



File/dossier : 6.02.04

Date : 2018-10-11

Edocs pdf : 5655074

**Written submission from  
Gordon W. Dalzell**

**Mémoire de  
Gordon W. Dalzell**

In the Matter of

À l'égard de

**Regulatory Oversight Report for Canadian  
Nuclear Power Generating Sites: 2017**

**Rapport de surveillance réglementaire des  
sites de centrales nucléaires au Canada : 2017**

Commission Meeting

Réunion de la Commission

**November 8, 2018**

**Le 8 novembre 2018**



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# Part A



## **Gordon Dalzell - CNSC Nuclear Oversight Report - 2017**

### **Background – Introduction**

This writer is a retired social worker having worked working in the community of Saint John for many years. Over the last 30 years, I have been as well as heavily involved in this community where I reside; serving on many volunteer community organizations. This writer is a member of several Community Liaison Committees past and present, of industrial facilities in Saint John. I have had a great deal of experience observing how they have engaged and informed community members of those facilities including:

1. Coleson Cove Generating Station Community Relations Liaison Committee (current)
2. Irving Refinery Committee Liaison Committee (past)
3. Canaport LNG (current)
4. Emera Brunswick Pipeline (past) – Community Liaison Committee
5. Board Member of the Atlantic Coast Action Program - ACAP-Saint John (current)
6. Life member of the New Brunswick Home and School Federation

In respect to licensees having engaged with and informed their communities, members who live in the vicinity of their sites, there is no questions a great deal of information and community engagement has occurred both with the general public at large as well as with the community members who live close to their sites. The focus of this writer is to address how much of this information and engagement directly relates to and is in context with RD/GD 99.3: Public Information and Disclosure Regulation that describes

CNSC's mandate is to improve the level of understanding by the public of information about proposed or licensed nuclear facilities and activities. Licensees and license applicants are required to develop and implement public information that includes a disclosure protocol.

As noted in the Regulation, the relevant legislation for these activities are derived from the stated objectives of the Commission in the Nuclear Safety and Control Act (NSCA). In reviewing the provisions of that act, the subsection a, b of NSCA is as follows:

“The objectives of the Commissions are (a) and (b) to disseminate objective scientific, technical and regulatory information to the public concerning the activities of the Commission and the effects on the environment and on the health and safety of persons”.

Paragraph 3 J of the Class I Nuclear Facilities Regulations states “the proposed program to inform persons living in the vicinity of the site of the general nature and characteristics of the anticipated effects on the environment and the health and safety of persons that may result from the activity to be licensed”.

Since the primary goal of the public information program, as it relates to the licensed activities is to ensure that information related to the health, safety and security of persons and the environment, and other issues associated with the lifecycle of Nuclear Facilities are effectively communicated to the public; this writer reviewed these programs within this context and within the broader back drop of the Regulatory Oversight Report for Canadian Nuclear Power Generating Sties 2017.

As a result, this writer spent considerable time reviewing this report commenting on the issues related to safety and security so that I could determine if those licensees’ public information program effectively communicated with people who live close for these sites the mandated focus of safety. Yes, there is extensive information shared with the public – a lot of which is not on the topic of safety or operations of those stations, for example, donations, sponsorships, community activities and volunteer work by employees. If I had not spent so much time reviewing this report and making comments, I would have found it much more difficult to determine to what extend did these public information program meet the goals set out in CNSC RD/GD – 99.3.



## **Section 2.0, 2.1**

Although, there is information that the plants are safe and are rated “satisfactory” or “fully satisfactory” in safety performance rating 2017 (table – Page 10 of the Oversight Report), there is a great deal of information on these sites on safety issues that is not included in their various information and engagement activities. It may be described as low safety significance by the regulatory but for the people who live nearby, it is significant especially with so many non compliances identified in the Oversight Report for 2017.

If I had not reviewed with great effort, I would not have learned of these issues, non compliance events identified in this Oversight Report by reading the public information formats. I also learned of these, for example with PLNGS- by being an intervenor at the relicensing public hearings for this site. In these settings, those who participated, they review in details the information as it pertains to all aspects of these operations including safety issues, environmental and health impact.

For interested parties upon request, this information has been made available.

This writer certainly learned a great deal of information regarding safety in this Oversight Report. The licensees for the most part have links to it, so everyone interested has access and can read it. We know most people will not spend the amount of time this writer did doing so and noting areas of concern as the document was carefully reviewed.

Providing the public with a summary and or the bottom line such as safety rating takes for their site is very important, I would submit there is other information found in this report of public interest for the public to know as well. For examples: Indigenous Relations to name just one example to illustrate this need.

I suspect the public may be surprised and concerned to learn of all the issues of concern and information this writer highlighted in my submission. The question is do they need to know all this and how relevant is it. A lot of it is of “low safety significance”.

I submit it is the kind of information that the licensees need to share with the public by summarizing those non compliance areas, action items and other issues of interest. Hopefully my

submission will identify some of these issues of concern as identified by the community member who carefully reviewed this “report card on the Canadian Nuclear Licensed Facilities.

The comments and conclusions by CNSC on the low safety significant matters as identified is information that these licensees need to report to the community so we can judge if there is a need for concern and comfortable with these matters.

### **Indigenous Relations**

This writer did not cover this area on how licensees have engaged with and informed the community members who live close to their sites other than acknowledge and value CNSC’s efforts towards strengthening relationships with indigenous peoples. Very pleased to read in Section 2.15 Page 75. “CNSC staff efforts in 2017 supported the CNSC’s commitment to reconciliation and building strong relationships with indigenous peoples with interest in Canada NPPs and WMFs”. CNSC staff continued to work with Indigenous communities and organizations to identify opportunities for formalized and regular engagement throughout the lifecycle of these facilities. In reviewing the Oversight Report, I am satisfied to see that OPG has a dedicated indigenous program for their facilities under their authority and control. This is such an important area, I would like to see much more information shared by the nuclear site in their efforts to engage and inform the Indigenous communities. More detailed information could be made available in the Oversight Report.

The nuclear licensees all have dedicated indigenous programs.

## **Regulatory Oversight Report for Canadian Nuclear Power Generating Site - 2017**

### **Mr. Gordon W. Dalzell Comments on Nuclear Plant and Waste Management Facility Safety Performance and Regulatory Developments**

Upon receiving the public noticed on September 7, 2018, that the regulatory oversight report for Canadians nuclear power generating sites: 2017 was publically available this writer commended a careful and through reading of the regulatory document preparing notations and comments as part of this initial step in this review.

This writer found the format of the document very well organized and easy to follow especially Section 3 “Nuclear Power Plants and Waste Management Facility Safety Performance and Regulatory Developments”. 3.1 to 3.6 provided a uniform format in the same order for all of the six sites covered in this report.

The outline format used in presenting this report covering the same titled sections for each facility made it easier to follow the content information in those sections despite the fact that many sections included some complex and technical information that even for a reasonably well informed community member who has no new clear background that was challenging to fully understand. The second impression left with this writer was the section titled Other Matters of regulatory interest was how short the commentary was compared to the other sections covered in this report.

Notwithstanding these other sections contain profoundly significant and critically important information related to safety etc. Public information and disclosure information covered in Other Matters of regulatory interest is equally important as it is fundamental for the public’s understanding of what both CNSC and these nuclear sites are doing to keep the public safe. The reason why the public information and engagement is so important is to mitigate any public figure and his and anxiety over any issue of safety that may be a real or perceived concern to the public. This writer will cover in more detail the importance of public information being communicated to not only within those emergency protection zones but to the greater community outside the zones.

My submission is based on the understanding that any real or perceived fear of danger or unsafe conditions at the site creates the psychosocial health effects as identified in the Public Health Risk Assessment in 1999 as part of an EIA process for a large industrial complex here in St. John New Brunswick. This concept was covered noting that through public information was key to mitigate these psychosocial health effects.

A good example of this is found in Section 2.10 Emergency Management and Fire Protection. Page 65, under Nuclear Emergency Preparedness and Response is the kind of information that the public close to the sites and in the boarder communities next to those facilities need to know to help ease any fear or worry about Safety.

In reviewing the public information activities of the nuclear sites, safety in the broader sense is certainly a very strong theme and message but I submit it may not always be detailed a comprehensive enough in reaching the broader communities near those sites. In reviewing the sections for each facility, this writer and anyone reading these sections can conclude that the authorities responsible for such nuclear emergency can be reassured that the public will be protected and any such emergency will be manage in a comprehensive competent manner with the CNSC oversight seeing such plans and actions as noted in the CNSC regulatory document 2.10.1 nuclear emergency preparedness and response.

The question raised by this writer is how and to what extent is this information is relayed to the residents close to the sites but just as important to the millions of people in the larger cities that are in the regions where some of those larger facilities are located. How much detail is required such as what is contained in the Point Lepreau Emergency Response plan? Those provincial EMO authorities obviously plan a critical role here and in some areas need to beef up their communication strategy in this area in respect to what they do in any areas of improvement being planned such as identified on page 67, under emergency exercise - lessons identified both by the CNSC as well as for other organizations.

At this point in this submission this writer will highlight points from my careful review of these regulatory documents subject to this public review.

For most Canadians who live in their respective regions like this writer from Saint John, NB, they are generally aware that there are nuclear facilities in the greater area where they reside.

This writer, for example is well aware that the majority of people in the greater region of south western New Brunswick. What they may not be aware of are the other nuclear generating facilities in nuclear waste management sites in other regions of Canada as listed and covered in this oversight report.

This is why the oversight report is as important as it serves as an excellent learning tool on these sites and more importantly how they are managed from a safety perspective. This writer was struck by the comprehensive safety portion of the information with the efforts both by the facilities themselves and the CNSC to keep these sites safe.

The average Canadian I suspect would not be reviewing this document in this detail, even though it is publicly available. This raises the issues which is one of the objectives of my submission. How have licensees engaged and the community members who live closed by as well as the greater general population who live in the region and outside the region where these facilities are located in respect to the important safety oversight information contained in this document. Two good examples of effective public information communicated to the public both from the regulator as well as the licensees include the following:

- (1) Online video presented by a Mr. Thompson on the waste management facility at the Western waste management facility located at the site of the Bruce A and Bruce B nuclear generating stations. This video was very informative on all aspects of this waste management facility most importantly the safety features and process of moving the nuclear waste into these above ground units.
- (2) The second communication tool was used in recent quarterly community newsletter from Point Lepreau Nuclear Generating Station title "From the Point". In this edition there's an article on the CNSC site inspectors. The article title "Safe and Sound" Canada's Nuclear Safety Regulator is on the job at Lepreau focused on protecting the health and security of Canadians and the environment. This type of information is welcomed by community members living in the area of the facility this is This is the kind of regulatory

information that needs to be communicated to the public in the communities where these facilities are located. It builds public trust and confidence in the public learning more information on a regular basis on efforts made to safely operate these facilities.

### **Comments on the Executive Summary**

CNSC staff concluded that nuclear power plant and waste management facilities operated safely in 2017. Based on reviewing the oversight report I am concerned of this fact and do not have any reason to conclude it is not an accurate statement. If everyone read and studied this report like this writer did, no doubt they would come to the same conclusion, but we know that would not be possible. So therefore, both the licensees and the regulator have to depend on the public information and disclosure program to get the kind of information to come to the same conclusion - which these nuclear power plants and waste management facilities were operating safely in 2017. That is why it is so important for licensees to communicate this kind of information to the public through various communication activities such as information sessions for the general public, facility tour, participation in community events, newsletters, on going website updates, and the use of social media.

In respect to the nuclear power plant safety performance rating for 2017, this writer would have liked to have seen Point Lepreau Nuclear Generating Station rated as “fully satisfactory” in more areas as noted in other facilities such as Bruce A and Bruce B, Darlington, Pickering sites. Even the general word of satisfactory is questionable.

Section 1.4 Regulatory Framework and Oversight section informs the public of strong of the strong comprehensiveness of the regulatory oversight in place as one would expect for these nuclear facilities both nuclear power plants and waste management facilities.

Many people may not be aware that there are 37 CNSC inspectors permanently located at the sites that also monitor safety performance and provide regulatory oversight from state offices. This writer press comments on Section 1 of the Regulatory Oversight Report for nuclear power generating station sites 2017.

As noted in the Section 1 - introduction this report is most welcomed and very informative as it provides the public with the CNSC staff assessment of the overall safety performance of the

Canadian Nuclear Power Plants(NPP) and the adjacent waste management facilities (WMF) for 2017.

The report compares safety performance data for multiple licensees as well as general assessments of all licensees as a whole in the area of security.

Section 3 containing the individual assessment for each facility on-site is key as it allows the public to be able to learn specific with more details on how these facilities are operating, their operations within the regulatory umbrella of the CNSC.

In reviewing this licensee's public information program utilizing webpage analysis, it was interesting to note how many had a web link to the oversight report.

This writer found most licensees had such a link to this very important report and on these nuclear facilities. This introduction presented information in a user friendly manner as illustrated in various tables including Figure 1.3 and 1.3.2.

## **Under section 2.22, Target and Audience(s) RD/GD 99.3 Public Information and Disclosure**

This writer recognizes that CNSC encourages licensees and license applicants to employ a broad and inclusive interpretation of person living in the vicinity to ensure that information reaches as many interested parties as possible. On reviewing these public information activities such Point Lepreau and some others, the focus and attention in these communications often centres on a more literal interpretation for person living in the vicinity such as those within the emergency evacuation zones boundary of 20 to 30 kilometres.

From the Point publication is an excellent newsletters that the public living in the vicinity are aware of an access

Although NB Power has it on their website, the general public of New Brunswick may not be aware of it is published quarterly.

Better knowing that this is such a strong and effective oversight from the CNSC. Point Lepreau Nuclear Generating Station just recently published and its newsletter From the Point a feature article on just this area of 6 CNSC inspectors assigned permanently to this facility to carry out the oversight duties identified in this report as noted in section 1.4 to 1. 4.6 as well as in the areas identified in section 2.

In respect to Section 1.4.5 Enforcement, this writer looked for a record summarizing of enforcement actions as listed in 1.4.5 page 21. This report needed to include the number and type of enforcement action of each facility. Such a list could help the public understand why certain performance ratings were assigned to these various facilities. No doubt this information can be requested from the CNSC but it is needed to be included in this report to help the public understand the noncompliance records of these sites. This information would be consistent with public information and disclosure policy.

The rating as noted is 1.4.6 Safety Assessment rating, it states that CNSC staff considered 1547



findings for NPPs and WMFs but does not mention enforcement actions (number and type), as part of the safety assessment process, they should be documented in this sections.

### **Comments on Section 2- General and Supporting Information**

This writer identified same areas of concern and observations in the section of the report.

They are as follows:

One area that caught my attention and pleased to see was covered is management of contractors. It was observed in reading about how licensees handled this area that there were some non-compliance issues identified in some sites over how they managed contractors at their facilities in compliance to regulatory requirements. Anytime you have members of the public such as contractors' workers working at these sites despite required efforts to ensure they are trained and qualified, there is always the possibility of something going off the rails in respect to these workers coming in conflict with the established safety procedures.

In this writer's view, this is a vulnerable potentially problematic area that requires vigilance is strict adherence to CNSC's regulatory standards, rules and procedures. The screening of outside external workers going inside these facilities is a concern to this writer in respect to security. I was not surprised to see some of the WMFs and NPPs having issues of noncompliance identified at some facilities. In my views, this is an area of potential vulnerability at all sites that needs utmost attention at all times.

Section 2.2 Human Performance Management is another vulnerable area to be vigilant. As a retired professional social worker, with 40 years delivering social work services, I have observed our various social problems can impact people putting themselves or others at risk. It is most reassuring to learn that they have important human performance management and in particular fitness for duty is to both the regulator as well as these licenses. Unless one was an intervener at one of these licensing reviews or read this report in detail, the general public including those living in close vicinity may not be aware of how important the area of human performance is in maintaining safety at these facilities. This is the kind of information that needs to be communicated to the public targeted audiences to assure them of how important this area is with comprehensive regulatory and non-regulatory oversight.

With the legalization of marijuana on October 17, 2018, this is just another dimension on their fitness for duty to be monitored. Mandatory drug testing is recommended by this writer. As expected, as a community member, please see that CNSC REGDOC 2.2.4 Fitness for Duty, Volume II Managing Alcohol and Drug use.

Managing work or fatigue page 29, it was troublesome and worrisome to learn in this report that Bruce Power reported numerous instances when they did not comply with the stations hours' procedure for certified staff. The report noted these noncompliances are addressed in section 3.4.2. The issue of length of shift is one that should have uniformity and consistency in my view based on best research to handle workers fatigue. Is there a set of CNSC standard for shift lengths?

In respect to section 2.3, Operating Performance, are the listed areas listed in this section are critically important. It was reassuring to learn that all but two licensees received fully satisfactory rating the exception of Point Lepreau Nuclear Generating Station and Gentilly-2. Most importantly it was stated "CNSC staff determined that there were no serious process failure at any of the NPPs".

Another potential although remote is covered in the safety analysis under operating performance is severe accident management and recovery. To what extent do residents within the vicinity of these nuclear facilities worry or become fearful of such severe accidents occurring. This is one of the questions that need to be answered. One way to gauge this concern is for these licensees to cover such topics in their public opinions survey on this topic of safety concerns. It's usually the upset condition unexpected severe accident situation that is everyone's worst fear. These public information tools such as public surveys need to be used to drill down into their residents real worries and from when it comes to severe accident management and recovery. Often those surveys ask more general questions on the topic of safety- please refer to surveys from sites such as PLNGS.

Certainly it is abundantly clear that both CNSC and those licensee's take this possibility despite being remote very seriously. As described in this report under severe accident management and

recovery station on page 33. It is my view that this area represents the greatest public fear. Therefore, under these public information activities, it is best to survey the residents but more importantly reassure them we will be ready to respond as it is described in the section 2.4 Safety Analysis ageing of these nuclear reactors is another area of public concern.

Under deterministic safety analysis page 35 it is stated as safety analysis report for their facilities is submitted every five years. From a public confidence perspective this five-year period is too long it needs to be done every three years and is writers view.

These public information programs of these licenses need to provide the residents in vicinity of those sites in the broader definition as noted in section 2.2.2 target audience in RD 99.3 Public Information and Disclosure document with a lot more information than this and other areas under section 2.4 for Safety Analysis. I certainly have an increased confidence and knowledge on the safe operation and management of these facilities after carefully reading

### **Oversight Report**

While reviewing the public information on all the facilities websites only some had posted this CNSC link to this report on their main website.

Considering the age of some of these facilities it is not a surprise to see cables covered under Component Design page 43. This statement that awakens this writer's attention is as follows: "Cables are critical to the safe and reliable operation of nuclear power plants due to their widespread use as a connector medium for many systems important to safety Canada's operating reactors are ageing and cables are affected by the aging process".

This good news is that the next sentence – the CNSC requires operating NPP licensees to implement cable condition monitoring and surveillance program and cable ageing management program to assess over time the degradation of cable installation.

This information cited above raises the question when is safety information such as this on cable unnecessary to provide in a newsletter or on these sites main web page, Facebook etc. If such information is requested the public disclosure protocol are to be followed. It is important that the public information made available doesn't inadvertently scare the public or cause undue anxiety

while at the same time being open and transparent in the communication provided to the person living our living in the vicinity.

### **Ageing management**

Of special interest to this writer and I suspect to get public at large, is captured in Figure 10. Comparison of estimated radiation, dose to the public from Canadian Nuclear Power Generating sites 2013 to 2017.

This figure 10 shows that the doses to the public were well below the annual regulatory dose limit of 1 millisievert for members of the general public. This kind of information is what is in the public interest to communicate to the public at large. Not all sites provide that information as far as I determined.

In viewing the public information activities for all of these NPP and WMFs in compliance with REG 9.3.3 this information is not readily available in their communications; however, under the CNSC disclosure protocol, it would qualify for release upon request in respect to that CNSC policy the targeted audience limitation is too restrictive. What is wrong with substituting targeted audience to the general public at large?

Is the general public aware that radiation dose to the public is well below the annual regulatory dose limit for members of the public. Question is how is such important information communicated to the general public including of course those residents in close proximity to these facilities?

Under section 2.9, Environmental Protection page 61 – the following points are made:

The general public including those in close proximity of the nuclear plants may not be fully aware that as part of the normal operation, nuclear power plant releases radioactive substances in both the atmospheres (as gaseous emissions) and bodies of water (as liquid effluents) and waste management facilities. Release of radioactive substances into the atmosphere again these licensees' need to communicate this kind of information along with the fact that the dose to the public were well below the annual regulatory dose limit of 1 millisievert for members of the general public. The fact that the CNSC has made available an independent environmental

monitoring around Bruce site, which includes Bruce A and Bruce B and WWMF, as well as Point Lepreau, Gentilly-w facilities in 2016 with areas around Pickering, Darlington, Point Lepreau sampling in 2017; does not exempt these facilities from putting this on their web site front and center for everyone to be informed.

I am concerned that these important public needs to know reports and information in this Oversight Report are not consistently made available on the many communications platform and vehicle they currently use to share information with the public that includes the broader public as well as the living in the vicinity.

### **Commentary and Analysis on section 3 – Nuclear Power plant and Waste Management Facility Safety Performance and Regulatory Development**

#### **3.1 Darlington Site**

There are a number of observations from this writer both positive and negative in relation to the information in Section 3 on this site.

- (1) The overall rating for Darlington and Tritium Removal Facility (TRF) and Darlington Waste Management Facility (DWMF) was “fully satisfactory”.

In terms of what fully satisfactory means and how that rating was determined, this writer carefully reviewed rating definitions and methodology on B1 and B in the report.

Fully satisfactory as defined is the kind of rating that one would like to see at all nuclear sites covering the classifications within the safety and control area as described in B3 SCA ratings for NPPs on page 252.

Such fully satisfactory ratings for all sites in all rating criteria are not realistic reading the definition of fully satisfactory is very reassuring especially for those living in close vicinity as well as the regional area of this site. Reading the section “safety and control measures implemented by the licensee as highly effective” is most reassuring. The rest of the definition is even more reassuring and comforting “compliance with regulatory requirements fully

satisfactory and compliance within the safety and control area (SCA) or specific areas exceeds requirements and CNSC expectations. Overall compliance is stable or improving, and any problems or issues that arise are promptly addressed. Having four grandchildren and their parents (my son and daughter) living within 150 km of this site is even more reassuring to this writer.

These definitions and the fully satisfactory rating for this facility is the kind of information sharing that needs to be communicated front and center to the public not just in close proximity to this site but the hundreds of thousands people in the greater regional area as well.

If any of these sites were ever related below expectations (BE) or worse unacceptable (UA), I would predict that a good number of the population in the vicinity of such a site would start to experience what the literature refers to as psychosocial health effects. This effect was identified in a public health risk assessment 1999 ordered by the New Brunswick Minister of Health in 1999 as a condition of an environmental impact assessment for the expansion of the largest petroleum refinery in Canada.

The residents who were already fearful and anxious of this operation in their Saint John neighbourhood were even more fearful and upset over the prospect of a 320,000 bpd petroleum refinery so close to where they lived. Many residents with existing emotional and psychological vulnerabilities and mental health conditions use suffering from the psychosocial health effects froth expansion of this petroleum refinery. For additional information on this topic in that report, please refer to page 143-146, in that risk assessment.

One of the most effective ways to mitigate such psycho social effects is to have effective public engagement and information activities to help the people living in the vicinity ameliorate such fears and anxieties. This was demonstrated and documented in the Irving Oil Refinery Expansion PHRA report of 1999. The section in that report describes such activities. This writer has observed first hand living near the Irving facility that the psycho social health effects have been greatly intensified as a result of a serious fire and explosion at this facility on October 6, 2018 (see media reports for reference).

### **Comment on 3.1.15 Other Matters of Regulatory Interest**

Considering how important it is to the public for various reasons, this section was short on details and specific content descriptors. This part of the report acknowledges that OPG met the applicable regulatory requirements related to public information and disclosure. Information noted in this report was used on the stations of Darlington site through a variety of communication activities including participation in community event facility tours, ongoing website updates, and use of social media.

This writer reviewed those formats and concluded that a lot of important information in Section 3 on this site did not find its way into their communication formats. There needs to be an indicator of regulatory kind of information versus non regulatory kind of information from Section 3 in their information activities.

OPG continued regular communications on the progress of the refurbishment project is noted both with indigenous communities and residents and stakeholders.

### **3.1.0 Introduction**

Several of those nuclear generating stations site are adjacent to shore lines such as Darlington facility located on the north shore of Lake Ontario. This writer was looking for information in this specific report on climate change impacts such as sea level rise, intense weather events such as we saw with hurricane Florence and Typhoons in the Philippines. Climate changes actions and adaptations plans needed more attention and focus in this report. If there are such adaptation plans being planned, the public needs to learn of them. It is noted that CNSC through its IEMP program analyzed the 2017 sampling results from the Darlington nuclear generating station site. The results on the CNSC website confirm that the public and the environment around this site are protected and that there are no expected health impacts. But where is the information and on the potential and real climate change impacts such as intense weather events and sea level rise. The latter being a real concern at the PLNGS as it is so close to the Bay of Fundy a tidal area..

This writer then read Section 3.1.9 environmental protection to see if this report covered anything on climate change impact. This subject was not mentioned in Section 3.19. This report focus was on airborne and waterborne radiological releases from the Darlington site and confirmed that they remained below regulatory limits and action levels which is most reassuring.

Climate change impacts cannot be left out of environmental file equations. This Oversight Report in the future needs to cover impacts and what steps are being taken to protect these facilities.

**Comment on Darlington waste management facility Page 85.**

This writer and I suspect others in the vicinity would be concerned with the statement. CNSC staff concluded that the interface between OPG and its contractors at the DWMF did not meet the applicable regulatory requirements in 2017.

Unless one spent many hours reading carefully this report, this information would not be communicated to the people in the vicinity through regular communication activities apart from disclosure requests. Like most of the facilities there is a lot of information in this report card not normally found in participation in community events, facility tours, website updates and newsletters. More of the information in this report has to be shared with the public not to alarm them as that is not responsible to keep them informed.

In respect to Darlington Section 3.1.1 Operating Performance:Very positive conclusion in the statement.

“CNSC staff concluded that operating performance SCA at the Darlington site met or exceeded performance objectives and applicable regulatory requirements”. These kinds of findings by the regulator are important for the public to see in the various communication programs.

Equally as noteworthy under section 3.14 safety analysis is the CNSC staff concluded that the safety analysis SCA at the Darlington site met or exceeded performance objectives and applicable regulatory requirements. As a result the DNGS and the DWMF received “fully satisfactory rating”. This is what provides the communities with the kind of confidence and comfort they need about the safety of this and other facilities.

**Comments on 2.10 and 3.1.10**

This writer has been carefully following how Point Lepreau Nuclear Generating Station has been handling their emergency response plans and emergency preparedness program in partnership with the New Brunswick Emergency Measures Organizations (NBEMO) and the Saint John Fire



Department as well as the local fire service close to the facility. Over the last 18 months, PLNGS has enhanced its response and in my view has demonstrated exceptional capacity as evidence in the LNGS Emergency Response Plan document.

This writer requested this plan and it was promptly disclosed and delivered to me. The public information communications in this important area should serve as a model of excellence to all other licensees who have regulatory responsibilities in this critically important area. One of the many strengths in the PLNGS is the strong and effective relationship with both the PLNGS as well as the surrounding communities in the vicinity.

In preparing this submission, this writer has tried a zero in on these emergency management areas in response to how all the licensees have carried out the public information side of these responsibilities.

Now in respect to DNGS's emergency management and fire protection, the eight sentence content from CNSC on this subject in section 3.1.10 page 104 is very limiting considering the size of this nuclear site this writer would have welcomed more information such as in an appendix or web links so the public could learn more especially evacuation plans and process in the event of a severe accident or radiation release. In reviewing the public communication tools used by DNGS, this writer could not find very much on emergency management activities or emergency response plans. This writer played the video on DNGS describing the facility itself. On that main web page, there was an excellent video , 3Cs n safety features of nuclear plants/reactors but no information on the emergency response plans/evacuation actions should a severe nuclear event occur. This writer does acknowledge the information from Ontario EMO agency in respect to EMO interventions in at this and other OPG plants.

### **Section 3.1.10 Page 104**

Perhaps the key message is contained in the sentence "CNSC staff determined (no details on how) that OPG continued to maintain comprehensive conventional, nuclear and fire emergency response capabilities at all times for the Darlington site that met the applicable regulatory requirements".

Although there is information on nuclear emergency preparedness and responses described on page 105 in the CNSC report, I question how much of this important information is communicated to the public by the DNGS in its own communication activities including participation in community events, facility tours, ongoing website updates and social media, newsletters. I concluded not enough and in fact may not have been adequate for those people living near their facility.

### **Section 3.1.10 Emergency Management and Fire Protection**

An area covered in this report (Section 2.10 and specific sections for all NPP and WMF's sections is emergency management and fire protection for those people living in the vicinity of these facilities, including the Emergency Evacuation Zones. The emergency response plan and emergency preparedness program are critically important of all areas that require quality public information communications to be timely, current and effective this is one of the most important.

# Part B

## **Gordon Dalzell's Comments on Public Information and Disclosure Program Activities**



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## **1. Bruce A & Bruce B**

Bruce A and Bruce B Nuclear Generating Stations keep the public informed and engaged through a variety of communication activities. During its ten-year license renewal applications period, Bruce Power proactively engaged with community members through various community meetings, open houses, social media and advertising campaigns.

### **Section 3.4.15 – Other Matters of Regulatory Interest**

This section does not specify whether these activities were any different from those who live near the site from those who were targeted to the general public at large. There should be special attention on information formats for those who live in the vicinity.

### **Public Information and Disclosure**

As noted in my comments, on this subject for Darlington site, OPG has its policy protocol link posted on the website for each of its nuclear site. This protocol is clearly in compliance with regulatory requirements in CNSC RD/GD – 99.3 – Public Information and Disclosure Program.

This licensee provides an immense amount of information on the status of their facilities through a variety of communication activities. It needs to be pointed out that a good deal of it falls outside the regulatory requirements that have the safety focus.

Here are some examples that this writer reviewed on the web pages located when Bruce Power was the subject of a web search under this subject area of the public information content. When reviewing the public information for Bruce A and Bruce B, it was guided by the two key words in the regulatory requirements for public information, they are the type of information and how that information will be disclosed.

The easy one to determine is the how aspect. As noted in Section 2.15 Other Matters of Regulatory Interest, Bruce Power/OPG utilizes a wide range of communication activities as one would expect in our information age including information sessions, facility tours, participation in community events, newsletters, ongoing website updates, use of social media and other means.

This writer was pleased to see in 3.5.15, that Bruce Power (OPG) continued regular communications on WWMF to engage and inform residents and stakeholders as opposed to including them in the information to the general public. Those living close to this and other sites need special attention with proactive communications, strategies targeted to keep them informed, especially those within the 10km to 30 km zones in close vicinity of those facilities. Residents need this kind of attention and information to reduce any psychosocial health effects they could be experiencing by virtue of the fact that they live in vicinity of these very large nuclear facilities.

On page 75, section 2.15, on Public Information Programs, - this section reference to the type of information that will be shared with the general public but does not distinguish or identify residents nearby in the vicinity of this and other sites as does the regulatory policy requirements.

Bruce Power A and B, do spell out residents in its communication activities clearly and also include the general public. I would like to see future oversight reports make the distinction and identify ways and means they communicate and engage with those people and residents who live close to their facility.

The following information material was reviewed on the Bruce Power and OPG's main website.

- Emergency Preparedness at Bruce Power
- Many other information topics including Post-Secondary Scholarship Program, Environment and Sustainability, Community Policies Guides

This messaging under their values identifies Safety First as values they value and practice listing important safety issues. Good to see such important information on their web site. This is the kind of information that meets public expectations in this writer's view.

The only point of observation is there is no distinction to clarify what is mean as to general public in the community at large or residents / people living close by their site. Question is there any need to do so? I would submit these is need to design and target information on safety and security to those who live close by within 10 to 30 km zones. This custom made approach is utilized at PLNGS for the 3100 people in those zones for community members who live close by as they have unique information needs. Emergency Response Preparedness an Evacuation Information is such information for those who live close by the sites.

There needs to be special attention given to these people who after all could be the ones significantly impact if something goes wrong.

### **Investing in Our Communities**

Recognizing the impacts in Bruce Grey and Huron Counties close to their site – they offer a wide range of community based initiatives including “our safety and environment initiatives”. One conclusion is clear to this writer; it is the level of financial resources available by Bruce Power to allow them to be so generous to reach out to the needs of the communities within those counties noted. It is impressive. Some of the examples:

- Post-secondary scholarship
- Community Investment and Sponsorship
- Physician Recruitment – Bruce Power partners with municipalities to improve health care
- Bruce Power Community Program
- Others

They are truly impressive and so generous. They are to be commended for their generosity. The question for those going through all this information is how relevant is this kind of information for those who live within those regulatory zones.

I was looking to see if these non regulatory required programs were over shadowing the key important sharing topic findings in CNSC RD/GD 99.3. I am happy to observe that this does not seem to be the case. The only suggestion I would offer is to have the safety information topics first where everyone can see them upon hitting the main web page. One can be overwhelmed with all the other information. One message I was pleased to see under “Bruce Power’s

Community Program website was the recognition that the public awareness of the Fukushima whether relate severe accident event or even could occur at this site.

The statement is “Our Emergency Preparedness program has taken great strides since the devastating tsunami caused a nuclear accident at Fukushima, Japan in 2011. Learn more how we have enhanced an area that was already strength for the company”. This messaging with information responds to the public who do worry about such a nuclear accident. Having the program reference “Emergency Preparedness at Bruce Power – although highly unlikely – Bruce Power is prepared all types of incidents, this is the kind of information that I would expect to see.

Newsletter – September 12, 2018 reviewed with Community News and Events. At the end the “contact us for information was all there along with social media, Facebook, Twitter, email, link in Instagram. It makes it easier to communicate with this licensee for those community members who use various social media platform. Messages about Bruce Power signed off by Michael W. Rencheck, President and Chief Executive Officer gives the message accountability as well.



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## 2. Darlington Nuclear Generating Station

### Section 3.4.15 – Other Matters of Regulatory Interest

The report state the following: CNSC staff determined that OPG met the applicable regulatory requirements related to public information and disclosure and provided sufficient information on the Darlington site through a variety of communications activities including: participation in community events, facility tours, ongoing website updates and the use of social media.

Further their public information program states in the Oversight Report:

“OPG continued regular communications about the Darlington site to engage and inform residents and stakeholders about the facility and, in particular, on the progress of the refurbishment project.”

This licensee certainly met the regulatory requirement in my opinion. These are the various activities and tools used to communicate with people both near their site as well as to the greater community:

- Darlington Nuclear Community Advisory Council – their terms of reference states “In order to take a broad approach to community consultation, DNGS decided in 2010 to develop and implement a wide-ranging community consultation and communication program.

Main Contact Number OPG 905 623 6670 – Voice activated # information center. I left a voice mail message requesting that they return my call seeking information on the public information disclosure activities –This writer received a call back a few days later and had the opportunity to discuss in further details their public information engagement program.

- Website Link – Clarington, Darlington, Nuclear in the community. The website states “Darlington Nuclear strives to make a difference and help improve the wellbeing of the communities that hots it operations.

We believe this is essential to being a good corporate citizen and neighbour. Darlington Nuclear through its Corporate Citizen Program provides (charitable not for profit), support to over 150 grass roots community initiatives on average annually in Clarington and Oshawa. Darlington

Nuclear community partnerships focus on the areas of Environment, Education and Community (health and safety, arts, culture, youth, amateur sport, humanitarian and local causes) as well as support to indigenous initiatives.

Additionally – a Fall Newsletter was posted on their web page for easy access. There was one page article titled: Rebuild of Darlington’s Unit 2 now underway (page 3 of a 12 page publication).

A concise update was provided. There were no references to any safety issues. The purpose was to educate the public on the project progress, OPG will hold an open house at the Darlington Energy Complex on October 27, 2018. Visitors will have the opportunity to learn more about the refurbishment and meet skilled professional behind the project.

When searching for Darlington Nuclear Generating Station on the internet, Ontario Power Generating (OPG) with Darlington link populated. Video on main page “Welcome to Darlington Nuclear”. This writer reviewed the video, which was an excellent public information tool with an excellent overview. There was also a video on nuclear safety from the CNSC on the 3 C (Control, Cool, Contain) of safety.

This also was very informative and reassuring I expect to those who live near this site. Below this title, several safety related links populated.

- Darlington Performance Report 2018
- Darlington Risk Assessment Summary Report
- Darlington Refurbishment Report

This writer while reviewing the online references and links to the subject public information came across the links from the OPG titled: “Nuclear Public Information and Disclosure and Transparency Protocol”. Again this was under the search title Darlington Nuclear Power Station. The Ontario Power Generation document states “OPG’s Darlington Police ensures public communications are informative, timely, accurate and material information is disclosed in accordance with applicable legal and regulatory requirements”. The Point Lepreau and other sites also provide these regulatory references on the policies for public information and disclosure.

I was pleased to see their policy state “The public information will provide information health, safety and security of persons and the environment and ensure issues associated with the Station’s licensed operations and activities are communicated”. This is what I would want to see in such information disclosure policy that is based on CNSC’s regulatory requirements as referred about RDGD-99.3. In OPG’s public communication regarding their public information disclosure policy clearly is consistent with CNSC’s regulation on this topic.

There is a strong effort to ensure the safety information receives top attention and does not get missed from all the other public information activities that they are engaged in throughout the surrounding communities.

This information on the OPG website applies to all their nuclear sites. It presents when you reference each one of their nuclear facilities.

In respect to Darlington Nuclear Community Council 4.0 Role of Darlington Nuclear, there is no specific information of safety other than providing information on agenda topics in a timely manner. If safety issues are placed on the agenda, they would be expected to discuss and provide information. It would be suggested that with all these community liaison committees fixed topic of safety update be part of the agenda. Some facilities put their minutes of these meetings on their websites but not all. This needs to be a standard practice in this writer’s view.

### **Darlington Site Public Information Activities Facebook Site**

This facility has its own Facebook page/site. This written visited the site and listened to two videos “Welcome to Darlington Nuclear Generating Station Site and the other from CNSC titled Nuclear Power Plant Safety Systems which by the way was excellent. There was a web link on Facebook that did not activate (3800 hits made to this site).

There is a main number: (905) 623 6670 Public Affairs Darlington Visitor Center - Information Center. This writer placed a call and left a voice message to have someone call me back. This writer received a call back a few days later and had the opportunity to discuss in further details their public information engagement program.

## **Additional information on Darlington and Pickering Facilities**

### **Open Houses**

This writer discussed further the public information and engagement program with Communication Manager at OPG – Nuclear Division.

Both Darlington and Pickering have extensively over the years utilized the open houses and information sessions as part of their community engagement activities (re refurbishment and relicensing)

For these open house formats they have used both the traditional open house format that include the public to go around and speak with company officials on a one on one basis discussing and asking their questions and collecting some information pamphlet at each booths. These kinds of format did not include an overall presentation or a public Q & A.

The other format used was a combination of the traditional open house describe about with an additional feature including formal presentation and public Q & A. This more formal format resulted in a decrease in the attendance in the Pickering event compare to the one-on-one format.

Both these sites have used both formats. At one event, 3000 people attended using the traditional format at the Pickering site, while less attendance was reported using the more formal presentation format resulted in less attendance.

It is important to note that questions and answers raised during these open houses were made available on their website which is part of the EIA process.

### **Newsletter**

The OPG official noted that in their newsletter they also profiled one CNSC site inspector. In the PLGS Newsletter (Summer 2018), there was a more comprehensive article highlighting the entire CNSC roles, responsibilities and the on-site interface with the Station. This latter newsletter paints a bigger picture of the overall role of the CNSC at nuclear facilities. The OPG newsletter is available in hard copies and online. Copies are made available to the local library.

Both Darlington and Pickering organizations ensure that pertinent information reaches those who live close to their communities (within the 10 km zones).

The point was made, that the closer people are to these site, there is a greater area of interest and attendance.

I was advised that Pickering and Darlington staff are constantly exploring new and innovative ways to communicate with the public on their operation activities with a high focus on safety. Both these sites have a speaker program where representatives speak to service club including Lions, Rotary etc.

### **Emergency Management**

It is my observation that the relationship between Pickering and Darlington depend very strongly on the Provincial EMO. It appears, with my experience with the PLNGS Station there seems to have a more engaged custom made individualized program to respond to the specialized need of their own community. As an example, the PLNGS utilizes the call out and in addition also had a Warden Program – who goes door to door to alert the household if required. It needs to be painted out that both these sites also utilize a call out communication method but these sites do not have Wardens in place.

If my comments on the Emergency Management relationship and activities at Darlington and Pickering are not accurate, I stand to be corrected. Perhaps CNSC can elaborate on the relationship between the Provincial EMO and site Emergency Management.

Pickering and Darlington as well as Point Lepreau also meet and present updates to their respective Mayors and Councils.

### **Trail Program at OPG**

This engagement activity allows the public to enjoy the natural setting around their nuclear sites. Another public engagement initiative includes having officials from both Darlington and OPG sitting on various community board and committee.

The writer was informed that both Darlington and Pickering have made available, “thousands of documents” over the years. This writer questioned earlier that some of these nuclear facilities are so involved in so many and varied kind of engagement activities that are not required under regulatory requirements. This writer has learned through this review, that several of these nuclear facilities are often the largest employer t in those communities making very signification contributions economically and socially. They recognize their contributions and consequently want to be involved and do respond to various needs of those communities. Within this context, this reviewer now understand why so much of those non-safety related activities are feature in their various communication platform including website, media releases, newsletters etc. The generosity and support from these nuclear facilities is truly impressive. The only recommendation I would suggest, is that they are presented in such a way so as not overshadow or diminish the required regulatory information that the public needs such as emergency preparedness and nuclear safety. This is what is ultimately important to the public.

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### 3. Hydro Québec – Gentilly -2

This writer could not locate much in terms of site specific communication activities such as participation in community events, ongoing website updates, information sessions, tours, community liaison meetings, newsletters etc. The fact that this facility was shutdown permanently in 2012 and completely defueled by September 2013 may obviously be the reason there may not be the active public information and ongoing engagement activities found in the other sites as documented in this Oversight Report.

This writer attempted to locate references of public information and disclosure programs. These searches for Gentilly-2 reverted to Hydro Québec websites with links to the decommissioning licence for this facility. This raises the question in this writer's mind as to why isn't there more site specific public information communication activities even if this site in in decommissioning status. It is acknowledge that as part of Hydro Québec' Indigenous engagement program, there is a public information program.

Section 3.6.15 Page 235 to 236, states Hydro Québec submits a paper copy of their environmental monitoring report for Gentilly-2 to several indigenous Grand Councils. This appears to be a minimal communication activity compared to the other sites. Another report is required to be submitted to CNSC annually summarizing all events and developments occurring at the Gentilly-2 site on a yearly basis.

Considering there is extensive information of public interest in Oversight Report – Page 221-236 related safety matters, this writer questions whether the current public information engagement activities are adequate notwithstanding the decommission status.

I referred to the “Record of Decision on the matter of Hydro Québec application for Nuclear Power Reactor Decommissioning Licence for Gentilly – 2. I received 3.16 Page 31- Members of the public, aboriginal groups and other stakeholders received participant funding to assist them in reviewing Hydro Québec application for decommissioning.

There were extensive consultation with Aboriginal groups and requests to be kept informed raised by these group(s) # 158. Public Information Program Page 160-163, particularly the number of conditions on page 160 causes this writer to be concerned that there may not be sufficient ongoing public information and engagement activities apart from Hydro Québec submitting a paper copy of its environmental monitoring report for Gentilly-2 to these Aboriginal groups cited in 3.6.15. It is recognized that this communication method may be all that was requested by the aboriginal groups referenced.

This writer was pleased to see condition 161 in the record of decision that the Commission encourage Hydro Québec to continue communication and public education activities to meet the decommissioning activities information needs. Section 3.6.15 in the Oversight Report does not describe those continuing activities other than the license providing an annual environmental monitoring report. It is noted that Hydro Québec submitted the 2017 in 2018 and CNSC staff are reviewing this submission. As part of this public review, an update would be interested and requested.

In respect to other information methods utilized by Hydro Québec there are a good number of reports from various sources on the Hydro Québec website under Gentilly-2 – all of which provides valuable information for the public. They include and are titled:

1. Gentilly-2 Nuclear Generating Station / SNC Lavalin
2. Canadian Nuclear Safety Commission Gentilly-12 Nuclear Facility with multiple links including Record of Decision – Licence for Decommissioning
3. Hydro Québec – Decommissioning of Gentilly-2 facilities



4. CNA Canadian Nuclear Association – What is new – Closure of Gentilly-2 Nuclear Generating Station  
CBC Report – Québec to shut down its only nuclear reactor
5. Hydro Québec Management of Solid Radioactive Waste and Spent Fuel
6. CNSC document titles independent environmental monitoring program: Gentilly-2 Nuclear Facility

All of the above provide more of a past focus on the facility as opposed to current update on going progress reports as we read in the oversight report.

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## 4. Pickering Nuclear Generating Nuclear Generating Station

### Section 3.4.15 – Other Matters of Regulatory Interest

This part of my submission continues to focus on how this licensee has engaged with and informed the community members who live close to their site. The following are some of the activities utilized:

1. Pickering Nuclear Generating Station (PNGS) Advisory Council. This writer reviewed a sample set of minutes that came up on their website. A highlight was an update on the Station safety performance. CNSC annual report 2015-16 (reported in the minutes) that PNGS safety performance was rated fully satisfactory across all 18 categories.
2. PNGS main webpage – the first subtitle include the topic.

Web Page - Safety at Pickering: it shows that in 2017, CNSC awarded OPG's Pickering and Darlington's station its highest safety rating. Drop down is a media release in the new section from News from Ontario Power Generating Station Advising the public of this highest safety rating. The first few web screens for PNGS led to Ontario Power Generation Nuclear Safety with five safety related safety topics including safety, radiation safety, and security.

### Regulatory Oversight, Fukushima Daiichi

Further within the few screen links is another important topic of public interest.

Emergency Awareness kit that was mailed to all residents and business within 10 km radius of DNGS and PNGS. This is an excellent communication tool with practical recommendations for the public to use in case of a nuclear event impacting the public who live close to the site. This is a communication/information tool that all the nuclear sites could provide to the people living close to the facilities.

This writer did not see the CNSC's actual link to the full Regulatory Oversight Report for Canadian Nuclear Generating Station sites: 2017 on this main web page

I did see reference to this report on Bruce and NB Power. I believe it would have been in the public interest to have such a link for those who want to compare this site with other ones. At the minimum, the section 3.2. P 111 to 146 covering Pickering site should have had a link to the

report. I would recommend the CNSC require all the sites to make their own oversight sections available so the public can easily access the safety rating information. A summary as well would be helpful. A web search for Pickering Nuclear Power Generating Station Community Outreach program activities leads one to Pickering Nuclear Advisory Council Minutes September 2016. A dedicated web link page for all the minutes would be a good idea to permit the people living close by to get current up to date information. No doubt there is a fixed site for all the minutes but it did not automatically link to it under the search topic cited above.

During the information search on this Pickering site, the Ontario Provincial Nuclear Emergency Response Plan for the Pickering Nuclear Generating station dated 2009 comes up. The most current version needs to be posted. Outdated versions need to be available in a separate archive link. I urge the CNSC to compare this document with the Point Lepreau Nuclear Generating Station's dated August 2018. It was prepared by the New Brunswick Department of Justice and Public Safety – NBEMO. It is my understanding that the Province of Ontario EMO only updated its Emergency Response Plan for nuclear facilities last year and further it had been ten years since such an update was completed.

The source of my information was from NB EMO official during a public information session in St. George, NB in August during the presentation on evacuation procedures' exercises. If my information is incorrect, it needs to be corrected and confirmed. Any new updated Provincial Nuclear Emergency Response Plan needs to be posted on all the licensees's main web page

### **Pickering Community Information Session**

This information activity is described on the home page of OPG. It takes you to the Pickering Community Information Session where OPG hosted a series of community sessions in Scarborough and Pickering. OPG holds these sessions annually each fall to share information on the Operations at Pickering Nuclear and to answer questions.

Summary of various presentations were linked in PDF files attached. This is an excellent public information tool for the public including those who live close to the sites. It needs to be standard practice for all the licensees.

I would recommend all the licensees to adopt these community information sessions format. Best time to hold these is the fall after the CNSC releases its Annual Oversight Report. I really like this information sharing tool especially when officials make presentations including PowerPoint slides to allow the public and media to listen to the presentations then be available for a questions and answer session.

It is unclear if this is the format or whether these officials present their information on a one on one basis similar to the open house format where no one else get to hear the question or answers except that one person who approaches the official. This latter format is not transparent enough for the public at large.

In respect to open house format after used by licensee's , I would recommend two parts format, public presentation to the people let's say 6:00 PM with informal one on one dialogue and questions with experts available. Many citizens are more comfortable with one on one set up.

All presentation materials, handouts, PowerPoint presentations need to be placed on their websites to accommodate the many people who could not attend the information sessions.

## **Pickering Nuclear Community Advisor Council Terms of Reference**

Further comment: Excellent approach noted:

“The work of the CAC will be of interest and will be open to the public”. The public is given an opportunity to make comments during a specified period on the agenda. Again this type of openness and transparency needs to be the standard used for these meetings.

This writer note that not all such committees give the public an opportunity to participate. Point Lepreau unfortunately is the one that comes to mind in fact their minutes are currently not posted on their website. Pickering Nuclear posts their minutes to their credit.

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## 5. Point Lepreau Nuclear Generating Station

This section will focus on how this licensee has engaged with and informed the community members who live close to their site as well as with the public within the region and province.

This writer is reasonably familiar with their public information, disclosure and engagement activities and methods. This writer lives about 60 km from this nuclear site. Media coverage about Point Lepreau is frequently available usually generated from their media releases during the refurbishment period with their past related challenges. Communications with the public was extensive and still to this day is. Additionally, this writer was an intervenor at the re-licencing public review as well as for the review of the Solid Waste Management Storage Facility several years ago. In my submission where I reviewed the findings in the Oversight Report for PLNGS, I provided a good deal of comment and observations on their Public Information and Disclosure Program activities and methods under the heading of other matters of Regulatory interest (Section 3.3.15 – Page 169). Please refer to those comments as part of this submission on this topic.

PLNGS has its policy protocol link posted on their website. This protocol is clearly in compliance with regulatory requirements in CNSC RD/GD – 99.3 – Public Information and Disclosure Program

Based on my direct experience and observations, this licensee has done an outstanding job in this area. In my view “fully satisfactory” would be the rating I would assign to PLNGS. Their programs are highly effective. They exceed requirements and public expectations. No effort; however, is perfect and there are some suggestions such as posting the community relations liaison committee minutes on their website. I should point that they are available upon request under the disclosure program.

Posting relevant reports on a Twitter Account would also result in wider circulation throughout the community at large, people retweeting such information to others in their community.

Here is a list of a number of their public information and engagement activities:

1. PLNGS Community Relations Liaison Committees / Minutes – I reviewed the August and October 2017 Minutes. There are standard agenda topics such including station update, environment, security & emergency services, radiation protection, regulatory, upcoming activities, community update and community engagement (which outlines all the various activities the licensee engages with the community).

One of the fixed topics includes safety message. Under station update they start their meeting with a safety message as well as including a Station Safety Update. The format of this communication tool covers issues of safety which is very important to community members who live near the site.

Many community members are from the immediate area of this facility. They benefit from these updates such as safety. Unfortunately since the minutes are not on their website, the rest of the public outside the area cannot access these important messages on safety and security unless they request a copy of the documentation.

I support this licensee and all these facilities establishing Community Relations Liaison Committees that include on the agenda under Station Update a safety report update as part of the meeting format. Additionally, minutes posted on their web sites is recommended for this facility.

2. Newsletter – Online and hard copy available. This newsletter (Summer 2018) is excellent. One feature worth mentioning is the through article titles “Safety and Sound – Canada’s Nuclear safety regulatory is on the job at Lepreau”. It profiles the CNSC permanent inspection team. This was very informative and reassuring to read.

All the licensees, if they do not already cover this information, need to so to allow the public near their facility to be reassured and learn how the CNSC (the Federal Safety Regulator) ensures regulatory oversight of these sites. This kind of information needs to be regular information subject in their public communication strategy.

Please refer to my earlier comments under Section 3.3 – Point Lepreau for additional comments.

### **Communications on Emergency Response Plans**

This writer requested a copy of the Point Lepreau Nuclear Response Plan. The emergency program at PLNGS has been governed by two principle plans: the onsite plan and the offsite plan

which is a Government of New Brunswick EMO document. This document was quickly made available in response to this community member's request. During the relicensing review and hearing, this writer was very impressed with the quick responses to this writer's request for documents.

Prior to the relicensing in January 2017 an open house was held where PLNGS staff were made available to this writer to respond to this writer's questions leading up to the relicensing hearing. The disclosure responses have been consistently strong and effective from this writer's experience. Two recent requests in July/August resulted in a quick turnaround time. One resulted in three professional staff being made available to discuss and answer this writer. Another disclosure and information sharing took place in mid July 2018, when an information sharing took place in mid-July 2018 when an information session was arranged to respond to many issues I raised during my intervener involvement during the relicensing hearing process.

I can only speak from my experience with this licensee but if other licensees are looking for the gold standard for public information / engagement activities, I would recommend they test their efforts against the PLNGS. The CNSC when examining this area with other facilities would be well served to carefully examine their program activities in comparison to the other sites with special attention to Emergency Response Plans information sharing programs to help the people in the area updated. This licensee's community engagement is worthy of attention. These activities include:

Press / media releases such as one issued in August 2018" Full scale Nuclear Emergency Exercise planned for October 2018, social media information, articles in the "From the Point Newsletters" leading to the exercises, the media information sessions, as well as the Open House. (Refer to Telegraph journal and other media articles). Expand the PLNGS Newsletter in hard format copies to the wider community. Certainly it gets wide circulation to those community members living near the facility (20 to 30 km). People in the city of Saint John and regional area would welcome the information contained in this Newsletter.

Once characteristic for the PLNGS's engagement effort is the degree of caring and thoughtful ways the staff in particular the Community Relations Unit carry out their responsibilities to keep



those living nearby informed and engaged. One example is for the Manager of this unit going down to the Dipper Harbour fish wharf to meet with the local fishers in that community near the PLNGS. Other examples include meeting and engaging with Indigenous people and stakeholders to provide information on Station operations and efforts to keep us all safe. These efforts need to be recognized by CNSC not only for this licensee but for others as well who carry out their community engagement activities.

It is clear that these licensees provide thousands of hours in their communities. It was impossible to document all the thousands of community engagement activities from all these licensees. This writer would like to see each facility prepare a master list on a dedicated web page of all those community involvement so the greater community can see in detail what they do for their communities.

In respect to PLNG Public Information Program, this licensee has an additional legal responsibility in New Brunswick, Canada only official bilingual province. It is to ensure that their communication to the public is made available in French as well (New Brunswick other official language). This additional requirement is required to comply with the New Brunswick Official Language Act. I was surprised to see that the posted Oversight Report for public comments on the CNSC website was available in English only which has the potential to restrict participation by francophone citizens.

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## **6. Western Waste Management Facility RWOS-1**

It is noted these facilities are located at the site of Bruce A and Bruce B Nuclear Generating Stations. The oversight report states “The CNSC regulates these facilities under separate license. These facilities are owned and opened by Ontario Power Generation as they do for Bruce A and Bruce B under separate license.

Therefore, some of my comments, observations regarding the public information and engagement programs were covered previous commentary on these programs under Bruce A and Bruce B. Additionally, this writer reviewed the section 3.50 and 3.5.13. and provided my analysis and comments on WWMF and RWOS-1 under separate heading above.

Based on my research on Bruce A and Bruce B’s public information programs, I am satisfied that OPG continued regular communications on the WWMF to engage and inform residents and stakeholders on these facilities. I am concur as stated in 3.5.15 CNSC staff determined that OPG met the applicable regulatory requirements related to public information and disclosure through a variety of communication activities including information sessions, facility tours, participation in community events, newsletters, ongoing website updates and use of social media.

# Part C

## **Mr. Gordon W. Dalzell's Conclusion and Recommendations**



## **Mr. Gordon W. Dalzell's Conclusion and Recommendations**

As a community member who lives relatively near a nuclear facility (60 km) for as well as several other large complex industrial facilities within the region; I and a thousands of other residents, I suspect, recognize that things could potentially go wrong if a severe accident were to occur in one of these facilities including at the Point Lepreau Nuclear Generating Station. This writer was directly impacted by such an industrial facility on October 7, 2018 when there was a serious fire and explosion at the largest oil refinery in Canada.

This writer and family live in the close proximity to their facility and experienced first-hand the psychosocial impacts of such a severe accident. Please refer to this writer's public comments as it reported in the media (CBC radio information morning

<https://www.cbc.ca/listen/shows/information-morning-saint-john/segment/15612023>

, Global News Saint John, CTV Atlantic, CBC the National.) We know how serious and potentially catastrophic the results could be. A couple of examples would be the Fukushima Daiichi event in Japan several years ago as well as the Three-Mile Island nuclear events.

Despite lessons learned that were subject to regulatory oversight and recommendations by CNSC; citizens like this writer and whose live close to a nuclear site worry and feel apprehensive as to whether one of these facilities in Canada could experience one of these catastrophic accidents occurring near where they reside. These reactions referred to as psychosocial impacts are implied to arise from the fear, worry, anger, anxiety and stress at the individual level that for many can have an impact on their mental/emotional wellbeing from such accident events-

<https://www.cbc.ca/listen/shows/information-morning-saint-john/segment/15612023>. Clearly some citizens who are vulnerable or experience mental health issues are more to be impacted.

This writer as a professionally trained social worker and community involved person has observed these psychosocial impacts of individuals living near these large complex industrial facilities. Some examples are Canaport LNG complex, the Irving Oil Refinery expansion, Emera natural gas pipeline, the proposed shale gas development in New Brunswick and just living close to a nuclear generating station and storage facility.

The research on psychosocial impacts have been defined in the literature as “the complex of dysfunction, distress and disability which are manifested by a wide range of social, psychological and behavioral outcomes in individuals, groups or communities as a consequence of actual or perceived environmental contaminations”. (Taylor et al 1997)

This phenomena was identified in the 1999 Public Health Risk Assessment prepared by Cantox Environmental as part of a EIA condition required by the New Brunswick Minister of Health as part of the Irving Oil Refinery Expansion Project at that time(1999).

Details on this psychosocial health effects are found in Section 6.3.1 Pages 142-144 for reference. From my experience and observations over the years and supported by the research, one of the most effective ways to mitigate such psychosocial impacts is to provide the community members as a broad and effective information tools and engagement focussed on improving communication exchange information and the development of increase trust and respect between the nuclear facilities, the regulatory and the public living near these sites.

This writer has carefully reviewed the 2017 Regulatory Oversight Report for Canadians Nuclear Power Generating Sites with a focus on how these licensees have engaged with and informed the community members who live close by as well as the public within the wider community itself. In order to do this, this writer spend considerable time reviewing the Oversight Report itself to determine if the findings and information are consistent and is included with the information provided to the public as well as by what means the information is provided in various community engagement activities by the licensees. One of the best ways to mitigate these psychosocial effects is to provide the public with ongoing extensive information and engagement of those complex nuclear facilities.

They are based on a thorough study and analysis of the 2017 Oversight Report with the focus on how the licensees have engaged with and informed the community members who live close to their nuclear sites; as well as my experience and knowledge on the best ways to mitigate psychosocial impacts. This is based on extensive first-hand experience and involvement with various industrial facilities. My involvement with PLNGS is from being an intervenor and an interested stakeholder.

I have concluded that the licensees have demonstrated effective information and engagement activities that are essential in mitigating those real and potential psychosocial effects on their health and wellbeing of the people who live by these facilities as well as the general public. The CNSC in its regulatory role shares this conclusion.

The role, involvement of the CNSC within its regulatory mandate including publishing these yearly Oversight Reports also significantly adds to the important information needs the public require to assure them that those sites are indeed safe. Ideally, it would be reassuring if they all had fully satisfactory safety rating.

With that in mind, this writer respectfully makes the following recommendations.

Please note that there are a number of them that are included in the body of my submission. Please refer to those as well. Priority needs to be given by the licensees apart from all the other information and engagement activities provided as outlined in the CNSC regulation RD/GD 99.3 – Public Information and Disclosure Program. In reviewing these activities and information provided by the licensees, it is overwhelming the amount of information and community engagement activities they are all providing.

There certainly is nothing wrong with that as they all are heavily involved and generously respond to the needs of their communities. They are to be commended for such generosity. I would submit for the public, they want to learn and understand the safety and security assurance of the facilities compared to information on the various sponsorships and community volunteer activities as examples. As important and involved as they are the requirements as the regulations states. The primary goal of the public information program as it relates to the licensed activities, is to assure the information related to the health, safety and security of persons and the environment are effectively communicated to the public. Therefore, the regulatory mandated information needs to be given more prominence front and center if you will. For example, in their information programs and activities, CNSC – the Oversight Report needs to be on the first screen on their web pages. In some cases this was done others it was not found in its entirety but a general summary giving the rating was provided.

Open houses are a common means to communicate information to the public. Open house formats need to include a formal presentation on the subject with a question and answer period for all the community members present. All PowerPoint presentations and Open House information need to be publically available on the licensee's website.

This way all the community members present hear the presentation as well as the questions and answers. The rest of the open house period can be set up for individual to raise their issues and questions can do so on a one on one basis with the subject matter experts. Many people prefer that format but everyone could benefit from a public presentation.

### **Community Liaison Meetings**

As a matter of practice, the minutes need to be posted on the licensee webpage in a dedicated link with past and current copies available. Many of the licensees do this but not all. The one(s) who do not post them on their website do make them available upon request as part of their disclosure protocol.

### **Emergency Response Plan**

As a matter of practice, all Emergency Response Plans both on and off site need to be posted on the main webpage of the facility. In one titled the 2009 Ontario EPP for Nuclear was posted despite being updated in 2017.

In the event of a nuclear incident/accident, CNSC needs to order licensees to accelerate its public information program to help the public handle the event with ongoing current EMO information. Old Emergency Response Plans such as one noted above need to be removed or archived.

It is recommended that communication and engagement practices be improved in the area of emergency preparedness and response to keep those in the vicinity of these sites be better informed so they will know what to expect. This writer raised this issue during the PLNGS relicensing hearing. This facility and its NBEMO partners have done an outstanding job in this area. It is highly recommended that the other nuclear sites review and follow the example both in their emergency response plan and community engagement activities in this area based on the PLNGS efforts.

### **Safety Analysis Review**



This reviewer recommends these safety analysis be completed every 3 years as opposed of 5 years. All these multiple public information programs need to be evaluated in term of their content and capacity to reach both the general public and those who live close to these nuclear sites. An independent communication/media specialist consultant be hired to complete an independent comprehensive evaluation to see if they are meeting the public's needs.

It is recommended that real and potential climate change impacts from intense and severe weather events be directly identified within the Regulatory Oversight Report for Canadian Nuclear Power Generating sites. This writer recognizes that those impacts are often covered in various environmental and problematic assessment analysis but the Oversight Report does not identify these impacts on those facilities. Considering how climate change impacts are to Canadians, this Oversight Report needs to pay more attention to this area.

As far as I determined in reviewing this report, if I missed those references I stand to be corrected. My concern is that some of the sites could be adversely impacted from intense rain events, storm surges, hurricanes is potentially vulnerable for PLNGS which is located close to the shore of the Bay of Fundy. It is recommended that these reports cover this area under the "Physical Design or Safety Analysis" topics and provide the public with information on both the potential impacts and mitigation adaptation steps being taken to protect these complex facilities. More prominent information on climate change intense weather events and adaptation plans would be recommended.

It was noted by this writer that there was little reference to these emergency evacuation zones in the Emergency Management and Fire Protection section. Certainly they are within the emergency response plans themselves but this Oversight Report even in Appendix K – Responsibilities and Details for Nuclear Emergency Preparedness and Response does not spell out how people closed by will be impacted and processed within these 4 km emergency evacuation zones. This kind of direct life affecting on their lives needs to be clearly shared with those within these zones. The same information sharing can be recommended for the provincial emergency measures organization(EMO) who closely partner with these nuclear sites.

It is recommended that a list of all enforcement actions be taken on the licensees be included in a table as part of the information included in the Oversight Reports. This writer did not see such information. The fact that no enforcement actions may have been necessary is equally informative to the public who live close to these sites.

This writer fully concurs with the statement on Page 18. “The licensing process offers significant opportunities for participation of the public and indigenous peoples, including commission hearings which are held in the community and Commission meetings all are open to the general public and webcast live”. It is this kind of engagement and openness that is recommended on an ongoing basis by licensees during those non licensing periods. One can never have too much public information sharing and public engagement activities especially during those periods between licensing public reviews. His comments reflect my view I have held and advocated for years.

This area needs to be given much more attention and current communication strategies need to be greatly enhanced in my view for all the sites. This writer raised this topic during the relicensing hearing for Point Lepreau. The local Fire and EMO officials made excellent points as well. Submissions from the interveners and CNSC Record of Decision are note worthy.

Emergency awareness kits or guide needs to be made available on their websites to those facilities. Community information sessions need to be a standard practice apart from those set up during licensing period or refurbishments. Best time would be in the fall after the CNSC published their Oversight Reports for nuclear facilities.

### **Definitions**

Definitions of the words Satisfactory and Fully Satisfactory – Although they are defined in the report, the public’s understanding of the word “satisfactory” does not illicit a great deal of confidence.

I recommend that a review of the rating classifications for satisfactory and fully satisfactory be considered to provide the public with a better understanding of the rating assigned. Please refer to the submission document for additional recommendations and suggestions. These words and

definitions need a more concrete measurement, more quantitative as opposed to qualitative explanation.

In conclusion, this reviewer spent considerable amount of time reading and commenting on the 2017 Oversight Report to satisfy myself whether the information contained in it was communicated to the public by the CNSC and the licensees in the key messages found in the summary on page 11? Yes it did in respect to assuring the public is safe.

There is; however, a great deal of information determined to be of low safety significance that this writer discovered with all these facilities but in my view of public interest, a lot of it was not included in the various information activities .

The question for those who live closed by these sites, do they need so much of that information found in the Oversight Report? I would conclude they do and therefore it needs to be shared broadly with as many people as possible especially for those living in the vicinity after all it is all about their safety and security. A notice could be sent out to the local community members advising them that the oversight is now available and a link to the report could be provided. For some, a hard copy format is available; please advise us if they wish to obtain a hard copy.