, trying to fix a leak or upgrade some system, they will still have to create a habitat that they still have to have a hyperbaric chamber onsite because many of the same risks are there. But these are quite complex issues. And but there is a big difference, as I say, between a chamber that's kitted out for medical purposes. Like, it is very difficult to recreate an intensive care unit in a warehouse somewhere or on the deck of a ship inside a container.

**COMMISSIONER (Miller Ayre):** Yes. No, no. I'm not pretending it's the same, I was trying to grasp it. I mean a more fundamental question, from my own personal point of view, is that it

appears that it may take you forever to come up but you can go down and get pressured very quickly. Is that correct?

**KENNETH LeDEZ:** No, to the types of depths here, you can get pressurized pretty darn quickly. Yes, that's true. That's exactly true.

**COMMISSIONER (Miller Ayre):** And the risks with that are nothing compared to the opposite?

**KENNETH LeDEZ:** Right. If you compress extremely quickly you can get an issue called High Pressure Nervous Syndrome, but, really, that wouldn't be a huge issue to the types of offshore depths that are going on here at this time. I could get pressurized quite quickly as long as I can equalize my ears; absolutely. But when I get in there, I'll be faced with a situation of very limited capability and not much backup from someone else who's experienced, actually, being inside a chamber.

That's not in any way to downgrade the excellent role of the other physicians who are involved in the offshore support of diving operations. All I'm saying is that this whole area of diving and hyperbaric medicine is unsupported. It is a very, very small area of practice. It needs to be developed to a much greater degree than exists at present in Canada. And our new organization is struggling and trying to do that with very limited resources. And as our organization becomes more established, no question, we will develop more and more links, for instance, with these other organizations. Right now, it is a struggle just to exist and try and to develop.

We recently held Fitness to Dive course for physicians in Vancouver that sort of certify physicians for doing a basic Fitness to Dive assessment on people. But we don't even in Canada, at this time, have a standardized system, a standardized recognition of a Fitness to Dive thing for divers that's going to be recognized across this country. There are the CSA guidelines but the CSA doesn't certify physicians. It's a complex situation and the only way for it, really, is to have physicians with proper credentials and those physicians who have that expertise working on what the medical requirements are for our divers, the appropriate surveillance of divers in Canada, bearing in mind the unique situation we have here, which is it's not that easy, it is not going to be anywhere near as easy to evacuate a diver from here as it would be in the North Sea, for example; or to get additional resources there. And it needs to be done on a Canada-wide basis because on a province-wide basis it is just, we're just too small. It is me.

**COMMISSIONER (Miller Ayre):** Yes. Well, I might ask Geoff. Would this kind of thing ever come within your control at all? Would you see R&D funding that might get directed this way or this something which your own company has experience with in other places? Are we sort of considered backward in any way that you know of? I mean, we understand what we've heard here today and obviously we have limited medical facilities, it would seem, all hinged on

one person. The North Sea must be different from that, I guess, just based on the numbers? But are you familiar with the problem at all?

**GEOFF PARKER:** Just in general. The issues ... I really enjoyed the presentation. So thanks. Very informative and interesting. I think some of the points you raise are very, very important. I think as far as comparing Newfoundland and Labrador to other parts of the world, I'm not able to do that. What I know is that one of the points you made was the need to choose top tier companies when you're doing the work because they may have standards that exceed whatever the requirements are (inaudible).

**KENNETH LeDEZ:** That's a very important issue because right now, for instance, the diving companies, there is a lot of dubious diving companies in the world. No question. The top tier diving companies do much better than that. I mean, and they are driving the standards and they are setting higher standards but those companies, in general, are still working with Canada-Newfoundland Offshore Petroleum Board Regulations, for instance, when it comes to medical kit. And so, I mean, if I say you should have a 12-lead ECG machine on here or a proper defibrillator, or at least an automated defibrillator, they are not obliged to do it, but, by and large, they will comply with some of it. Because the companies, they are conscientious, they are excellent companies. No question about that. And that's very, very important. The companies are much more advanced than the regulations and the regulator.

But I guess one of things I'm saying is that the regulator has some homework to do, and to pull their socks up and so the regulator can effectively advise the companies, too, but talk to your companies. No question. It is extremely important.

**GEOFF PARKER :** And as you say, it is a very specialized area and so we do look for those top tier companies, particularly ones, if we're working in Newfoundland and Labrador, who've had that harsh cold water experience because diving offshore Newfoundland and Labrador is different to diving to the Gulf of Mexico, for instance. So we'd be looking for companies with that experience.

I think, now that, I think, interesting discussion in your presentation was around that balance between the hazards of training against the desire to have realistic training, and I think that's an interesting debate that you always face in any sort of safety training, wanting to give a realistic experience versus the hazards of the training itself. So that's another piece of risk management that we need to always do whenever we're looking at training.

**KENNETH LeDEZ:** Two comebacks on that, just very briefly, is, first of all, I mean, people need to understand that just the incredible capabilities and expertise that exists on these offshore diving operations. I mean, they are truly remarkable. It's like going into outer space. They are truly remarkable people, these top tier companies. They are remarkable. It is mind blowing. I am green with envy at my own hyperbaric facility every time I see the facilities offshore. It is

remarkable and, yet, they would still benefit from more medical advice.

And secondly, that balance, I think, is a important thing. I'm just trying to put some context on it, that where people are being trained as recreational scuba divers at ten years of age and we need to keep that in that context. That I think that with the step-by-step approach and proper research, in other words, don't just go off the deep end and implement a new program. You need to research it first. See what the impact is on the participants for each of these steps and demonstrate that, first of all, that it is effective and safe. That you can better climatize people. I think the answers are going to be pretty clear that with a step-by-step approach, that you can get a much more capable individual in terms of being able to get clear of underwater upside down submerged helicopter but don't just go off the deep end. Research it.

So that's why I'm advocating support for an offshore safety research facility so that we can do that research and so it will provide better support for the offshore companies.

**COMMISSIONER (Miller Ayre):** I think ... Geoff, yes, go ahead.

**GEOFF PARKER:** Well, just to answer the other part of your question around research. Research into safety is one of our focus areas of the research program. So we'd always be looking for proposals in the area of safety. There is two ways to tap into that program. You can approach the Hebron Project directly through our website. We have the contact there. But in an even better way to get more of industry involved is to go to an organization called Petroleum Research Newfoundland and Labrador. It used to be called PRAC, it used to be Atlantic Canada, now Petroleum Research Newfoundland and Labrador.

And I think early next year they'll actually be calling for expressions of interest for people looking to do research in health, safety and environment issues. So that could be a good fit. And the advantage of that, is that it taps into not just Hebron but the whole of the industry which is what you're trying to influence here. And the link to their website is also on the Hebron Project's website. So [hebronproject.com](http://hebronproject.com) would be the place to find those contents.

**KENNETH LeDEZ:** I appreciate that. Perhaps I can make one small comeback on that, and that's very good information. I wasn't aware of that organization. I mean, as a physician my perception is if you're engineer, just hold out your hand, all the money is going to be dropped into it. But, and I'm sure that's not fair, but the situation is so limited in terms of we don't even have ... I mean, lots of people in the medical community, anyway, think that diving hyperbaric medicine, these guys are quacks. We don't have a big core of people who can work together and network together to move forward to make these kinds of applications. And I'm trying to make people think about this so that maybe more people will come forward to speak with me, that we can create the kind of group that will have the possibility of successfully applying for support for this type of research. But right there it is sort of scattered. We need to build that type of capability.

**COMMISSIONER (Miller Ayre):** Well, I would like to thank you for your presentation.

**KENNETH LeDEZ:** Thank you for your time.

**COMMISSIONER (Miller Ayre):** And it's unique and interesting, I think, to all those of us who are in the room just listening or who are from the process of trying to grapple with the best way to go forward on a lot of different fronts. Thank you very much.

**KENNETH LeDEZ:** Thank you for the opportunity. It is greatly appreciated for your time. Unfortunately, I have to be rude and go because I actually have to go back to the hospital to do a hyperbaric treatment, so I appreciate it.

**COMMISSIONER (Miller Ayre):** Okay, thank you. We'll have a brief break here now before we get to the next presenter.

**(Nutrition Break)**

**COMMISSIONER (Miller Ayre):** I have to get Mr. Clerk up here. I can't start without Mr. Clerk.

**ED FORAN:** Thank you, Mr. Commissioner, and I'm glad you realize that. So anyway, so we will reconvene again now, and we have Resource Trades Development Council Rick Dalton. I believe Rick is the business manager.

**RICK DALTON:** Yes.

**ED FORAN:** Okay, Rick, thanks.

**RICK DALTON:** Of the IBEW but I'm an affiliate, the IBEW is an affiliate of the RDC.

**ED FORAN:** Okay.

**RICK DALTON:** And I'm here representing the RDC.

**ED FORAN:** Okay. Well, thanks. So, Rick, as we've discussed, you can go through your presentation and then we'll have some question and answer as you go through. So thank you, you can proceed.

**RICK DALTON:** I hope you appreciate and you're a little bit easy on me. I didn't put it together; I was just asked to come and deliver it.

I'll just explain, I think ... does everybody have a copy of it? I'll just explain a little bit of who

we are, the Resource Development Council. We're made up of 16 local union affiliates. They're all listed: Boilermakers, Electricians, Pipefitters, Labours, Teamsters, encompasses all crafts, all trades, all skilled people required to build any project, especially and specifically resource-based projects, the bigger mega projects, as you may know.

Originally, everyone is familiar with the Hibernia Project, and there was a council formed at the time called the ODC, Oil Development Council, and it later took on a new name; they called the PDA, the Petroleum Development Association to build the Terra Nova, and then once and for all, it took on a final name to be used forevermore, the RDC, Resource Development Council, and it actually goes back long before that. The same Council actually built the Upper Churchill, Labrador City and so on. Of course, right now, we're doing all the mega projects. So, that's just, as an example, the Vale, up in Long Harbour Project. We have an agreement for the Hebron Project at Bull Arm as well. So, that's just a little history on, a little bit about who we are.

The expectations -- I won't read through the whole presentation. I'll just touch on different areas.

The RDC understands that this Public Review will consider, amongst other things, the general approach to the proposal potential development and exploitation of petroleum resources within the Hebron Significant Discovery Area and resulting benefits that are expected to accrue to the province of Newfoundland and Labrador.

The Review will also consider matters dealt with in the Development Plan Guidelines and the Benefit Plan Guidelines. In a review of the Commission's mandate, we were particularly struck by the word "expected," and, the Commissioner, Miller Ayre, will conduct a review of the resulting benefits that are expected to accrue to the province.

The second part of our submission is a recommendation to the Commission, and our recommendation is a concrete process for our people of our province to ensure that the Hebron expectation is fulfilled in a meaningful way.

I think it's time we realize that generic calls for better communication, dialogue and stronger partnerships with the owners are no longer sufficient. Submissions asking and pleading the owners to break down their own bid packages relieves us from the responsibility of the heavy lifting. And in the past, what that's about, the heavy lifting, that's actually heavy lifting. Modules and so on could not be constructed in the province, we were told, because of the actual weight and so on. So, that's in our second part.

We have to become our own owners, and part of this process and our recommendation will be how we, as the true owners of the resource, should act so that the benefits that we expect are realized.

Our submission is divided into two parts. The first will deal with the Newfoundland and

Labrador Resource Development Council, that's us, and the role we play in the construction phase of this Project. And, as mentioned earlier, we have already signed a labour agreement with the Hebron Employers Association. We just signed it recently, I think it was on October the 18th. And this signed contract sets out our role and responsibility, of course, and we know where the opportunities for the RDC lie, and we are starting the process to capitalize on these opportunities by preparing our members, that's the workers themselves, for the job ahead.

So, part one, our commitments. The Council is committed to promoting and maximizing opportunities and benefits that derive from our natural resources for all Newfoundlanders and Labradorians.

The RDC accepts its responsibility and role in the development of our province and have established the necessary partnerships that will enable it to fulfill this commitment.

It is our submission to this Commission that many of the labour and employment-related commitments provided by the Hebron partners can be better realized through a meaningful and substantive partnership with us, the RDC. We have a vast body of experience and knowledge that should be relied upon at the onset of the design and the planning processes.

And the RDC is available to work with the Hebron partners to meet many of the challenges it has identified in its Development Application and Benefits Plan, and we are committed to supply the skilled workforce for this Project. And, in my introductory, I mentioned who we were, understanding that this Council, who I represent here today, the RDC, encompasses all craft, all tradespeople and workers on the Project. So, we do have the expertise.

Increasing the provincial component, the RDC believes that the Hebron Project should develop a more formal process to share information with us, the RDC, on the specific labour and qualification requirements for this Project. The RDC will then be in a more informed position to demonstrate where, in fact, there are real deficiencies.

This early information will allow the RDC to better assist the Hebron Project labour market planners to target resources that can maximize the number of people in this province employed on the Project. We need a heads-up. We need discussions, consultation very early on, like, right now to make sure that even today there may be people there who are not trained at all in areas, like, I represent electrical, and we can make sure that they are qualified by the time the need is there.

Gender diversification: The Hebron Project has stated its intention to work with governments, educational institutions, women's organizations and industry associations to advance gender diversity on the Project by creating a welcoming and respectful workplace and adopting policies and initiatives in support of the employment and retention of women. And the RDC understands the value of a diversified workforce and is committed to enhancing the number of

its members who are under-represented in the construction workforce.

And the RDC and its member unions have demonstrated its willingness to implement measures and programs to enhance the diversification of its memberships, and this will continue with the Hebron Project. Just as an example, in the particular union that I represent, the electricians, the IBEW, in the local union itself, we have a very intense employment equity program, we called it originally; today, the better word is diversity. And we're the, I guess, in the past unions didn't stop women from become electricians and so on, but so too, in order to go out and actively try to pull out all the stops and the barriers to encourage them to come in and be members solely for the purpose of trying to get a job done, with Newfoundlanders and Labradorians. So, a little blurb on that about our commitment to diversity and, in particular, the largest portion being women.

Labour Shortage: A labour shortage involving the trades represented by the RDC will only occur without proper planning.

The RDC, through its work on the on-going one, the Vale Project, is already developing the capability and the processes to meet the labour requirements of the Hebron Project. And the cornerstone of this commitment is our willingness to dispatch the maximum amount of qualified Newfoundlanders and Labradorians. When we do not have sufficient members to meet manpower requirements, we continue to accept new members into our unions. Our doors are open to all people of the province that they join up, become members, get the necessary skills to do the Project.

We also continue to work hard ensuring that these members are able to meet the technical requirements set by the contractors and, in many cases, we are training our members to meet these qualifications.

The RDC is the only labour organization in the province with the knowledge, experience and pool of tradespeople for a big project like this. We're made up, currently, of about 9,000 qualified tradespeople and growing.

A recruitment program. The provincial government has recently embarked upon a renewed focus on labour market requirements and supply issues. We're supportive of this increased attention and recommend greater communications between the government, the Hebron Project and us, the RDC. And we can play a critical role in any campaign to recruit additional skilled workers, and particularly, to encourage former residents of the province to return home to work on the Project. Right now, as everyone can appreciate, a very large number of the people from our province are in Alberta, in Ontario, Saskatchewan, and I think, given the opportunity with some long-term work and some good-paying job, would come home.

The RDC submits that, prior to embarking on such a campaign, the provincial government and

the Hebron Project partners should meet with the RDC to discuss the best method of attracting and retaining a skilled workforce.

Training. The RDC has a long history of training. We're continuously training new members and our members, in particular as well, to ensure that our workforce is the most modern, best equipped and certainly the safest, above all, in the province.

Many of our affiliates have state-of-the-art training facilities. Several of them are some of the best that's in the country; the biggest and the best in the country and all paid for by the members.

The RDC urges the Hebron partners to become more proactive with information concerning specific trade and skill requirements.

Part 2. Who decides? The C-NLOPB appointed the Commission to conduct an independent assessment of the Hebron Project's Development and Benefit Plans and to make recommendations. Under the provisions of the Atlantic Accord Act, all petroleum projects must have a benefits plan and "first consideration" for employment and training must be given to the people of this province.

The Act also states that first consideration must also be given to services provided from within the province and the goods manufactured within the province, where those services and goods are competitive, in terms of fair market price, quality and delivery. We realize that we've got to be competitive as well.

The Benefits Plans must also provide manufacturers, consultants, contractors and service companies in the province and other parts of Canada with a fair opportunity to participate on a competitive basis in the supply of goods and services. We understand that, that we've got to be competitive as well.

Isn't it time we defined what "first consideration" is? And isn't it time we put in place our own vehicle that determines exactly what goods and services are competitive in terms of fair market price, quality and delivery? And isn't it time we used our in-province expertise developed since Hibernia to determine if our manufacturers, and consultants, contractors and so on should be given the work because they are competitive. And isn't it time we determined if we are to be given a fair and full opportunity prior to the awarding of any proposed work or activity?

And, Mr. Commissioners, we respectfully submit our recommendation to create a solution that is driven by evidence and facts so that collectively, we can mount informed arguments to any claim that we, as a province, cannot compete. If we do not have this capability, we will be forever at the mercy of the others whose interests are not always aligned with the interests of

us.

A balanced approach: On October the 28th the government of this province indicated a renewed commitment to ensuring that the province's natural resources are developed in a manner that would be of maximum benefit to the citizen of this province, and the newly created Department of Advanced Education and Skills is the latest example of this commitment to ensure that we maximize the number of opportunities that our residents receive from this project and others.

The RDC believes that we must design a new and aggressive partnership structure dedicated to maximizing benefits that are derived from our resources.

We recommend that this Commission consider recommending the establishment of a three-party that's made up of government, industry and labour, that's an agency to promote the maximization of fabrication of work in the province.

This agency would have the ability to collect information and set realistic targets that components seeking to capitalize on our natural resources are to follow.

This tripartite agency would be mandated to ensure that the objectives and action plan set in the August 20th, 2008 Hebron Benefits Agreement is diligently pursued on the basis of facts and ability.

This arm's length agency will do more than promote the maximization of fabrication and work in the province through the collection and release of data, and this agency will make the fact-based cases that will cause the work to be formed in the province fulfilling the realistic expectations the proponents seeking to capitalize on our natural resources are to follow.

This agency would be outside the mandate of the C-NOPB which may not have the mandate to conduct such investigations and to make such determination.

At present, the C-NOPB requires that the project operator regularly submits information detailing local benefits in project employment and spending. Operators collect much of this information from other contractors.

While the C-NOPB tracks the data and publishes a portion of it, in an annual reports, it does not publish all related detailed information on the percentage of local benefits derived from each stage of the project, such as front-end engineering or topsides construction on a regular and ongoing basis through the project.

This work by the C-NOPB is not sufficient to ensure work that should be done in this province is actually performed in this province.

In the April 2011 Hebron Project Benefits Plan, a brief overview of the consultation process was provided by ExxonMobil Canada Properties. In this section, it was noted that the C-NOPB contract review guidelines indicate that the number of contracts and subcontracts, et cetera, for review, will not exceed 20 percent of all contracts, subcontracts and other purchase orders greater than or equal to a quarter of a million dollars.

It also proposed several items to facilitate the C-NOPB's intended contract review process. They indicated that for any major contract awarded outside the province, they will provide the C-NOPB with the rationale for that decision; particularly, if a local shortage and capability or capacity has been identified. Note, the rationale is to be provided after the award.

The agency functions would have two functions. The first basic premise of this agency, this tripartite agency, is to cause informed connections.

It is time that we went beyond rumor, speculation and independent actions by establishing a single agency of like-minded provincial organizations to act in concert.

This industry-driven agency would maintain an updated inventory of provincial capabilities to be progressively matched with specific project requirements per contract.

Secondly, the agency would be staffed with the technical expertise to proactively evaluate and determine if the project components can and should be undertaken in the province.

They would have the ability and mandate to break down larger project, and, with all due respect, this task should not be left to the owners. This would be a watchdog function and would seek to have informed decisions made much earlier in the procurement and contracting process.

The operating principle: The agency would be guided by the basic premise that all jobs and fabrication, et cetera, from the projects, using Newfoundland and Labrador natural resources, should be performed in our province by our people. And prior to any jobs, work, fabrication leaving the province, the Proponents would be required to provide sufficient justification that will be assessed by the agency. And this is in direct contrast to the offer from EMPC to provide the rationale after the awarding of a contract. And the agency would have the ability to assess the validity of the request and determine if such work or fabrication should be performed in the province.

In conclusion, we thank the Commission for its work and for providing us with this opportunity. Thanks.

**COMMISSIONER (Miller Ayre):** Thank you, Rick. Well, you've made a number of

recommendations, and, of course, your proposal you've outlined there is quite a significant one. There have been numerous presentations referred to issues surrounding the Benefit Plans, of course; not only this commission but previous commissions who focused on issues surrounding the Benefits Plan. You're no doubt aware your suggestion calls for a major structural change in the current process.

I fully understand of openness and transparency and timely information and measurement are not achievable within the existing process. That, like any problem, the whole objective becomes, then, to find a new process that does work.

So this hearing is an open hearing. We are seeking at all times to have positive suggestions you've made and concepts and ideas and approaches. So I'd be interested in asking you questions as we move along. And, first of all, I would like to deal with some of the first parts of your presentation.

So, I think in the first part of your presentation, have you found that you have specific information, enough specific information and time line in the labour requirements for Hebron? I mean, how does that compare with if you have knowledge of, say, like White Rose or Vale or any of the major projects that mentioned? I mean, is this a common situation that you find yourself in? How do things compare?

**RICK DALTON:** The answer is this: Like, with most of these major projects, and I would say this goes back for all projects, we'll end up finding out the real numbers and the types of skills that we need probably a month or a couple of months in advance of the actually needing the people. And as you know, that's not enough time to even have a facility secured or instructor secured to even do the training, let alone have it all done.

So, we need, we need to know now the qualifications that are required. I'll only speak for the craft that I know best, which is my own electrical. And as an example there is highly skilled people needed in things like instrumentation. Right now, I have no idea, none, the numbers required. Zero. I might need 10, I might need 50, I might need 100. I don't know. So I don't have the lead time to have the people ready, probably. I don't know.

**COMMISSIONER (Miller Ayre):** You're confident you can do it if you get the numbers. Is that what you were saying?

**RICK DALTON:** Very confident.

**COMMISSIONER (Miller Ayre):** Because you indicated a confidence level in being able to do it, but in terms of not having the information you're now indicating you can't do it. Is that?

**RICK DALTON:** Yes. Not indicating we can't do it, if I heard your question correctly. The lead

time, right now I don't have that information, how many are required. If I had it, I am sure I would have the people ready.

**COMMISSIONER (Miller Ayre):** Yes, okay. Geoff, if you're reflecting on the same kind of problem, I mean you've also expressed confidence, I think, that the workers can be done. So, do you see an ongoing process where you would discuss specific requirements with RDC. I mean, the time line seems to be pretty critical here in terms of how long it might ... I mean, someone has to know precisely how long it's likely to take to train some people up or to bring them back from other communities. So, I mean there is a pressure of a different kind.

**GEOFF PARKER:** Absolutely. And I agree completely on the need for the forecasting so that we can have the right training and preparations. And our forecast, they will improve as we move through the execution planning. For example, we already have the forecasts in the Benefits Plan. You might remember that sheet, the one with the red and the green dots.

**COMMISSIONER (Miller Ayre):** Yes.

**GEOFF PARKER:** So if we look at our electricians, a theoretical supply of 2,172 and the Hebron peaked demand of 147. So that's the published forecast at the moment. And so there is data for that in the Benefits Plan.

**RICK DALTON:** What? Just say that again. What's the number?

**GEOFF PARKER:** So, there is 147 for the Hebron peak demand of electricians.

**RICK DALTON:** For the peak demand?

**GEOFF PARKER:** Yes, correct. And so we will be, through our detailed execution planning, updating those forecasts, and even as early as next year, having further stakeholder consultations to share those numbers. They would be shared with the educational institutions so that they can be understanding what the demand is to come and the timing for that demand. They would be shared with the union organizations, such as RDC.

But, Commissioner, it is important to realize that RDC isn't the only union organization we have to deal with, because we've talked about the Marystown yard. That's a different union under a different organization. So, some of these electricians would be there as well. So we would be sharing our information with all of those union organizations as part of those stakeholder consultations.

**COMMISSIONER (Miller Ayre):** Well, I mean, I guess the thing is, I don't know. In other words, the chart that we had there is basically one that deals with the peak. Is that correct? There is no other sort of time lines in it. I mean, I don't ... I mean, for example, does the chart in and of

itself say that the peak will be 2014, July, something like that?

**GEOFF PARKER:** Correct. That's the sort of detail we would expect to have as the detailed execution planning progresses. So, next year's public stakeholder consultations will have that additional detail in terms of people being able to understand when those peaks may occur and even when the initial ramp-up will occur.

**COMMISSIONER (Miller Ayre):** So, I mean, is it also clear to those who are involved that so much might be in Marystown, so much might be on Bull Arm? Or is this mostly Bull Arm?

**GEOFF PARKER:** Yes, correct, because that is the sort of detail that we've been working out as our execution plans are further defined, and it would have locations.

Now, sometimes it will be a forecast of locations; for example, some fabrication for GBS outfitting. As an example, there is many fabrications yards within the province that could do that work. And so we won't be able to predict exactly where it is, and so that would be shown accordingly. Other areas, like the large modules we've talked about, we'd know where they were, so we could say this location or this location. But others would be just to say this is to be competitively bid within the province and we wouldn't know which particular location.

**COMMISSIONER (Miller Ayre):** Rick --

**RICK DALTON:** Could I just make a comment there?

**COMMISSIONER (Miller Ayre):** Oh, yes. Go ahead. Yes, absolutely.

**RICK DALTON:** Like, it's been experience over the last 20 odd years since Hibernia, even before Hibernia and all the major projects even since then, that, and I have all the respect in the world for ExxonMobil, I don't mean to be disrespectful or anything like that, but the early numbers, like you just mentioned a number of electricians of a hundred and something or other, I don't think they're realistic. The numbers are always so, so low.

As an example, we did a major project here in Labrador where it was estimated to peak at between 60 and 90 electricians. Well, that project went to 400. So, the lead information suggested to us to have 60 to 90 electricians available. Well, when the time came we needed 400 and that's what I'm getting at; whether it's because of engineering lagging or whatever the case may be. Like, I'm not trying to be disrespectful. Like you understand what I'm saying?

**GEOFF PARKER:** Absolutely. And I think what you're identifying is really a reality of projects, in that there is, along the way things will change. The original forecasts may have been predicting engineering coming at a certain time it may not have. It may have been predicting a certain productivity, and if that productivity wasn't achieved, they'd need more electricians

and so there is many number of things that could change that forecast. And so I think your suggestion is the right one, that we keep communicating, so that you can get as much information as possible as early as possible, and then you just have to recognize that we're not, like it is not like we're sitting here with the numbers and not telling you. They change for reasons outside our control as well and we just have to all try to communicate around that.

**RICK DALTON:** Yes. And I don't mean to belabour this, but as an example, I mean, while this major project that I'm talking about was needed 400 electricians. We were told between 60 and 90 at peak; well, we actually needed 400. We bring skilled workers, electricians in from other provinces and in the meantime many, many Newfoundlanders, men and women unemployed, smart, intelligent people, who could have had some training to go in and do that work. That's the only point I'm making. Right.

**COMMISSIONER (Miller Ayre):** With regard to training and so on, we've had a lot of presentations on the apprenticeship issues and so on. So I'd be interested in your comments on that process.

Is the program expanding and the whole concept of where you'd have two apprentices, one journeyman, all those concepts that are being talked about in the face of what most people think is going to be a skilled labour shortage; all these projects going at once. I mean, is there really an active forward-going progressive effort to train and to change some of the approaches, or to expand, take different approaches than we might have historically within the RDC, within your own project, and RDC's own guidelines for the unions within it?

**RICK DALTON:** The answer to that is yes. Most of the individual unions that comprise the council of the RDC, including my own, being the IBEW, as an example, to directly answer your question, in our all of our collective agreements we had with stakeholders in the province, our apprenticeship ratios were three journey persons to one apprentice. Well, back four years ago when we got hit with this project of not having enough skilled workers, we changed our ratio in collective bargaining from three skilled electricians and one apprentice, to one skilled electrician and one apprentice.

So, the answer is yes, and it is my understanding that most affiliates of the RDC have done exactly the same thing, to try to give it our best shot to have enough skilled people to do a project. It is a component that, I think, everybody has latched on to.

**COMMISSIONER (Miller Ayre):** Yes. Geoff, not in the same field exactly, but in talking over the last day or so, in part of when you go from lack of certainty to higher degree of certainty comes when all the FEED work is done. Is that correct? So what are the sort of dates around that kind of thing? When might there be, let's say, more certainty around numbers of workers needed?

**GEOFF PARKER:** I mean, it's an ongoing process but the next sort of milestone, if you think of it in terms of finishing FEED and then doing the estimates based on FEED, that would be coming out in the second quarter of next year.

**COMMISSIONER (Miller Ayre):** So, I mean, that's a very important date for anyone involved with the skilled training process and many of the unions. So, I mean, I guess you know all that but.

**RICK DALTON:** Yes.

**GEOFF PARKER:** And I think that gives us, still, some good lead time because, as I said in my earlier presentations, the topsides fabrication wouldn't be commencing until 2013, and so the peaks would be more around the 2014/15. And depending on the trade; for example, the electricians and the instrument guys even further towards the back end of that.

**COMMISSIONER (Miller Ayre):** Now, Rick, I know you said earlier that the major proposal you made in the second part of your presentation, that you're presenting it. You didn't write it. Were you involved with the development of that concept? Were you involved in the ... I mean, I don't know who put the ....

**RICK DALTON:** Yes, that's the council. When we get together for our general meetings, which we do usually every second week, every second Monday, that's something that we have talked about now for perhaps a couple of years, that we think that there needs to be an arm's length. That's what you're talking about, the agency?

**COMMISSIONER (Miller Ayre):** Yes, absolutely.

**RICK DALTON:** Yes. There needs to be something in place, a well-rounded group of industry people, labour and government, sort of as we said in the layman's terms, sort of like a watchdog.

**COMMISSIONER (Miller Ayre):** Well, I mean, I just needed, I was going to ask you some questions but I didn't want to launch off if you, but you have a knowledge of it

**RICK DALTON:** Be easy, shoot. Shoot.

**COMMISSIONER (Miller Ayre):** I thought you might be ready. So, I mean, we're trying to learn more about this, obviously, as I indicated. All of the suggestions and ideas are more than welcomed, and we like to follow. We want to get to the bottom of all the concepts that we have in front of us and understand them more fully.

So I think you said you'd be independent of government, is that correct? I think you said arm's

length.

**RICK DALTON:** Yes.

**COMMISSIONER (Miller Ayre):** But basically, you'd be independent from government, right?

**RICK DALTON:** Yes, that's right.

**COMMISSIONER (Miller Ayre):** And also, in reading your material, it looked to me like you'd see ... I mean, a benefits agreement might be struck and then subsequent to that the agency would be put in place, and it would be monitoring or measuring the process that followed after a benefits agreement was actually struck. Is that correct?

**RICK DALTON:** Right exactly. Exactly.

**COMMISSIONER (Miller Ayre):** And have you discussed the funding? Is it funded by the tripartite group or would government do this and fund, I think you said you'd have experts or some, you'd have a staff in any event?

**RICK DALTON:** Yes, probably funded by government. It is actually the people's interests who are trying to ... we are suggesting should be looked after here, the people of the province, right. So, probably funded by government, yes.

**COMMISSIONER (Miller Ayre):** So while your group developed the concept in amongst its own discussions, are you aware whether there is a model like this in any other jurisdiction; perhaps country or jurisdiction, whatever?

**RICK DALTON:** Not that I'm aware. And some of the things that, like, just to move away from what was written in the presentation, because, again, I didn't put it together, but in laymen's terms, here's what he see happening about Newfoundlanders and Labradorians not maximizing on the projects. If, for example, the process module, and am I fair in saying that the process module is probably, in all likelihood, going to go outside the province? Right? But okay, let's take for example, just leave that for a minute, in the past modules for, say, topsides modules and so on have gone outside the province because they're too big, and so on, to be done in the province. The lifting capacity is not here or the yard capacity, the fabrication capacity is not here. Well, like, that work could be broken out, instead of one super module as an example, broken out into several modules, done in several yards. Like, one module is probably, I don't know, seven/eight hundred million. The capacity is probably not here in the province in any one yard to do that work.

So that's what we're saying. Like, this agency would be watching for stuff like that, as to why this work could not be done in the province, and, like, have a little bit of insight into it.

**COMMISSIONER (Miller Ayre):** Okay. Did you want to say something, Geoff, on that?

**GEOFF PARKER:** Perhaps just it is complex because some of the fabrication yards we've been talking about would be covered by other organizations. So the tripartite group would become many different groups trying to assess this. So there are other complications in that.

**COMMISSIONER (Miller Ayre):** Well, yes, I understand what you're saying. But, I mean, you would be focused, and that's, you'd be focused on Hebron or you'd be focused on Vale. Would the agency ... Let's say, as we do now, we have multiple mega projects.

**RICK DALTON:** Yes.

**COMMISSIONER (Miller Ayre):** So the agency would work. There would be an agency dealing with Hebron in particular, is that what you're saying? You're talking offshore primarily when you're talking about this particular agency?

**RICK DALTON:** Yes. Well, no, that would be all resource-based projects.

**COMMISSIONER (Miller Ayre):** Oil industry, in other words.

**RICK DALTON:** As an example with, you know, Vale would be no different. That's a mega project. As an example, there was a package, a contract package probably about a year ago that went to Maine. In the particular area that I work in, in electrical, that was so big and enormous. It was like many huge electrical rooms. I think nine of them. The capacity was not just here in the province. Like, there was no one contractor had the ability to bid something of that magnitude. So the maximum benefit was lost. That work went to somewhere else down in Maine that had the capacity, while there was plenty of yards in the province with little or no work and lots of skilled people unemployed.

**COMMISSIONER (Miller Ayre):** So where was that? I mean, was that with Vale or somebody?

**RICK DALTON:** That was with Vale, yes.

**COMMISSIONER (Miller Ayre):** I see.

**RICK DALTON:** At Long Harbor.

**COMMISSIONER (Miller Ayre):** I see. So you would see, an agency like this would look after multiple different, simultaneously be looking at different mega projects if that was the situation?

**RICK DALTON:** Yes.

**COMMISSIONER (Miller Ayre):** If they were occurring simultaneously.

**RICK DALTON:** Yes. And if you go right back 20 years almost, the Hibernia Project was no different. There was only one module built in this province, and it was probably the least, by far, labour-intensive module.

**COMMISSIONER (Miller Ayre):** Well, I mean, I'm interested in the concept of how it works as well.

**RICK DALTON:** Okay.

**COMMISSIONER (Miller Ayre):** I mean, I know that it's supported by a certain amount of evidence that you're working with. Let's just assume that this agency existed and it was working on a project like this. Would it have an advisory role to government and C-NLOPB? It wouldn't have any legal, it wouldn't have a legal position. It would have an advisory position, is that what you're saying?

**RICK DALTON:** Exactly, yes.

**COMMISSIONER (Miller Ayre):** So, I mean, this agency would simply be saying, giving advice and saying this is what we think should be done.

**RICK DALTON:** Yes.

**COMMISSIONER (Miller Ayre):** It wouldn't be in a position to say look .... Someone else would have to make the decision on whether the project ended up going out of province or not, for example.

**RICK DALTON:** Yes.

**COMMISSIONER (Miller Ayre):** Perhaps over the advice of this committee.

**RICK DALTON:** Exactly.

**COMMISSIONER (Miller Ayre):** Yes. Now, so if you got an agency that's dealing with something like this, you would comment on those matters. And you indicated in your own report that there were issues, and there are always issues surrounding benefits versus royalty. I mean, from the government revenue point of view they balance, the concept of balancing and the issues that go around balancing royalties and benefits and so on. So that's not something that this committee would be concerned with?

**RICK DALTON:** No.

**COMMISSIONER (Miller Ayre):** It would say this is how you could maximize benefits. If the government took another route, it took another route.

**RICK DALTON:** Right, exactly.

**COMMISSIONER (Miller Ayre):** Well, I think there is .... I mean, I think it is an interesting concept. I think that perhaps we'll come back to it at some stage. We thank you for your efforts here today. And we've learned, I think, a great deal about the way your organization works. I mean, I thank you for your presentation. I don't know, Geoff, if you have? Yes, go ahead.

**GEOFF PARKER:** I guess I'd also, again, acknowledge the work done by RDC in the Hebron Project Employers Association to collaborate to come up with the project labour agreement for Bull Arm. And again, we've talked about the diversity initiatives in that labour agreement, and the stated commitment from RDC and the individual unions again. So, we really do look forward to seeing that make a real difference at the construction sites. So, thanks very much again for that.

**RICK DALTON:** Thank you.

**COMMISSIONER (Miller Ayre):** So thank you, Rick. And good ideas and interesting ideas of what we're looking for. Thank you.

**RICK DALTON:** Thanks.

**COMMISSIONER (Miller Ayre):** Shannon, that's it for today? We're done, are we? An amazing day, then. Thank you.

**-END OF DAY 8-**