HEARING DAY ONE

New Brunswick Power Corporation: Application for the renewal of the Point Lepreau Nuclear Generating Station Nuclear Power Operating Licence

THE CHAIRPERSON: We will move to Hearing Day One of a two-day process on the matter of the application by New Brunswick Power Corporation for the renewal of the operating licence for the Point Lepreau Generating Station.

May 28 was the deadline set for filing by the applicant and by CNSC staff. June 20 was the deadline for filing of supplementary information by the applicant and Commission staff.

Since Dr. Barnes is absent today, he will not participate in the decision on this matter.

The applicant, New Brunswick Power Corporation, filed supplementary information contained in CMD document 02-H16.1A. I would like to begin the hearing today by calling upon New Brunswick Power for the oral presentation as outlined in CMD 02-H16.1 and CMD 02-H16.1A and I will turn it over to the Vice-President, Mr. Rod White. Mr. White.

02-H16.1/02-H16.1A

Oral presentation by New Brunswick Power Corporation

MR. WHITE: My name is Rod White, Vice-President, Nuclear, New Brunswick Power. With me today is Joe McCarthy, Acting Station Manager at Point Lepreau. Supporting us today are June Connell our technical specialist for regulatory affairs and Dave Wilson, our senior technical advisor.

We are here in support of the Point Lepreau power reactor operating licence renewal. The current licence expires October 31, 2002. Our presentation today will focus on our activities over the current licence period and in particular our improvement efforts.

We have continued to focus on safety and quality in all of our activities. One of our important key focus areas has been on our quality management program.

Before continuing with the detailed presentation, I thought I would give a brief overview of the recent provincial government announcement in New Brunswick. On May 30 the New Brunswick government announced in the legislature

their decision on NB Power's structure and operation.

The minister said the government intends to maintain NB Power as a crown corporation and intends to begin a major restructuring, and this restructuring will include both structural and financial separations of NB Power into a holding company with subsidiaries that match our current business units.

These subsidiaries should operate on a commercial basis. They should earn a positive rate of return on equity. They should pay cash dividends to the province. They should pay appropriate income and capital taxes and they should borrow funds without a provincial guarantee.

The government also invited equity positions or partnerships in business development projects. They set a target implementation date of April 1, 2003.

In declaring its intent to seek and explore equity positions or partnerships they particularly referred to the refurbishment of the Point Lepreau generating station and the Colson Code generating stations due to the government's

concern on debt levels that these projects would have on the corporation. The minister also said that the province is on track for the opening of the electricity market for wholesale and large industrial retail competition on April 1, 2003.

The NB Power board of directors is establishing a governance process to work with the provincial government and senior management to effectively implement these changes. The NB Power board responsibility is for development of the implementation plan.

We recognize that licensing requirements need to be proactively managed during this process.

I will now turn the presentation over to Joe McCarthy to focus on our licence renewal application.

MR. McCARTHY: Good afternoon, Madam Chair and other members of the Commission. For the record, my name is Joe McCarthy and I am currently the Acting Station Manager at Point Lepreau. I am here today to make a presentation in support of our request for renewal of the operating licence for the Point Lepreau generating station.

This follows a formal submission we had previously made with supporting documentation that would provide evidence that we meet the Nuclear Safety Act and regulations as written. Throughout the course of the presentation I will speak a bit about the licence renewal application itself, the operating performance of the station, the program improvements that we have made in the last licensing period, or the current licensing period I should say, our relationship or our performance in terms of international obligations and security, research and development, community information, social economic impact of Point Lepreau and I will conclude with a statement.

In terms of making the request to renew the licence application for Point Lepreau, as Rod pointed out earlier the licence expires October 31. We are also requesting that the licence to transport spent fuel from our in plant bay to an on site dry canister storage site we would like to have incorporated into the licence. What I have shown you here is a picture of the facility. This picture may not be very good, but what it is trying to show is the relationship of

the dry canister site to the plant itself. That railing you are seeing in the picture represents -- it is on top of the reactor building itself and the little round yellow circle you see, that is the dry canister site. So we would be transferring fuel from the reactor building area up to the canister site and that area is about a kilometre from the station itself. It looks much farther in the picture, but it is about a kilometre. That particular facility is on the same site that the plant itself is on.

We currently have a separate licence for that and for convenience purposes and to reduce the amount of effort we are requesting that it be included in the operating licence.

On the next slide here what I am showing you is an organizational chart for the Point Lepreau operation. It is only a high-level chart. My primary reason for showing you this is to show you the changes that have occurred since the last time we presented ourselves for licence renewal. There are four positions identified with stars, as you can see there.

The first one is a new position reporting to the Vice-President, Mr. White here,

called a Refurbishment Project Director. This individual is responsible for activities that are leading up to hopefully what will be one day a positive decision to refurbish Point Lepreau.

On the next line down on the far right there are two additional positions that are starred, the first one being the Manager of Performance Improvement. That's a new position created at Point Lepreau. The intent of this position was to co-ordinate all improvement functions under one manager. What I am talking about here is our independent assessment group, the event investigation group, quality management development group and our corrective action management program.

To the right of the manager performance improvement you will see the Manager of Personnel, Safety and Environment. That position existed before, but prior to this current licensing period that was titled Health, Physics Manager. The title has been expanded to better represent the responsibilities that this position manages, that being the environment as well as health physics and conventional safety.

On the next line down there is a

star called Facilities Superintendent. That again is a new position as well. That position, the reason it is pointed out here is that it is responsible for the security of the site, in addition to maintaining the infrastructure around the site.

Another interesting or important thing you should be aware of is two additional changes that are here different from the previous licence is the fact that the training superintendent and the health physics now report to the station manager. Prior to that they reported directly to a director who reported to the Vice-President.

On the next slide I want to talk about operating performance and the first part is in the area of health and safety. What I am trying to show here is the amount of radiation Point Lepreau puts into the environment relative to the licence or the legal limit, as well as other sources of radiation to the public at large. I must admit that this particular diagram is not to scale, but if we look -- first of all, I guess I should say our emission are well below regulatory limits and, typically, the dose to the

public, that being a person at the boundary fence, is about one microsevert per year.

If we look at the diagram itself and really you could take those four circles I guess and separate them out and you will see the relative comparison. The first one represents background radiation which would be from the sun, from the rock formation of the earth and so on and so forth, and we are talking about 2,500 to 5,000 microseverts per year. I apologize that the term "year" was missing there. That is per year.

The legal dose limit is about 1,000 microseverts per year. If you look down on the far right, a single chest x-ray would give an individual approximately 70 microseverts a year. So on the left bottom you will see the contribution of Lepreau over a period from 1983 to 2001 and you see it is 20.61 microseverts. So it is less than really one microsevert or around one microsevert per year. In fact, last year per year it was .4 microseverts.

I should also point out that no one on the site has actually received greater than the limit, which is 50 milliseverts per year.

Additionally, in the area of

health and safety, over the course of the licensing period to date Point Lepreau has operated safety. We have had no serious process failures. The availability of our special safety systems has CNSC targets. As I have mentioned earlier, doses to the workers have been acceptably low.

Additionally, within the licence period as well we have two periods where we exceed a million per hours without a lost time accident. Some statistics on that, lost time accident frequency, which is a number or a measure that is used throughout industry, Point Lepreau had .2 lost time accidents per 200,000 hours of work in the year 2001 and that is compared to in the U.S. the target for the top performing plants, I believe the target was .4. So we are actually in the top quartile in the particular area.

In terms of severity which is the number of lost time accidents, in the last year we had .5 per 200,000 hours. I do not have a good number to compare to say that is good or it is bad, but I believe it to be a reasonably good number as well.

The other thing is we compare

ourselves in terms of any events that we do have relative to the Innes scale. In the period 2000-2001 we did not have any events that would have rated a level one on the Innes scale. For information, the level one is defined as an event which is outside the normal operating regime, but it has no safety significance on site or off site. But I must admit we did have one in our current outage. It happened about a month ago, subsequent to this report being issued, or this presentation being submitted.

In terms of the environment, the Point Lepreau nuclear power station is a vital component of NB Power's emission control strategy. In fact, it is very unlikely that NB Power would be able to meet the environmental limits established through regulation or through participation agreements with other government agencies or whatever without Point Lepreau.

Since 1990 to 2001 and again there is no significance to this particular time period, but just a date that was relatively easy for me to pick up, Point Lepreau generated 52 billion kilowatt hours of electricity. That displaced the equivalent of about 80 million barrels of oil. In

displacing that much oil we prevented 700 kilotons of SO_2 from going into the environment, 160 kilotons of nitrous oxide and 40 megatons of carbon dioxide and 7 kilotons of particulate. So quite a significant load then was not pushed on the environment because of Lepreau.

Also, continuing with the environment, Point Lepreau has been registered as meeting the ISO 14001 standard. What this means is that we do have a systematic process to manage environmental hazards on the station. The key elements we are talking about here is like we have identified the hazards. We have a program in place to manage the hazards. We now are able in terms of the management system we can define goals and targets for ourselves each year, which we do. Then we measure our progress against these targets and goals and then we have a corrective action program to continuously improve.

The CNSC staff audited our environmental program last year. They did identify three areas where we needed to make some improvement. We have taken action on that. We have submitted a plan and a timetable to complete those actions. We are working to do so at this

point in time.

In terms of the provincial government, there is a number of permits that we require to operate the facility, such as waste water, non-radioactive and so on. Again, our permits are all current. Throughout the course of the period we have made some improvements to our waste water facility to minimize the chance of waste water exceedences.

Another significant thing in terms of improving the site, we removed from the site 58 drums of contaminated oil.

Now, moving on to our maintenance area, in the current licence there was a condition that Point Lepreau submit its maintenance program to the CNSC. We have done so in the form of an Information Report, 01361-01. The next thing I have identified here is a performance measure. It is a preventive maintenance ratio.

What I am looking at here is the amount of preventive maintenance we do versus corrective maintenance we do. Really what it tells us is how well we are at fixing things before they actually break. What we are showing here is between January 2000 and March 2002 we

averaged about 66 per cent. In the first quarter of this year we averaged 71 per cent.

Now, these numbers, I believe from talking to various organizations, a number in the high seventies to eighty is probably good, but on the larger scale of things this may be a good measure, like I say, to tell you in terms of the maintenance you are doing if you are doing things before your equipment breaks, but it in itself is not a very good measure to tell you how good your maintenance program is. You have to look at a lot of other things, like maintenance backlog, schedule adherence, unavailability of your systems and unit on an unplanned capability loss factor, other factors. The reality is we find that you have to look at a significant number of variables to try and assess if you are doing a good job or not. Any one really does not give you a true picture.

During the licensing period we have made some improvements to our maintenance program. We input a new software program called SAP. It is a Systems Application Process. It is an enterprise IT strategy to deal with various processes that would be employed within any

business. We put that in to try and improve our maintenance program.

Other things that we have introduced is what we call a top 10 list. I should mention the top 10 list, the control room deficiency list and operator workaround list. What these three things are doing is focusing on operations. We are trying to make sure that we do what is best to make life easier for our operators to minimize the chance of them making a mistake. A top 10 list allows them to identify what top 10 systems they would like us to focus our maintenance effort on.

The next one, the control room deficiency list is if there are deficiencies in the control room itself, things they have to work with on a daily basis, give us the issues, tell us of the concern and we will deal with that. It gets looked at on a regular basis so it is a priority from a maintenance point of view.

The operator workaround list we talked about is if systems or a component are somewhat degraded and not working in accordance with original design it sometimes puts stress or strain on the operators. We have a program to

monitor that and deal with that.

These are things that we have done to try and improve our maintenance program.

In terms of emergency preparedness, within the licensing period, we have revised our emergency response plan and we have revised our documentation which defines our state of readiness and the services that we should have in place.

Additionally, in the license period we installed another IT solution to allow us, the Emergencies Measures Organization of New Brunswick, to provide early warning to people in the event of an incident.

MS CONNELL: This is a device that has been installed in homes within a 20 kilometre radius of the station and 87 per cent of the homes have been contacted and things have been installed.

It is a device that allows EMO to send a message out about a problem in the area and not just with nuclear but if there happened to be a forest fire or something else. Every phone in that 20 kilometre area will ring. If the person picks it up it tells them to push a button on this

piece of equipment. That will take their name off the contact list so we know that they have been contacted.

If it goes to voice mail and they don't push the button, then we will know that no contact has been made so that someone will physically have to go out and visit that person so that everybody in the 20 kilometre radius is contacted.

These have been provided free of charge and we are providing them with batteries, and batteries are being distributed on an as needed basis to keep them current.

MR. McCARTHY: Back still in emergency preparedness, we conducted a major exercise which activated all aspects of the Emergency Response Organization in 2001. This was audited by CNSC staff. They did find some issues. We have resolved those issues and we now believe we are meeting the requirements.

We have another major exercise scheduled for next year.

In terms of training we have, in March of 2001, submitted an overall plan to deal with all the training deficiencies at Point

Lepreau. At this point in time, we submit progress reports to the CNSC staff every six months. We are on target in all areas except the EINC training program. We have taken recent action to deal with that. In fact, we went out and procured additional resources to deal with that issue. We are looking to bring that program back on track within the very near future.

We have established an in-house technical training program and our progress is on schedule there as well.

CNSC staff had done some evaluations in the mechanical EINC training program recently and they have identified some deficiencies which again we are addressing with priority.

An additional thing we are doing, we are concerned about certified staff so to download our current training superintendent we intend to have him focus strictly on the certified staff. We have hired an additional training manager who will take on the rest of the training organization to allow a greater focus on operators and shift supervisors.

Speaking of the certification

training programs, at the current time we have 18 candidates in the program, five of which are shift supervisor candidates, 13 which are controller room operator candidates. We propose to put 10 additional candidates in the program starting next year.

Of the candidates that are in the program, we are hoping to be in a position to be able to present three to the Commission next year for authorization and possibly two later on in the fall. We are looking at five CROs next year and the remaining eight in 2004.

In terms of human resources, we have to look at two aspects: workforce planning, which really involves the total organization; and then succession planning which we apply to key positions in the organization. At this time we are in the process of developing and implementing a comprehensive five-year staffing plan, which involves of course completing a station demographic and attrition analysis for both aspects of the program, the workforce planning and the succession planning.

The next two bullets more pertain to the succession planning, that is, identifying

positions at risk, and the one we are talking about here is positions with unique skills that take a long time to develop and that sort of thing there.

Then we have to obviously recruit and develop the individuals to fill the positions.

At this point in time, we have completed the station demographic analysis. We have identified the key positions at risk at the station. We have identified somewhere between 25 and 30 positions. At the current time we are looking at strategies to move forward with acquiring these people and developing them, so we look forward to recommendations to our VP by the end of the year.

In the area of programs, again looking at design here, the design process has been revised and implemented. It has yet to be audited by the CNSC. There were a number of significant issues or problems CNSC had with this process in the last three years. We believe now that we have addressed all of those issues, but we await now an audit by the CNSC. We obviously would like the opportunity to work our process for some number of months to ensure that it does do

what we think it will and then we would look forward to an audit to verify that we do meet the standard.

In the interim, with respect to design, we are using a third party to compensate for the deficiencies that are perceived or real. Also, any new design we are contracting out to CSA compliant consultants.

In the area of performance improvement, we are progressing the development of our quality management program, Rod spoke of that at the front, I will speak to it again at the next slide.

We are also focusing on initiatives to improve human performance at the station through observing work-in-progress, reinforcing expectations and promoting the use of error prevention tools. One of the things that we have done to drive it down into the organization is we have established an event-free day clock. This is a clock that counts up in numbers as you progress without having an event. We are talking human performance events. We have established some criteria which dictates when the clock gets reset or whatever. The whole idea of it is to

generate awareness with the staff.

We have a corrective action program in place which helps us identify what the issues are. We have done significant training in terms of vision and interpersonal skills training. We have developed and delivered human performance and safety culture training to most of our staff.

We continue to do assessments and observations and provide feedback to people pretty well on a daily basis.

I mentioned I would speak about the quality program. This is a picture which represents the processes that make up our quality management program. This identifies the 27 processes that will make up the program. The key aspects of it are the executive process you will see on the left and then the three core processes which are: to operate the station; maintain the station; and modify the station.

Then, below that, you will see the support processes. These would be: business support; training support; any support process that would be required to either operate, maintain or modify the station.

At this time, we have a target to

complete this program by March 2005. We provide milestones to the CNSC at six-month intervals. The current interval period runs until the end of September this year. We will be providing CNSC staff with an update of the next six month milestones prior to this, the end of September.

Currently, we are on track to meet all of the milestones we have set for ourselves at this point in time.

As at the end of May 2001 -- this is a four-tier structure that we are talking about like a pyramid: the top being our nuclear management manual which is our highest level of documentation; the next level down is our process maps and process references, which is what I spoke of here when I talked about the 27 processes; then we have what we call station documentation, reference documents and station instructions which define how we conduct our work; then below that we have tier-four documents which are activity-specific. A maintenance person would use a specific procedure or an operator would use a specific procedure to achieve a very specific activity. Those would be level four documents.

As I have said a minute ago, 13 of

the 27 high level processes or the tier two documentations have been produced, four are pretty well along the way, three processes we have completed the documentation at the tier three and four levels, and one process has been effectively fully implemented, that being the design process. We are currently in the process of developing five processes at the tier three and four level.

The next one talks about our refurbishment program which Rod spoke of up at the front. We are currently in the planning stages. We have completed phase one of a three phase project. Phase one was really a condition assessment of the plant such that we could determine the scope of what the outage should be and determine the cost. At this point in time we have looked at starting engineering on long lead items.

We have recently presented our case to the New Brunswick Public Utility Board hearings, both from a technical point of view and from a financial point of view. That process completed about two weeks ago. We anticipate a decision sometime in the fall from the PUB.

In terms of the environmental

assessment associated with the refurbishment, we have presented information to this Commission in May and we received a decision last week on that.

In terms of international obligations and security, Point Lepreau has met its expectations in the area of safeguards, emergency planning and convention on nuclear safety.

From a security point of view, we have implemented enhanced security measures as was directed from an order in October of last year, subsequent to the September 11 event in the U.S.

We update the CNSC regularly on things that we do in the area of security. We also participate with other utilities in terms of trying to standardize the direction we go in.

That is all I would care to say about security I guess in the public vein.

In the area of research and development, Point Lepreau has consistently funded research and development at about 3 per cent of the station's operating budget which this year is in the order of $3 million to $4 million.

We continue to support R&D at Atlantic universities. There are a number of

universities that NB Power provides funding for: the University of New Brunswick through a share in the University of Guelph, Mount Allison in Nova Scotia and St. Thomas in Fredericton, New Brunswick.

Additionally, we operate with the other CANDU owners in the COG group. We participate as a full-fledged member where we share funds to do research and development. This particular year the COG organization will spend about $36 million on research and development.

In terms of community participation and communication, NB Power is a very open organization. We provide information on plant upsets, operations, accomplishments and any important initiatives that we take on.

We are proactive in dealing with the media, proactive in dealing with the government.

We had a significant number of sessions in the local communities around Lepreau and all of the major centres in New Brunswick to inform them as to where Lepreau fit in the organization, the feasibility of and the possibility of a refurbishment decision. So many

people in New Brunswick had an opportunity to participate in these sessions.

We used the news media, paid advertisements and a corporate web site to keep people informed.

We also have an award winning web-based interactive electrical safety program for children which is available.

Additionally in the local communities Point Lepreau supports a lot of the activities that the local communities do, like Fundy Fishermen's Day, beautification programs and many other type things of that nature.

In terms of socio-economic impacts, Point Lepreau employs directly 700 plus people with an annual direct payroll of about $50 million dollars. With a multiplier of about 2.6 this translates into about 1,800 direct and indirect jobs. It represents about 3 per cent of the total employment in the local area.

The dollars represent about 5 per cent of the total employment income in the local area. If we use a multiplier of 1.4, from $50 million we are looking at about $70 million injected into the local economy because Point

Lepreau operates in the area.

Additionally, Point Lepreau produces about 30 per cent of New Brunswick's electrical energy needs.

In conclusion, we believe NB Power is qualified to operate Point Lepreau. We will make adequate provision for the protection of the environment, the health and safety of persons, the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

We respectfully request the Commission to renew the Point Lepreau generating station's power reactor operating licence for a period of at least three years. As I have requested at first, that also you consider the inclusion of the fuel transfer licence from the in-house spent fuel bays to the dry canister site in storage.

Thank you very much. If you have any questions I will try to answer them.

THE CHAIRPERSON: Thank you very much.

With the concurrence of the other Commission Members, I would like to turn to CNSC

staff for their presentation before we have questions for the licensee.

Therefore, I will turn to Mr. Blyth for the oral presentation by CNSC staff noted in CMD Document 02-H16.

Mr. Blyth?

02-H16

Oral Presentation by CNSC Staff

MR. BLYTH: Thank you very much, Madam President and Members of the Commission. I am Jim Blyth, the Director General for Power Reactor Regulation.

CMD 02-H16 is presented to the Commission for its decision concerning New Brunswick Power's application for the renewal of the Point Lepreau nuclear generating station operating licence.

The current Point Lepreau operating licence will expire on October 31, 2002.

With me today are Mr. Chuck McDermott, Director of the Point Lepreau Compliance and Licensing division, and Mr. Jeffrey Meade, one of that division's project officers who is resident in Point Lepreau.

I will now pass the microphone to

Mr. McDermott. He will make the staff's presentation.

Thank you very much.

MR. McDERMOTT: Good afternoon, Madam President, Members of the Commission. I am Chuck McDermott, Director of Point Lepreau Compliance and Licensing Division.

Representatives of all of the CNSC divisions that contributed to the Commission member document and have responsibility for some aspect of the regulation of the station are also present.

2:00 p.m.

This presentation summarizes staff's review of the licensee's renewal application and performance of the Point Lepreau nuclear generating station.

We will also present staff's overall recommendations and conclusions.

The Commission member document contains much more detailed information than we will present here.

On March 13, 2002, New Brunswick Power applied to the Commission to have its nuclear power reactor operating licence renewed

for a period of three years.

New Brunswick Power has also included in its application a request that the activities described in the current transport licence for the on-site transportation of Category II nuclear material from the Point Lepreau nuclear generating station to the solid radioactive waste management facility be included in the proposed nuclear power reactor operating licence.

Staff has reviewed the application and concludes that it contains all of the information prescribed by the General Nuclear Safety and Control Regulations and the Class 1 Facility Regulations.

CNSC staff considers that New Brunswick Power has operated the Point Lepreau nuclear generating station safely during the current licensing period. There have been no serious process failures, the availability of special safety systems met CNSC requirements and the doses to workers and radioactive emissions from station operation were well below limits. Risk to the public and to workers have been acceptably low and, in staff's view, are likely to remain acceptably low over the recommended

licensing period.

CNSC staff rates NB Power's overall performance at the Point Lepreau nuclear generating station as "B - Meets Requirements". This position was arrived at by considering each of the nine safety areas and the importance of the associated programs to overall performance.

However, several specific areas of licensee performance do fall below CNSC requirements and are rated by staff as a "C". They are: quality assurance, human factors and environmental protection, specifically the radiological environmental monitoring program.

Also, the implementation of the following specific programs are also rated as being below requirements: outage management, training, maintenance and licensee's progress with generic action items.

I would like to provide some context with respect to generic action items.

Generic action items are complex technical issues that affect more than one nuclear power plant. Resolution of these issues usually requires multi-year research programs at the industry level.

Although maintenance and outage management programs at Point Lepreau are comprehensive and management expectations are clearly set out, there are some difficulties in implementing these practices. For example, New Brunswick Power staff failed to meet a number of preparation milestones set out in the outage management plan for the 2002 maintenance outage. There are also differences between implementation practices and program requirements in both programs. Although these issues are relatively minor in nature, when taken collectively, they signal a weakness in implementation oversight.

CNSC staff has requested that NB Power submit a detailed action plan to address these weaknesses by mid-August, 2002.

The performance assurance safety area contains the following three programs: quality assurance, human factors and training, and examination and certification. The combined rating of all three programs gives this safety area a rating of "C - Below Requirements".

CNSC staff's most serious concern is with the development and implementation of quality assurance at Point Lepreau. The licensee

is making a concerted effort to meet CNSC requirements for a quality assurance program that meets CSA standards, but CNSC staff's concerns are with the length of time required to achieve success. Two licence conditions relating to quality assurance are included in the proposed draft licence. The first is for New Brunswick Power to implement a quality assurance program that meets CSA quality assurance requirements by March 31, 2005; and the second, as an interim measure, to require a third party technical review of the licensee's proposed design modifications on safety-related systems until the licensee implements its QA program.

The human factors program at Point Lepreau is in a state of development. As a consequence, many human factor principles have yet to be incorporated into the overall work that is done at Point Lepreau. Several positive actions related to human performance have been initiated during the past licensing period, such as training courses relating to human factors and the hiring of a human performance technical advisor. However, CNSC staff found the design change process at New Brunswick Power does not adequately

incorporate human factors.

During the next licensing period, CNSC staff will continue to monitor the licensee's human factors program development and implementation.

New Brunswick Power has made good progress in improving the training programs at Point Lepreau. Despite this progress, CNSC staff finds the licensee's implementation of the overall training program to be below CNSC requirements pending implementation of the new shift supervisor incremental training program, improvements to the continuing training program for certified staff and implementation of the corrective action plans initiated in response to past CNSC evaluations.

CNSC staff has examined New Brunswick Power's request to include provisions of the transport licence for on-site shipments of radioactive materials in the power reactor operating licence.

As Commission members know, transport licences are normally issued by a designated officer. Commission members will also remember that uranium mine licences authorize on-site shipment of radioactive materials.

CNSC Transportation Division staff have evaluated New Brunswick Power's provisions for on-site transportation and conclude that New Brunswick Power meets the requirements for a transport licence. During the current licensing period, New Brunswick Power was in full compliance with the requirements of the transport licence.

Compliance verification activities will be conducted by CNSC staff resident at the station, supported by Transportation Division staff as necessary.

New Brunswick Power still requires, and currently holds, a transport licence for off-site shipments of radioactive materials.

At the end of May 2002, the Government of New Brunswick announced that NB Power is to be restructured by April 1, 2003. New Brunswick Power Holding and its subsidiaries will continue to be publicly owned.

CNSC staff will be meeting with New Brunswick government and New Brunswick Power staff to identify and elaborate on CNSC requirements. This will allow staff to keep Commission members up to date with developments and advise the Commission with respect to any

licensing decisions it may be requested to make.

As Commission members know, CNSC licences cannot be transferred and the Commission itself must consider an application for any new entity for an operating licence.

I will now turn the presentation back to Mr. Blyth for the conclusions and recommendations.

MR. BLYTH: Thank you very much.

In conclusion, NB Power's application for renewal meets the requirements of the Nuclear Safety and Control Act and its Regulations.

In light of NB Power's performance during the period covered by this CMD, the results of inspections, audits, evaluations and reviews, as well as the programs and resources in place at Point Lepreau, CNSC staff is of the view that NB Power is qualified to operate the Point Lepreau nuclear generating station.

Staff concludes that adequate provision has been made at Point Lepreau for the protection of the environment, the health and safety of persons, and the maintenance of national security and measures required to implement

international obligations to which Canada has agreed.

Staff is making two licensing recommendations today.

Recommendation 1 is that CNSC staff recommends including the authorized activities described in the current transport licence for the on-site transportation of Category II nuclear material from the Point Lepreau generating station to the solid radioactive waste management facility into the proposed nuclear power reactor operating licence.

The second recommendation is CNSC staff recommends that the Commission approve the issuance of a nuclear power reactor operating licence to NB Power for the Point Lepreau nuclear generating station for a period of 38 months, until December 31, 2005.

With respect to the proposed licence length, which I believe is two months longer than Point Lepreau requested, in CMD 02-M12, "New Staff Approach to Recommending Licensing Periods", staff outlined the information it would take into account when recommending licence periods. In particular, if a licensee had shown

consistent and good history of operating experience and compliance in carrying out the licensed activities, longer licence periods would be recommended. Staff would also take into account the future plans of the licensee.

In this particular case, both of these have a direct bearing on the recommended licence period. NB Power has shown an overall improvement in performance since the last licence renewal in 2000. CNSC staff noted that continued improvement is needed in some programs, in particular quality assurance, and therefore cannot or is not inclined to recommend the maximum licence period of five years.

The recommended licensing period also lines up with NB Power's expectations to have fully implemented its revised quality assurance program. The licence conditions that CNSC staff have recommended provide adequate oversight for NB Power's activities at Point Lepreau. Through its compliance program, CNSC staff will be monitoring licensee performance.

The recommendations also take into account facility life cycle and compliance programs, particularly the possible Point Lepreau

refurbishment in 2006.

The proposed licensing period would allow staff to devote additional resources to compliance activities, as well as providing Commission members with a better, more comprehensive analysis with respect to the trends on critical safety programs.

This concludes staff's presentation. Staff are available to answer any questions the Commission members might have.

Thank you very much.

THE CHAIRPERSON: Thank you.

The floor is now open for questions to the applicant and to CNSC staff.

Ms MacLachlan...?

MEMBER MacLACHLAN: Thank you very much.

I would like to begin by complimenting all of the staff that were involved in putting together CMD 02-H16. I haven't been involved with a licence renewal before and I just found that this document is extremely comprehensive and helpful.

I think I have only one question, and it is not a yes-no question. I would like to

address it to both staff and to New Brunswick Power.

I am aware of the effort that it does take to obtain ISO certification. I am also aware of the issues that have been raised by staff with respect to the quality assurance program -- I hope that's thunder and lightening -- that meets CSA standards. But what I would like each of you to address and to discuss is the differences and the interface between each of these two different sets of standards with respect to establishing the program and implementing it. I guess I am particularly concerned when I take a look at the report card done for environmental performance where there is a rating of "C" for the program and "A" for implementation.

MR. BLYTH: The staff will respond.

MR. McDERMOTT: Chuck McDermott, for the record.

With respect to Point Lepreau's environmental monitoring program, they are very close to going up to a "B" from a "C". There are some very specific requirements with respect to environmental monitoring that we need to see. We

expect that the next time we come in front of the Commission they will be at a "B".

With respect to the interface between the various programs, there are similarities between all the programs. We do not require that they have separate programs or a combined program. We really look at: Are they meeting the objectives and the intent of the programs, however they decide that they are going to do that. What we look at is: These are the criteria; show us that you have met the criteria and show us that you are going to continue to meet the criteria. New Brunswick Power has the ability to decide how they are going to manage theirs within the framework of: There are some standards out there that they must meet.

MR. BLYTH: I would like to add one thing before we pass it on to NB Power.

If my understanding is correct, ISO 14001 is a program for environmental protection. It is important to realize that when we talk about a quality assurance program that is compliant with the CSA standard and which is different this is for the entire management system of the facility and not just the environmental

aspect. 14001 would address a subset of that overall management program. It is my expectations that compliance with 14001 would, in turn, satisfy the requirements of the overall management system at Point Lepreau.

MR. WHITE: We undertook to qualify ourselves to the 14001 program in the year 2001. In fact I think near the end of that program we actually have overlapped between the audits that CNSC staff carried out and the implementation audits that we were doing there and so we got some good feedback from CNSC on strengthening that program, which we appreciate.

14001 programs, of course, allow you to properly define a program, document it, communicate it to your staff, implement it and do a review of quality as you run that program and it is the standard that you want in all your quality programs.

In terms of our broad quality assurance program, I think we recognized, and the staff have been encouraging us for a number of years, that we need to improve upon our overall program. Our documentation covers a period from the early 1980s through to 2000. We recognize the

need for updating that documentation. But to just update it with regard to the specific licence condition to meet CSA requirements, we felt, was only a marginal improvement in it. What we really needed to do was to look at it from a holistic management process point of view to see that we have adequately covered all of the management needs for the station. We used the Nuclear Electric Institute model of 27 processes and decided that is the way we would implement it. That didn't quite meet, I think, staff's desire for us to urgently move forward to meet CSA standards. Because if we had just done that, it is a bit of a stopgap process that doesn't allow a properly structured management program to operate for the long term. We felt that we would be better off to look at the program from the broader aspects, incorporate all the requirements of the current standards as well as a good management program. We have attempted to do that. In doing that, I think it took a lot of effort by both parties to look at how we properly incorporated that in the documents.

There was a desire by staff to incorporate it in the higher level documents so

that all the details of the standards could be met by looking at those higher level documents. We felt that doesn't allow for good implementation at the lower levels in the organization where you need better instructions at the lower level on meeting those requirements and so we spent considerable time last year, I think 13 days of meetings, and I spent the majority there as well, trying to make sure that we properly understand both requirements and get them built into a framework so that as we started to roll these documents out we don't have to go back and reassess and rebuild them as we go. It took us a little longer to get started than what we had desired to do but now we have got the process rolling. We have established clear milestones for our people to meet and that meets the requirements that staff has placed upon us. We are currently meeting those. I think we are going in the right direction.

I do recognize that it is maybe a little slower than we would like. It is a little slower than staff would like. But in a running station we have as quality program, when you make these kind of adjustments to documents and there

are hundreds of these at the end of the day, you have to get all of your people to readjust to these things as you roll them out and do it within an environment that you don't cause events and errors and upsets. There are some pragmatic approaches to making sure that as we introduce the new things we don't upset something else that is already working okay.

THE CHAIRPERSON: Dr. Giroux...?

MEMBER GIROUX: A few questions.

Concerning, first, a statement on page 7 and 6 of the staff CMD, there is a rating "C" on the implementation of the outage management. They mention that most of the milestones were not met and that there is a weakness in there.

I think there are two points. One, I would like NB Power to respond to that judgment and explain their views on this.

But the major concern is that if there are problems in managing an outage, is that not a sign that there might be problems in managing the refurbishment? Because a refurbishment is not an outage but it is in order of magnitude higher and larger than an outage and

this same sort, I think, of management would be called for. Could you comment on that, NB Power, and maybe staff also?

2:20 p.m.

MR. WHITE: I think what we recognize and we knew as we entered our 2002 outage is that we were not as prepared as we wanted to be for entering that outage, particularly with regard to completion of design packages at a much earlier state in the outage. If you get those completed well that obviously allows us to properly discuss those with the regulator in a more timely fashion. It allows appropriate procurement of the parts and materials needed to support them and it allows the maintenance shops and those that are implementing them to assess them in a timely fashion, so that you go into the outage with all parties knowing exactly what they are going to do, so their execution can be on time and on schedule as you intend.

We knew we were later than we wanted to be in that preparation. When you go into an outage in a nuclear plant these days if you do not have your preparation in the state that

you would like to have it, it will affect you as you do work because you then end up with conflict of work going on and adjustment of schedules, all of which ultimately cost you time.

We knew that and I think we caught up most of it by mid-point in the outage, but still it has impacted us because we are not back today and we would expect to be back by now.

We recognize that when we finish this outage our next one is about 16 months away and that we need to be putting the team in place right after this outage to start preparing for the next one and set the appropriate milestones for design packages, work lists, clearances, work plans. We fully intend to do that.

When you reference that to the refurbishment outage all the same parameters of course apply as well. I think the advantage that we currently have in the refurbishment outage is that we got a four year planning window. We spent the last two years doing proper condition assessments of the plant, so we really understand the condition of the plant and properly scoped the work to be done and put it into an appropriate schedule. So we have all those things today.

Here we are four years in front of an outage for that.

Second, we have already started long lead time engineering, Clandry 2 qualification work, both with our supplier and ultimately with the CNSC staff. We started probabilistic safety analysis work that is needed to support that we have committed to staff. We have started determining the safety analysis work. So we have started a number of pre-engineering and analysis pieces of work that we want to support that, so that we early learn any issues out of those. We have compared all the current codes and standards to the Lepreau codes and standards, so we know the deltas for all those already.

We have a lot of advance work and we still have four years to properly do the detailed engineering work to support that outage. So we are putting in place the right kind of front-end planning, which is what I say we need for each outage here.

MEMBER GIROUX: Thank you.

Does staff share my concerns?

MR. McDERMOTT: Chuck McDermott, for the record.

We mentioned it in the CMD because we do recognize it as a concern. With respect to the refurbishment, I will deal with that first, by the time the refurbishment starts the complete quality assurance program and the new management program will all be in place, have been tested and functioning fully, which will be a benefit that they do not have right now.

With respect to the outage that is under way right now, what happens when they missing some of their planning milestones is it puts pressure on CNSC staff because there are interactions required, approvals that we need to give. We do not give these approvals without the documentation. If the documentation is a week late it disrupts our planning cycle. It also has the potential, although we have not seen it, to put pressure on licensee staff to speed up the work, cut corners, stuff like that, which requires extra vigilance on station management's part and on our part. That is why we have identified it as a concern. It has not been realized in this outage.

The outage has been well managed to this point. We have given all the approvals we

have needed give.

MEMBER GIROUX: If I refer to your recommendation for, what is it, a three and a half or a three-year licence that you recommend?

MR. McDERMOTT: Thirty-eight months.

MEMBER GIROUX: Thirty-eight months you said. Thank you.

That means you will be coming back in the fall of 2005 just prior to refurbishment and I think that is your plan, then this would be a major topic at that time, even though the refurbishment itself does not have to come up for a licence?

MR. BLYTH: Yes, that is a key element of our strategy and our logic in choosing that date. We want to be in a position at that time to say here's the work that will be done, here's what must be done and that the plant will not return to service until this work is completed. So that the Commission members have a very clear idea of the magnitude, the content of the refurbishment and the advantages and the safety implications of the work that will be done.

MEMBER GIROUX: Thank you.

The other question concerns the generic action item on computer code validation. Staff do comment that there have been problems -- in other words, practices and examples of poor practices in what NB Power has been doing, but you also referred to a generic framework which has been developed by the industry.

So my question to NB Power would be, one: What is your reading of the problem which is outlined by staff? Two, have you been using or are you planning to use the industry generic framework for computer code validation? Page 22 of the staff's document, article 3.3.3.11.

MR. McCARTHY: There is a number of issues surrounding the qualification of computer codes. The requirement is that we bring codes associated with licensing activities and safety analysis activities in line with the CSA standard 286.7 and it is being done in two phases. One phase associated with safety analysis is being done primarily by the industry at large. It involves the other nuclear facilities as well as AECL. We are jointly funding and moving forward to build an industry standard tool set in terms of codes to do safety analysis. We are progressing

that work, a lot of it through COG and a lot of it through AECL. For the most part that work is happening.

I think maybe what the staff are referring to here is codes that we do use in-house, other codes that we do use in-house. We do have a plan and are in the process of fixing these codes.

I must admit we are not perfect at this point in time. We have some additional work to go to get them to meet the standard, but we are progressing and moving in that direction.

MEMBER GIROUX: How about the industry standard, are you planning to use it for --

MR. McCARTHY: Absolutely. We will be using the industry standard tool set as they are being developed and validated, yes. In fact, we are using some of them right now in terms of the new fuel codes to deal with the bundle and channel power limits as we are moving I think by the end of the year we hope to be fully engaged using those codes.

There is a significant transition period to move from the codes we are using over to

the new codes because a lot of the new codes there is a lot more software to the codes. It is getting the computers that can handle the codes and getting them the tool sets that can run the codes at speeds fast enough to be able to allow you to achieve your business objectives as well.

MEMBER GIROUX: Thank you.

Does staff have any comments on this?

MR. BLYTH: Yes. Jim Blyth, for the record.

This is a major project with some fairly significant legacy issues in that at one time there were two different suites of codes that were used in the industry, one by Ontario Hydro and another set by Hydro-Quebec in Gentilly or Point Lepreau. Those codes, quite frankly, became dated and then there was a major undertaking to bring them up to modern standards and to improve the validation of them.

It is a complex issue changing the codes, gathering the experimental data by which to do the validations, confirming the reliability of the codes over the range of expected use. So, it has taken a long time to get there, but we are

coming to a position where the nuclear industry in Canada uses a standard set of codes, standard validations and that is a very positive step for all of us because we are all coming from the same reference points and talking the same language.

MEMBER GIROUX: A further question, another generic action item where you were discussing the positive void reactivity. The staff mentioned that there are indications that the reactivity has been overestimated. This sounds to me as going in the other direction from what we have been hearing for the past few years, that the radioactivity might be higher than had been assumed before. Am I correct in interpreting that this is maybe a reversing trend and that what we are doing now might be conservative?

MR. BLYTH: Yes, you are correct, what the situation is as I understand it in the physics codes that are being used to calculate this, the new physics code there is some indication that those calculations may be unduly conservative, i.e. overpredicting the void reactivity component.

We may down the road be able to back away from that which will give us more safety

margin for the accidents for which void reactivity is important.

MEMBER GIROUX: A final question, just very briefly this warning system that the lady, and I don't know your name, has shown us, has this been tested at large? Has it been installed in homes? Did you run a test to make sure that it worked and people responded?

MS CONNELL: June Connell, for the record.

As each one of these is installed it is tested to make sure it works. We found some phone lines that had ground faults on them and it would not allow it to work. So we got NB Tel to go in and repair phone lines. So an added benefit for some people is they have got much clearer phone lines and their computer systems are working better because we checked to make sure that these work one by one.

MEMBER GIROUX: I was thinking of a general exercise, once you have them all installed that you send a general call and see how people respond.

MS CONNELL: Once they are installed they would be tested to make sure that

everything works.

MR. WHITE: You may recall that I think last fall when we were here we went through a little bit of an explanation of a test program to see whether these devices would work. It is driven by EMO and we are supporting the process of course. The results of that showed that it would be worthwhile investing in this, and so EMO has invested in it.

I think maybe, Dr. Giroux, you actually raised the question about the warden system and how effective it was. This is an improvement upon that, but it is still supported by the warden system.

THE CHAIRPERSON: Mr. Graham.

MEMBER GRAHAM: Thank you.

My first question is regarding the presentation by NB Power. On your organizational chart that you presented to us today are all those positions filled now, not only the four new ones or the three new ones plus the change, but are all of the boxes do they all have permanent or not acting, but do they all have permanent positions filled?

MR. McCARTHY: There are still

some acting positions.

MEMBER GRAHAM: How many?

MR. McCARTHY: The station manager that is sitting in front of you today is acting. I have an action on that issue.

MR. WHITE: That is the only one.

MR. McCARTHY: The technical manager is actually filled today by a secondee that we have from WANO and we have had for the last two-year period. We believe the secondee was important to bringing more information from the world stage, from the World Association of Nuclear Operators to both our maintenance organization and our technical organization. We have had him operating in both areas and providing us some very valuable assistance in those areas.

The other four there have people all in those positions, yes.

MEMBER GRAHAM: Thank you.

Another one of the presentations you made on research and development and I think I have asked the question before, not maybe to NB Power, but maybe it was to Gentilly, but a very small station with a budget or one facility, you say you are spending 3 per cent which is $3

million or $4 million a year on R&D, compared to the larger facilities that I know we talked a little bit about earlier.

My concern would be is there a sharing of information, a complete sharing between the three utilities that now have nuclear facilities with all of the R&D projects, so that a smaller utility like NB Power or Hydro-Quebec with Gentilly can benefit so that there is not duplication?

MR. WHITE: We do not have duplication in those things, but to answer your specific question there is not complete sharing. As we set up the COG programs for the year and several years in advance there may be specific programs that a utility wants particularly to be involved in or otherwise may not want to be involved in because it may not be particular to his facility. So you cannot not only buy into the generic programs. You can opt in or opt out of specific programs if you wish to. So there is a high level of sharing that is not 100 per cent.

MEMBER GRAHAM: Does CNSC want to comment on that at all?

MR. BLYTH: No. We have nothing

to add.

MEMBER GRAHAM: Another question I have, in the presentation with regard -- that CNSC made with regard to areas requiring improvement, you had mentioned that there will be an action plan mid-2002 or by mid-August 2002 will be available. Will that be available to us, that action plan on Day Two?

MR. McDERMOTT: Chuck McDermott, for the record. When it is received, yes, it will be incorporated into either the presentation or if we have time into the supplementary CMD.

MEMBER GRAHAM: Thank you.

Another question of clarification, NB Power has shown its restructuring and which Point Lepreau will fall under I presume will be NB Power Nuclear. When that comes into effect on April 1, 2003 that will require a licence amendment or a new licence?

MR. BLYTH: That will require a new licence if it is a different entity than NB Power.

MEMBER GRAHAM: So even if there is, as proposed, a licence issued for 38 months or whatever it is, there has to be a complete

application that has to come back before us if that is to go into place for 2003?

MR. BLYTH: If there is a different licensee in 2003, yes, then it will be a new licence.

MEMBER GRAHAM: Thank you.

A couple of other questions that I have, if I may, Madam Chair.

On page 8, of CNSC's presentation, you get into performance assurance and overall ratings and so on. There is one place that I noticed it states:

> "However, CNSC staff found the design change process at NB Power does not adequately incorporate human factors. During the next licensing period, CNSC staff will continue to monitor the licensee's human factors program development and implementation."

Then you go on. There is a quite critical critique on that page. Will there be an update on day two of a follow up to that or not?

MR. McDERMOTT: What we have tried to do with the proposed draft licence is to incorporate a licence condition which takes into account the fact that we are not completely satisfied with their entire design program right now.

It is unlikely we are going to see substantial improvement between now and the next day of the hearing.

MEMBER GRAHAM: Three other questions I have.

Page 19 on the molten fuel moderator interaction -- I'm sorry, it is on page 20, regarding pressure tube failure and loss of monitoring inventory, at the very last paragraph on the bottom of page 20:

> "NB Power has provided the basis for its plan of action to lead to closure of GAI. The plan is currently being reviewed by CNSC staff." (As read)

Will that review be available to us on day two?

MR. BLYTH: I would like just a

minute to consult on this, please.

MEMBER GRAHAM: Okay.

--- Pause

MR. BLYTH: I will ask David Newland from our Thermal Hydraulics division of CNSC to respond to that question.

MR. NEWLAND: The plan that Point Lepreau has provided relies on them refurbishing. This is a plan that has been presented to CNSC staff by all of the industry. Each of the licensees are essentially applying a cost benefit argument. It is something that the staff is developing experience with. It will take us some time to review those submissions, so in short, no.

MEMBER GRAHAM: I gathered that much.

When do you think you will have something with regard to this because this has been quite a major topic within some of the facilities? When do you think that you will have a consensus or a dialogue that will reach a consensus?

MR. NEWLAND: I would say by the end of this year.

MEMBER GRAHAM: Will we, as a

Commission, be able to see this or will this come back to us in any way?

MR. McDERMOTT: The annual report on performance and nuclear power plants, if you look at this Commission member document, and the report you received at your May meeting follow the same format, so significant items that affect the industry will be included in the annual report.

MEMBER GRAHAM: Thank you.

On 3.3.9 regarding moderator temperature predictions, again you say on page 22, the last paragraph on that item:

> "The industry standard code validation work is in progress with a targeted date of completion of August 31, 2002." (As read)

Will there be an update on that on day two.

MR. McDERMOTT: Yes.

MEMBER GRAHAM: Thank you.

With regard to the -- I had several other questions there --

THE CHAIRPERSON: We could come back to you later.

MR. BLYTH: Yes, if you could. Maybe that would be better.

THE CHAIRPERSON: I have two questions that may require supplementary information for hearing day two. One is with regard to, frankly, the licence length issue.

In the CMD that we received with regard to licence length there was a series of specifications that we had looked at in terms of knowledge of the facility and long-term stable positions, et cetera, et cetera. There was a number of criteria in the CMD.

I would like that to be specifically addressed because we are contemplating -- although you talked about in the CMD looking at five year licenses and working back, in fact in my mind I am looking at a traditional two year licence for power reactors and going forward, so you will have to help me look at this for day two in terms of specifically talking about why we shouldn't leave it at two years, I suppose, is one of the questions I have. Why?

I understand the arguments for three years in terms of where the facility will

be, that possible refurbishment, et cetera. I understand that discussion. I just want a different discussion based on the licence length scenario as to why not two years. Why not leave it the way it is based on performance? So if you could do that.

The second issue. I don't think there is enough information, from my point of view, on the inclusion of the on-site transportation activities. I note your comments with regards to uranium mine licences and changes but I just think we need a little bit more information on this in order to have an inclusion. What are the reasons for this? Are there any safety implications for that? Is it efficiency period, or are there other reasons to do it?

I would like more details of that on page 2.

These are directed to the staff, both these comments.

I think that is all for me right now.

Ms MacLachlan, you have one?

MEMBER MacLACHLAN: Yes. Thank you very much. This is a question for staff.

On page 43 of the CMD, under "Decommissioning Plan and Financial Guarantees", you state that NB Power has submitted the decommissioning cost study and staff has found it acceptable. However, NB Power has not yet proposed a guarantee but their target for completion of that proposal is March 31, 2003.

Yet when I turn to the draft licence, clause 11.2 states that there is a requirement for a financial guarantee and that it must be in place by March 31, 2003.

Those are essentially the same dates. Can you identify for me again the process that would be involved in arriving at a financial guarantee that is acceptable to the Commission, and the time frame associated with reaching consensus and acceptability of that financial guarantee?

MR. McDERMOTT: I will ask Dr. Richard Ferch to answer that question.

MR. FERCH: For the record, I am Richard Ferch, the Director of the Waste and Geosciences division which provides specialist advice on decommissioning.

NB Power has submitted their

preliminary decommissioning plan last year. Comments were sent to them and they have in fact now committed to respond to those comments by October 31 of this year. So as far as the preliminary decommissioning plan is concerned, there will be a short review process for the changes in response to our comments, but the comments that we had were not such as to require major changes.

With respect to the cost study, as far as the methodology that was used and so on, we have reviewed that and we are in agreement with that, so really the major outstanding item will be the form of the financial guarantee itself.

If NB Power's target for completion is March 31, 2003, if we don't actually receive the guarantee until that date, I think as you suggested, there would be a period of review required in order to ensure that the form of the guarantee is acceptable so, in effect, the licence condition requiring it to be in place by that time, I think I would have to agree with you, implies a somewhat earlier submission.

MEMBER MacLACHLAN: Thank you. I guess I would like that noted by both staff and NB

Power.

I take your point on form of financial guarantee. Then by way of acceptance of the cost plan, the decommissioning cost study, then I take it that staff have agreed on the quantum.

MR. FERCH: The staff have agreed on essentially the cost of decommissioning. The form of the guarantee also includes an item which is not yet closed, I guess you would say, which would be the present value of that cost estimate. Depending on the nature of the guarantee, the present value might be determined a different way, so the actual magnitude of the guarantee required today may depend upon the form.

MEMBER MacLACHLAN: Thank you.

THE CHAIRPERSON: Dr. Giroux? Mr. Graham?

MEMBER GRAHAM: Yes, I had two more questions.

On pages 12 to 13 with regard to training programs there was some critique by -- and this is CNSC's presentation. I am wondering if on day two we can have some more information and your comments regarding incomplete training

records and on-the-job training that was non-existent. I wonder if we could have some update on that on day two.

On page 16, it read that with regard to safety issues you referred to several outstanding safety issues. If we could have an update on those if they have been addressed by the time day two comes around.

Those are two items I would like to have checked.

MR. BLYTH: Staff will provide updates of all those issues.

MEMBER GRAHAM: Okay. I think that is it, then, Madam Chair.

THE CHAIRPERSON: Mr. Secretary.

MR. LEBLANC: That brings us to the end of the question period for this hearing. This hearing will continue on September 12, 2002, here in the CNSC offices.

The public is invited to participate either by oral presentation or written submission on hearing day two. Persons who wish to intervene on that day must file submissions by August 13, 2002.

The hearing is now adjourned to

September 12, 2002.