Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

CMD 24-H3.2

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Public Comments on the Request for Confidentiality

Commentaires du public sur la demande de confidentialité

In the Matter of the

Ontario Power Generation Inc.

Application for a licence to construct one BWRX-300 reactor at the Darlington New Nuclear Project Site (DNNP)

Commission Public Hearing
Part-1

October 2, 2024

À l'égard d'

Ontario Power Generation Inc.

Demande visant à construire 1 réacteur BWRX-300 sur le site du projet de nouvelle centrale nucléaire de Darlington (PNCND)

Audience publique de la Commission
Partie-1

2 octobre 2024

Canada

MISSISSAUGAS OF SCUGOG ISLAND
FIRST NATION

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September 24, 2024

To the attention of:

Senior Tribunal Officer
Commission Registry
Canadian Nuclear Safety Commission
Email: interventions@cnsc-ccsn.gc.ca

Re: **Public Inquiry #24-09-055 - Re: Notice of Request for Confidentiality**

On September 6, 2024, the Canadian Nuclear Safety Commission ("**CNSC**") sent a Notice of Request for Confidentiality Public Inquiry #24-09-055 ("**Request**") to a staff member of the Mississaugas of Scugog Island First Nation ("**MSIFN**"). CNSC's submission regarding the Request provided a deadline of September 20, 2024.

As noted in MSIFN's September 18, 2024 request for an extension to make submissions, the addressee of CNSC's original Request email was to an employee of MSIFN who is not involved in this proceeding nor was the person involved in other matters between the CNSC and MSIFN. The Request included hyperlinks to more than 4,100 pages of materials. The Request cited commercial, technical and security as reasons information should be treated confidentially. The Request gave fourteen (14) days to review and submit a response. We are not going to repeat the details of our communication of September 18, 2024 here but rely upon the submissions contained therein as part of these submissions.

To perform a proper review, a person must review the nature of the information and the basis or bases for the claim for confidentiality, item by item, as it may impact the nature of the remedy that the CNSC determines to be appropriate in these circumstances under the Rules, Sub-section 12(3). Given the circumstances, such a review was not able to be performed.

The CNSC is an agent of the Crown and has stated in numerous documents that it is responsible for discharging the Crown's duty to consult and accommodate in respect of decisions that may impact Indigenous rights, including the licencing of projects. This duty was

established in 2004 and is well recognized across Canada.[1] The CNSC's approach is highlighted on its website:

> "*The Government of Canada has a duty to consult and, where appropriate, accommodates Indigenous Nations and communities when it considers conduct that might adversely impact potential or established Indigenous or treaty rights. The duty to consult is an important part of the CNSC's activities, including for licensing and for decision making in environmental reviews*."[2] [Hyperlink]

CNSC's website continues to discuss a whole-of-government approach to consultation. The Crown-Indigenous Relations Northern Affairs Canada guidelines on Canada's whole-of-government approach includes the establishment of a consultation protocol.[3] As a best practice in discharging its duty to consult the CNSC should have established a consultation protocol with the impacted First Nations including MSIFN.[4] The need for an unreasonable process of reviewing 4000+ pages of sensitive documents could have been avoided if the CNSC had taken the proper whole-of-government approach and established a consultation protocol at the earliest opportunity.

Further, CNSC's website notes that the CNSC may only delegate certain procedural aspects of this duty to a third party. The CNSC states: "While we cannot delegate our obligation, we can delegate procedural aspects of the consultation process to licensees where appropriate."[5] MSIFN is not aware of a formal delegation of any aspects of the duty to consult in this matter.

In order for the Crown to discharge the duty to consult it must take an approach that fulfils both substantive and procedural requirements.[6] Both the inadequate provision of information and failing to provide an adequate time to consider issues are fatal to the Crown's ability to fulfil its legal duty. The Supreme Court of Canada ("**SCC**") has clearly indicated that document

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[1] *Haida Nation v. British Columbia (Minister of Forests),* 2004 SCC 73 (*Haida*) at para 10-11; *Clyde River (Hamlet) v. Petroleum Geo-Service Inc*. 2017 SCC 40 ("***Clyde River***") and followed in over 150 cases.
[2] Indigenous consultation and engagement (cnsc-ccsn.gc.ca)
[3] Government of Canada and the duty to consult
[4] Consultation protocols have been established multiple times across Canada including the Consultation Process Interim Measures Agreement with the Algonquins of Ontario and the Mississaugas of the New Credit First Nations: Consultation Protocol Agreement
[5] *Haida* at para 53; *Supra* note 2.
[6] *Haida* at paras 10-11.

dumping is inappropriate. In *Clyde River* the SCC found that providing a 3,926 page electronic document and in an inappropriate time frame is not true consultation.[7]

MSFIN is a not a stakeholder but rather a rights holder and needs to be provided certain information, in a timely manner to be capable of providing free, prior, informed consent. MSIFN should not have to fight for the information nor fight for adequate time to review such information. The decision to file the Request at the last-minute cannot be the norm and an accepted practice.

The request for confidentiality is in itself concerning. The general rule is that evidence before a tribunal is to be filed on the public record. Section 12(1) and (2) of the Rules make it clear that excluding evidence from the public is the exception – not the rule. The ability to remove evidence from public access is only available when the requirements of s.12(1) are satisfied and only to the extent s.12(2) permits. We would submit given MSIFN's rights and status that the obligation to disclose is even greater in dealing with Indigenous rights holders. Courts have affirmed the Crown must share available information openly with all impacted Indigenous communities concerning the proposed decision or course of action. The SCC stated in *Mikisew* that the Crown must share all "necessary" information.

Information about a proposed decision or activity is necessary if it helps the Indigenous community understand the nature of the proposed decision or activity and/or the possible impacts of the decision or activity on any proven or asserted s. 35 rights. In the case of a proposed activity on the land, this would include details about the timing of the project, its precise location, its duration, the nature of any disruption to the land or resources, the expected environmental impacts, the volume of any resource that will be harvested and any safety concerns.

It is not possible for MSIFN to know what constitutes "necessary" information when it hasn't been given adequate time to review the materials. Failing to provide information required by an Indigenous community to permit meaningful consultation is a breach of the Crown's duty.[8] Failure to provide information involving safety risks to MSIFN's rights impacts MSIFN's ability

[7] *Clyde River* at para 49.

[8] *Moulton Contracting Ltd. V. British Columbia*, 2013 BCSC 2348 at para 294; Jack Woodward "*Aboriginal Law in Canada*" (No. 3, 2024). See section 5:48 at para 5.1950.

to make informed decisions and provide assurances to its members about the protection of its rights and interests.

An overly broad claim for confidentiality that precludes MSIFN's access to information that is relevant to the potential impact on its rights leaves the Crown as being the only entity with the information and eliminating the Indigenous community's ability to consider and assess the potential impact of **its** rights. This paternalistic approach to the relationship between the Crown and Indigenous communities has been rejected as being neither legal nor appropriate. As such, decisions regarding the confidentiality of information that may impact an Indigenous community's rights must be as narrow as possible.

In MSIFN's submission, the scheduling and scoping of this entire proceeding has not met the expectations of MSIFN. It is our submission, that a hearing involving rights holders such as MSIFN and separate from stakeholders, should have been conducted at the earliest opportunity. Establishing a consultation protocol would have been the appropriate course of action. This would have allowed the parties to discuss essential steps in the proceeding and to ensure adequate time would be provided for the Crown to discharge its duty.

At a scheduling hearing, one of the issues should have been a hard date for which claims for the confidential treatment of information should have been filed. Further, in MSIFN's submission, the CNSC should have ordered any party that was going to make a submission seeking to have certain evidence filed in confidence to be discussed with other rights holders and stakeholders in advance of filing the request. In that way, issues around the claim for confidentiality could have been narrowed through discussion. As it stands, participants are left with a last-minute request involving an overwhelming amount of evidence.

To be clear, MSIFN understands why certain types of information is necessarily confidential. However, the interplay of the need for confidential treatment is at odds with the obligation of free, prior, informed consent and the discharge of the Crown's obligation to Indigenous communities.

We have reviewed section 12 of the CNSC's Rules of Procedure ("**Rules**"), the Application Guide, and Regdoc3.2.2: Aboriginal Engagement. In MSIFN's submission, the current regulatory documents and Rules do not adequately address the larger issue of ensuring Indigenous rights are adequately considered. The process CNSC is undertaking with the consultation of Indigenous communities is paternalistic, ignores the strength of MSIFN and all

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Williams Treaties First Nations Aboriginal Title and rights and runs counter to established common law.

In our submission, CNSC should order OPG to engage in discussions with MSIFN to provide information such that MSIFN can be capable of making an informed decision. The CNSC should have a broader discussion about how to better engage with MSIFN on this and other projects. The CNSC must recognize that there is insufficient time before the second hearing day to complete the necessary work to have fully completed the duty to consult.

Thank you,

Mississaugas of Scugog Island First Nation

CANDU Owners Group Inc.

"Excellence Through Collaboration"

September 16, 2024

Canadian Nuclear Safety Commission
c/o Ms. Julie Bouchard
280 Slater Street, P.O. Box 1046 Stn B,
Ottawa, ON K1P 5S9
Email:interventions@cnsc-ccsn.gc.ca

Subject: Ontario Power Generation Request for Confidentiality (Ref: CMD 24-H3)

Dear Ms. Bouchard,

I am writing on behalf of CANDU Owners Group (COG) in support of Ontario Power Generation's (OPG's) request for confidentiality related to the application to construct one BWRX-300 reactor for its Darlington New Nuclear Project.

COG is a not-for-profit organization with membership from CANDU operators both in Canada and internationally. COG focuses on achieving excellence through collaboration and is dedicated to sharing information and collaborating on nuclear sector research and development for CANDU and advanced nuclear technologies for the complete nuclear reactor lifecycle. OPG is a significant contributor to the strength of the CANDU industry and COG programs through its leadership in collaborative efforts.

Pursuant to Rule 12 of the Canadian Nuclear Safety Commission Rules of Procedure, OPG has requested that information associated with application to construct one BWRX-300 reactor for its Darlington New Nuclear Project, particularly information that involves nuclear security, is commercially sensitive and/or related to intellectual property. COG is in support of this request as it is in accordance with the Access to Information Act and the Government of Ontario's Freedom of Information and Protection of Privacy Act, which protect entities from disclosing security protected and commercially sensitive information and intellectual property.

Sincerely,

Rachna Clavero
President and CEO
CANDU Owners Group

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canadian nuclear association cna anc association nucléaire canadienne

September 16, 2024

Commission Registry
Canadian Nuclear Safety Commission
280 Slater St.
PO Box 1046 STN B
Ottawa, Ontario K1P 5S9

RE: Requests to maintain confidentiality of information

The Canadian Nuclear Association (CNA) appreciates the opportunity to comment on the requests to maintain confidentiality of information with respect to the application by Ontario Power Generation (OPG) to construct a BWRX-300 reactor on its Darlington site.

The CNA has approximately 100 members, representing over 89,000 Canadians employed directly or indirectly in exploring and mining, uranium, generating electricity, advancing nuclear medicine, and promoting Canada's worldwide leadership in science and technology innovation. The total impact for the Canadian GDP is estimated at $22 Billion per year. Our members are proud of our safety and environmental record, our contribution to Canada's economy and our vital role in the fight against climate change.

While OPG is the largest electricity generator in Ontario, the Ontario electricity market is still a competitive market and some of the documents filed in support of the licence application contain intellectual property and other business sensitive information that could put OPG at a competitive disadvantage if released in the public domain. In addition, the documents contain security protected information that should not be released to the public.

The CNA appreciates the CNSC's commitment to transparency and its desire to provide the public with as much information as possible but there are long standing practices and procedures in both Ontario and Canadian law that protect entities from having to disclose IP, business sensitive and security protected information.

These protections are further referenced in the CNSC's Rules of Procedure specifically Section 12.1 which states:

- **12 (1)** Subject to subrule (2), in any proceeding, the Commission or a designated officer, as the case may be, may take measures referred to in subrule (3) to protect information if
    - **(a)** the information involves national or nuclear security;
    - **(b)** the information is confidential information of a financial, commercial, scientific, technical, personal or other nature that is treated consistently as confidential and the person affected has not consented to the disclosure; or
    - **(c)** disclosure of the information is likely to endanger the life, liberty or security of a person.

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canadian nuclear association cna anc association nucléaire canadienne

Furthermore, the CNSC Rules of Procedures make provision for the information to be considered by the Commission so that all information is available to be considered in rendering a decision.

The CNA believes that the information referenced in the requests for confidentiality fall under both the CNSC's Rules of Procedure and Ontario and Federal law and therefore the requests for confidentiality should be accepted and the information excluded from public disclosure.

Sincerely,

Jill Baker
Vice President, Regulatory Affairs, Policy and Corporate Events

1120–340 Albert Street Ottawa ON K1R 7Y6 cna.ca

From: Steve Lawrence
Sent: September 20, 2024 4:03 PM
To: Interventions / Interventions (CNSC/CCSN)

Subject: Re: notice of Request for Confidentiality - BWRX-300

Hello CNSC,

This request was made by the OPG.

At the present time we are globally being threatened by climate change. As the CNSC states, this crisis is man made, and accommodation must be made to mitigate potential damages. The BWRX-300 at Darlington is in partnership with Poland and the US. Poland plans to build a fleet of these SMR's, using Darlington as a test case. Saskatchewan has an interest in this reactor design, as well as the Czech Republic, Estonia, Sweden, the UK, and probably has many more clients in mind. If the industry is truly serious about taking action to reduce the man made climate emergency, now is not the time to hide behind confidentiality. Does OPG have a commercial interest in exporting this technology - is this why many of the sections in their application are redacted. If you are planning to export a technology all over the world, particularly one with the safety concerns associated with nuclear technologies, they should not be holding back from the Canadian public information on its design and operation and related industries - do they then expect to do this in every country? It seems this is a first of kind project with many watching on. Construction costs make up a huge part of the levelized cost of electrical generation for nuclear plants. Finding ways to reduce costs could be front and center of considerations and needs to be closely examined. The operation and safety of nuclear reactors is complex, as indicated in the materials presented, and if any of this is perceived to be compromised in the design and construction it becomes unmarketable. GEHitachi are the only ones building this model of reactor so commercial and technical confidentiality seems mute and areas that involve national security

redacted information are not in the public's interest! For instance, item 38 regarding interface between contractor and owner, which concerns internal reactor components says nothing except they are removable and SEction 5 is completely missing in this report. Item 53, flooding is not considered a possible threat and not considered. IIems 54, 55, 56, concerning impacts due to climate change are left to future monitoring. Climate impacts are being felt now with significant storms sweeping up through the states, bringing significant rainfalls in short periods of time. With seismic considerations, the PreCambrian shield seems to be considered calm and little likelihood of seismic events seems probable. The whole section 3.3.1 is almost unintelligible. They have identified liquefaction as a potential problem and have replaced materials below the reactor that would be susceptible to this. Given the base of the reactor is 35m below grade and sitting on bedock, this is a mute point and the reactor is not going to settle into some kind of huge sinkhole. What is relevant and not considered is liquefaction and slumping of materials surrounding the reactor. This reactor already has far thinner walls than conventional reactors, to save costs, and pressures on the building must already be considerable at depth. Given that the design is modular in aspect, I would assume large sections of the building are assembled on site. Lateral movement, deformation of the building due to shifting soils could be catastrophic and, given Murphy's Law, will happen at the worst time, in the worst weather and temperature conditions possible. Perhaps all systems will be compromised and little can be done to avoid loss of containment. Would the reactor vessel end up being tilted? Would the reactor even be able to continue its passive functions of cooling? Are the cooling pools on the top floor and how are they protected from damage or compromise and how would these problems be mitigated? Proximity to the existing Candu reactors and 3 more BWR reactors would be reminiscent of the Fukushima disaster. Events which are unlikely, but have

potential for core damage and radioactive releases due to extensive damage to all systems need to be considered. This site was never considered for a reactor buried to this depth and needs design work. It should not even be so close to the existing reactor complex and is practically at the doorstep of dry storage of used fuel facilities, let alone putting the construction crews at such risk..I also found in particular the sections on safety and defense lines and safe operation very confusing. Entire sections of the materials presented seem to be torn from the pages of training manuals and I feel sorry for the people who are being trained using these materials of the panel members who have to wade through these materials to glean a complete understanding of its design and operation so they can make an informed decision on whether to grant licenses. It should be sent back again for revision and clarity! Very little detail in plant maintenance! Reading this material, I would never feel comfortable even visiting this facility. What exactly does staff training involve? Are staff required to attain mastery or is a pass sufficient. Are they expected to be Sgheldon Coopers with Eidetic memories? Judging by slight selection and proximity to other facilities, it appears they are willing to break from rules and lessons learned.

- RE: 4.5.3 safety classification

A fundamental element of the BWRX-300 SSC classification approach is the direct correlation between the DLs in which an SSC performs a function, and the relative safety importance of that function. Functions are categorized into three safety categories, Safety Category 1, Safety Category 2, and Safety Category 3, with Safety Category 1 being the most important.

Primary functions are those that directly perform the FSFs in support of DL2, DL3, DL4a, or DL4b. Safety Categories are applied to the primary functions as follows:

1. Safety Category 1 is assigned to DL3 primary functions. DL3 functions assure the integrity of the barriers to release, provide the ability to place and maintain the plant in a safe state, and provide independence and diversity for all DL2 and DL4a functions caused by a single failure (and many CCFs). Accordingly, DL3 primary functions are the most important from a safety standpoint.

2. Safety Category 2 is assigned to DL4a primary functions. Both DL2 and DL4a provide a redundant means to address PIEs (generally independent of DL3 functions) and are therefore important from a safety standpoint, although less important than DL3 functions. DL4a functions are a backup to DL3 functions, in the unlikely event a DL3 functions fails, and therefore have a higher consequence of failure than DL2 functions and are more important from a safety standpoint than DL2 functions

3. Safety Category 3 is assigned to DL2 and DL4b primary functions as they are relatively the least important. DL4b functions address severe accidents, which are extremely unlikely because failure of both DL3 and DL2 or DL4a functions would have to occur. Accordingly, DL4b functions are considered relatively the least important defence line functions, despite the high consequence of failure.

4. Non-Safety Category is assigned to all other functions.

Components that are required to perform multiple functions with different safety categories are assigned to a safety category based on the highest safety category of any of the functions they perform.

Decommissioning of the reactor is not even considered, with only assurances that everything will be planned in accordance with appropriate guidelines. This thing is buried deep. The hole was bored to minimize removal of material. It is well below lake and groundwater water levels. I don't know how they handled water, or stability of excavation walls, during construction, but decommissioning would be no picnic.

Apparently everything is constructed and operated according to all the appropriate codes, standards and protocols and anyone reading this presented material should be familiar with them all. NOT - more explanation required please!

They want to sell this design all over the world. Remember our experiences in Romania, controlling accuracy and quality of construction. Remember India who went on to develop nuclear weapons. Remember the Chernobyl experiment that led to disaster. Remember the confusion at Three Mile Island. remember the unexpected failure of three reactos simultaneously at Fukushima due to poor management decisions that left them unprepared for such an eventuality. Remember our own Canadian experience in the Chalk river Days when 1500 reactor workers and

military personnel were sent in to contain incidents in 1950 and 1952.We have learned a lot but we will have more to learn or relearn, especially as we introduce novices to the technology. I sure events came as a shock and surprise to the people involved

CNSC's mandate is to regulate the use of nuclear energy and materials to protect health, safety, security and the environment. It also implements Canada's international commitments on the peaceful use of nuclear energy, and disseminates objective scientific, technical and regulatory information to the public. However, it is not just about the building and operation of the reactor itself - many associated costs and risks also go along with a nuclear facility. To accomplish this, the process must be entirely transparent. Everything should be on the table. Full costing for the nuclear cycle, full carbon footprint disclosure for all its related industries as well as other environmental concerns, full disclosure of long term and short term risks, how readily the technology would be transferable to all other nations, security risks involved in the transference of these technologies to other countries, an analysis of what countries should not receive these technologies and guidelines used for determining what jurisdictions should be excluded, timelines for implementation, I am sure the industry is well aware of the numbers and they should be included, whether or not it is your mandate to rule on these aspects, they should be brought forward in your report.. The federal government needs to formulate a climate action plan that weighs all the costs and risks associated with a given approach.

Reviewing the material available it seems like much of the information redacted falls under standard protocols. Much is redacted for commercial reasons - do they want to export this technology to the world or not. If they are serious about climate change, everything needs to be out there, to be judged by the public and governments alike. It would be unethical to expect policy makers to make decisions that are not based on all the information available. If some of the design impacts involve national security (power block), is this not something that the public should be aware of. What are technical reasons, are there not members of the public who could handle technical

material. Bear in mind, much of the material presented was not user friendly and the authors should take lessons in plain language to make sure all considerations are fully understood!! The heavy use of acronyms should be avoided in such a report available to the public as it becomes unreadable. If the hydraulic scram action is credited in an BL-AOO scenario, then the hydraulic scram action is assumed to have a mechanical CCF of the hydraulic scram where only the Control Rod Drive Motor (CRDM) run-in functions insert control rods. No additional failures are assumed. If the costs and risks are too high and the time lines, in the short term, are too long, I am not sure Canadians would want this technology, let alone export it! As Gordon edwards states in his siting report Even simple, typically publicly available information on reactor designs was not made available for the design ultimately chosen under the inexplicable guise of being 'proprietary'. Such blatant cover of 'proprietary' information is inconsistent with the vendor's obligations to people of Canada where the vendor hopes to benefit from a proof of concept with public funds. Reactor data on new Chinese reactor designs is more abundantly available than was made available for BWRX-300. This is not a time machine design or a shoulder carried hypersonic missile design.

The control rods and possibly access from refueling (??) is from the bottom of the reactor vessel, which is done while the reactor is operating - how are seals maintained?

The reactor water is demineralized using resins - how do these resins not gum up the reactor - especially if water temperatures exceed 60C?

The cooling system can handle cooling of reactor vessel and machinery and the cooling pools with up to 8 years of stored fuel in them - is this reasonable and can they justify this?

What is the expected operating life of this reactor?? What is the expectation this will be extended as this will improve the levelized cost of power produced? What is the possibility that other jurisdictions might decide to arbitrarily extend the life of a reactor because of cost considerations?

What are the EME - Emergency Mitigation Equipment?

How is water flow kept passively from stratifying?

Only radiation from fissioning in the reactor core is considered. Material from corrosion and deposition that are trapped in lines is not -why? areas that are contaminated are

ventilated out - where does this go? BWR reactors already emit more radioactive daughters than any other reactor to the atmosphere, than other reactor designs.

Joints in pipes are straight and are butt joints - this means that there is no inherent flexibility in the piping system during such events as tremors or earthquakes - is this a problem?

The fuel and processing/reprocessing of the fuel are given no mention - this is a major concern for nuclear technology and needs to be discussed if exporting it. As I understand it every time we handle and process the fuel and waste, more waste is created. For instance, acids used will contain radioactive materials. There is waste created during the 'recycling ' processes even though the volume of usable nuclear material may be reduced. How does a third party creating this kind of fuel improve reliability of supply? Who os top say that authorities in other jurisdictions to which we would be exporting this technology will be honourable and they will not take shortcuts or less reputable suppliers.

Water levels seem to be magically maintained, should one source have a problem, there will always be another. I am not exactly clear on how the passive cooling takes place.

This is a light water reactor , different from the current Canadian CANDU heavy water reactors. The fuel is different, requiring enrichment and/or reprocessing. The associated risks/costs with this type of fuel needs to be clearly understood. It is being promoted as a technology that can be exported and there is no control over what fuel outside juridictions might deploy in the future. Reactors were first constructed to produce weapons grade materials. There is always going to be a risk that outside jurisdictions will use the technology to create/acquire this material. It is naive to think this couldn't happen. Surface stored nuclear materials will also be a risk as terrorist targets. Is this really a risk we want to export to the world - this concept must be fully explored and understood. The prospect of enriching and reprocessing fuel for the reactors also involves additional radioactive waste into the nuclear chain. What exactly is the global solution for the long term handling of nuclear waste or are we going to figure that out later?? Radioactive nuclear waste is radioactively hot and the chain reactions that have been initiated will continue to create heat for thousands of years, which is a problem for storage, for at least thousands of years. Uranium mine waste which has been ground to a fine flour and treated to release its treasures, on the other hand, is also radioactive and dangerous to the environment, still containing most of its original radioactive materials, and is currently placed in an open tailings pit and covered with a layer of topsoil - this is not an acceptable, long term solution considering the geology time lines and the forces of erosion at play. Because these radioactive minerals are now so much more mobile in its

new form, I am not even sure they should be placed underground where they are being exposed to groundwater - some of the new mines, by the way, are being solution mined with even more danger to groundwater.

Since this a first of kind, with the experience from the Gentilly reactor, what are the probability of this happening and how will this affect the cost estimates?

When I talk of full costing, I am thinking of not only the capital cost of building the reactor, but also the cost of decommissioning, the cost of fuel and reliability of supply, the cost of mitigating for incidents that result in the release of radioactive materials the cost of long and short term handling of nuclear waste, the cost of backup systems for when reactors are down, the cost of extended power lines from a point source,

The reactor is also being promoted as convenient for synthesizing H2. While H2 itself is clean, it is also a very reactive combining, as it does in the reactor, with compounds in the atmosphere and extending the effective life of existing greenhouse gases, which gives it a potential of having a much higher greenhouse net effect than methane and at least 40 times that of CO2. This is clearly understood by the proponents who use hydrogen in the waters flowing through the reactor to bind with oxidizing agents to limit corrosion within the reactor. Many of the problems with methane are the result of various leakages from the system chain. Hydrogen would be even lighter and harder to contain. Another fuel that might come back to bite us. As Hydrogen is continuously introduced into the system, where does it go, while not a greenhouse gas in itself its net effect is considerable and this needs to be considered, when you are advertising this as a clean technology. The Hydrogen explosions that ripped apart building at Fukushima need to considered here also. We can't just keep producing stuff that we hope the transportation, distribution and end users will handle properly. A hydrogen facility is not something that is covered in the document presented - merely offered as candy.

It is true that the sun and the wind will not be available full time but this does not take into consideration energy storage technologies which are cost effective and have the net effect of making their energy truly available full time. A distributed power grid also makes much more sense than power production that is concentrated at a few point sources and may have less transmission infrastructure costs, efficiencies, reliability, and security issues. Also if one solar collector or wind generator goes down this does not affect the whole grid. Reactors do not have a record of providing power full time either. A reactor that goes down for maintenance or repair needs to be backed up - what is the cost of that. I don't think we could store energy for that eventuality.

Thanks for your consideration, steve

Steve Lawrence

Canadian Environmental Law Association
EQUITY. JUSTICE. HEALTH.

CELEBRATING 50 Years 1970 - 2020 OF ENVIRONMENTAL PROTECTION

September 20, 2024

Senior Tribunal Officer
Canadian Nuclear Safety Commission
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Delivered via E-mail: interventions@cnsc-ccsn.gc.ca

Re: OPG's Request for Confidentiality for OPG's Application for a licence to construct 1 BWRX-300 reactor for its Darlington New Nuclear Project (CMD 24-H3)

The Canadian Environmental Law Association (the intervenor) writes to provide brief comments regarding the above noted matter, being Ontario Power Generation's (OPG) four requests for confidentiality related to its application for a licence to construct 1 BWRX-300 reactor for its Darlington New Nuclear Project (DNNP).

On September 5, 2024, the CNSC published a notice of Request for Confidentiality, identifying 4 documents for which OPG requests confidentiality:

- NK054-CORR-00531-10740, Darlington New Nuclear Project – Submission of Package #3 Security Deliverables in Support of the Licence to Construct Application for the CNSC Review
- CMD #24-H3.1, OPG Written Submission in Support of the Darlington New Nuclear Project Application for a Power Reactor Construction Licence
- CMD #24-H3, CNSC Staff Review and Assessment of OPG's Application for a Licence to Construct a BWRX-300 Reactor at the Darlington New Nuclear Project Site
- NK054-CORR-00531-10775, Darlington New Nuclear Project – Submission of Package #6b Construction and Commissioning Program Confidential Deliverables in Support of the Licence to Construct Application for the CNSC Review

In accordance with section 21(1)(e) of the *Nuclear Safety and Control Act*, the intervenor advises the CNSC that disseminating:

> objective scientific, technical and regulatory information to the public concerning the activities of the Commission and the effects, on the environment or on the health or safety of persons, of the development, production or use of nuclear energy or the production, possession or use of a nuclear substance, prescribed equipment or prescribed information"[1]

[1] *Nuclear Safety and Control Act*, SC 1997, c 9, s 21(1)(e), *emphasis added.*

is one of the powers mandated to the Commission.

As a result, we expect transparency and public disclosure to be hallmark in the Commission's regulatory process, and its goal of maintaining public trust. Accordingly, we expect the CNSC to stringently scrutinize any request for confidentiality and limit it only to matters truly prejudicial to security. We submit technical matters such as functional descriptions of the technologies should never be kept confidential in this realm, as it is core to the questions of safety and emergency planning. Similarly, potential impacts and emissions should never be kept confidential for the same reasons.

For example, the request for confidentiality regarding "*CMD #24-H3.1, OPG Written Submission in Support of the Darlington New Nuclear Project Application for a Power Reactor Construction Licence*" ("Material related to CMD 24-H3.1") provides a lengthy request to exclude entire documents from being made publicly accessible, including a number of technical documents. OPG is requesting that an entire document discussing "*Fuel Design Description Qualification and BWR Fuel Licensing*" be excluded on commercial and technical grounds. While the request notes "*OPG's PSAR, Section 4.2*, is proposed as a sufficiently descriptive publicly-accessible summary,"[2] we submit the summary lacks sufficient detail for our expert, Dr. M.V. Ramana, to provide a fulsome review of the fuel system design for his expert report.

While publicly available summaries are being prepared by OPG for some of the documents, we submit these summaries are not sufficiently transparent for the public to understand the whole picture of what is being proposed for the DNNP site.

Additionally, the request for confidentiality regarding "*CMD: 24-H3 – CNSC Staff Review and Assessment of OPG's Application for a Licence to Construct a BWRX-300 Reactor at the Darlington New Nuclear Project Site (DNNP)*" ("Material related too CMD 24-H3") requests that documents related to the *Hazards Analysis Methodology* and *Hazard Analysis Results* be excluded in their entirety, while "*OPG's PSAR, Chapter 2*" being proposed as "sufficiently descriptive publicly-accessible summary."[3] Again, these documents are being excluded on the basis of commercial and technical means. We submit the inclusion of such documents would be highly beneficial to understanding the safety and emergency planning mechanisms being proposed and/or implemented.

Reviewing the four requests from OPG, most of the confidentiality requests are seeking entire documents to be excluded, with very high level, vague summaries being made publicly available in their place. We submit that the exclusion of entire documents should be avoided as much as possible, especially when the information does not impact national or nuclear security.

In the interest of effectively disseminating objective scientific, technical, and regulatory information to the public for this application for a licence to construct, the Commission should stringently assess these requests with a lens of upholding public transparency. Rather than excluding entire documents, redacting content may be more appropriate, and we reiterate that

[2] Material related to CMD 24-H3.1, page 2, Table 1
[3] Material related to CMD 24-H3, pages 8-9, Table 1

technical information, especially information related to safety and emergency planning, should not be made confidential.

We trust these comments on OPG's requests for confidentiality are of assistance to the Commission, staff, and OPG.

Yours very truly,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION

Sara Libman

Sara Libman

Counsel

From: Curtis Russell
Sent: September 8, 2024 11:40 AM
To: Interventions / Interventions (CNSC/CCSN)
Subject: Notice of Request for Confidentiality

Canadian Nuclear Safety Commission members,

Ipsos Custodes is a business in Ontario dedicated to improving His Majesty's public sector through commentary on its incompetence.

It is a fundamental aspect of democratic institutions to have an open and transparent documentary system. All information presented to His Majesty and his agents ought to be public. However, given current limits on this information in the legislation, *Access to Information Act* (ATIP), any such redactions by this commission must be in line with the will of parliament.

Therefore, Ipsos Custodes requests that the standards for ATIP be applied here. Normally His Majesty's agents must redact, in whole or in part, information of a "financial, commercial, scientific or technical information that is confidential information supplied to a government institution by a third party and is treated consistently in a confidential manner by the third party." However, this doesn't automatically apply here.

Notwithstanding the requirement to keep the applicant's confidential records redacted, His Majesty and his agents may release the information if
"the disclosure would be in the public interest as it relates to public health, public safety or protection of the environment; **and** the public interest in disclosure clearly outweighs in importance any financial loss or gain to a third party, any prejudice to the security of its structures, networks or systems, any prejudice to its competitive position or any interference with its contractual or other negotiations."

While the applicant has stated that the information has consistently been treated as confidential, the exception of public interest heavily favours disclosure in this case. A nuclear reactor failure has national and international consequences (*Ontario Hydro v. Ontario (Labour Relations Board),* 1993] 3 SCR 327) and therefore deserves the least amount of commercial and financial deference available to His Majesty's agents. Simply the existence of the *Nuclear Liability and Compensation Act* should bar the applicant from *in camera* records since the liability is held not by the applicant, operator, builder nor licensee, but by all Canadians. All Canadians are due to know the risks--all submissions to the commission by the applicant should be public.

The only redactions consistent with current practice involve security preparations demanded by the commission.

Curtis Russell - Ipsos Custodes