



**Written submission from Nuclear
Transparency Project**

**Mémoire du Projet de la transparence
nucléaire**

In the Matter of the

À l'égard d'

Ontario Power Generation Inc.

Ontario Power Generation Inc.

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

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

**Commission Public Hearing
Part-2**

**Audience publique de la Commission
Partie-2**

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nuclear
transparency
project

Website: www.nucleartransparency.ca
Email: info@nucleartransparency.ca

Submitted via email

November 4, 2024

To President Tremblay and Members of the Canadian Nuclear Safety Commission,

Re: OPG's application for a licence to construct new BWRX-300 reactors at the
Darlington Nuclear site

We would like to begin by thanking the Commission for this opportunity to provide comments on this matter. These submissions build largely on our organization's previous comments during the hearing to consider Ontario Power Generation's (OPG) environmental assessment (EA) for the Darlington New Nuclear Project (DNNP).

Our comments are divided into five parts: the first part addresses the timeframes for this current review and their relation to the previous EA hearing; the second part outlines some concerns with the approach to successive licence applications that effectively fragment the DNNP project review and prevent a comprehensive project description; part three concerns climate change and how it is addressed in the current proceeding; part four canvasses our outstanding technical concerns with the DNNP; and part five which provides comments on the Commission's new confidentiality process introduced during this hearing.

However, before we proceed with each of these parts, we will first introduce our organization and our interest in this current matter.

About NTP

The Nuclear Transparency Project (NTP) is a Canadian-registered not-for-profit organization dedicated to supporting open, informed, and equitable public discourse on nuclear technologies. NTP advocates for robust public access to data and other types of information and helps to produce accessible analysis of publicly available information, all

with a view to supporting greater transparency in the Canadian nuclear sector. NTP is comprised of a multi-disciplinary group of experts who work to examine the economic, ecological, and social facets and impacts of Canadian nuclear energy production. We are committed to interdisciplinary, cross-sectoral, and equitable collaborations and dialogue between regulators, industry, Indigenous nations and communities, civil society, members of host and potential host communities, and academics from a variety of disciplines.

About this intervention

NTP's intervention was made possible by Canadian Nuclear Safety Commission (CNSC) funding through its Participant Funding Program (PFP). These submissions were drafted by NTP founder and coordinator Pippa Feinstein, JD LL.M. in collaboration with biologist (environmental toxicology) Dr. Shamaila Fraz and hydroecologist (biogeochemistry) Dr. Ekaterina Markelova.

As NTP noted in its submissions concerning the EA for the DNNP, this is effectively the first regulatory review of a 'modular' nuclear energy reactor by the CNSC Commission Tribunal. As such, the current review is a precedent-setting case that can effectively set the tone for future reviews of other modular reactor applications elsewhere. The evidentiary basis for any ultimate decision by CNSC Commissioners must be fulsome and ensure that the public is properly informed about the project and its potential effects. NTP calls for a transparent, diverse, and open process in order to produce a comprehensive, responsible, and equitable decision in this matter. The current review should constitute a high-water mark for future reviews of modular technologies and it is with this high threshold in mind that NTP offers its comments in this submission.

Generally, NTP finds the current evidentiary record for OPG's application to be deficient. Many important questions we raised during the EA proceedings for the DNNP have yet to be addressed, and several information gaps we identified have yet to be filled by OPG. Transparency requires that Commissioners must render a decision in this matter that is supported by clear and substantiated evidence – namely technical studies, models, and assessments that can be reviewed by intervenors on their merits – and not merely assurances that such studies, models, and assessments may be done at a future time. OPG must clearly demonstrate and prove the safety of its project in order to obtain a licence to construct it – not promise that it will be able to prove these things once the reactors are already built.

At the same time, it is important to note that while these submissions are primarily addressed to the CNSC Commission Tribunal, NTP recognizes Indigenous intervenors as relevant decisionmakers with the inherent authority to determine allowable activities by nuclear industry in their territories. NTP acknowledges the applicability of Indigenous laws and governance systems over these Nations' homelands on which OPG's Darlington facilities operate. We do not understand this CNSC review process to override Indigenous jurisdiction, nor do we believe it to indicate the paramountcy of Canadian law and regulation of the Darlington site. A formalized process by which Indigenous Peoples' authority and jurisdiction is observed is necessary to determine a just outcome of these matters and should be defined by these rights holders.

PART ONE:

Timeframes for the current review and CNSC engagement with past interventions

The availability of participant funding for the hearing to consider OPG's licence to construct was announced on October 10, 2023 with an application deadline of December 8. The PFP rendered its decisions on February 19, 2024. All this occurred before any decision on the DNNP's EA was rendered by the Commission Tribunal. This timeline gave the impression that the matter had already been decided: a licence to construct could not be considered at that time if OPG were required to produce a new EA for the DNNP.

The early announcement of, and deadline for, participant funding also meant that funding applicants had to draft proposals for their interventions without having the benefit of knowing the outcome of the DNNP EA review. The Record of Decision relating to OPG's EA for the DNNP was only rendered several months later on April 22, 2024. Funding applicants also had to draft their proposals without being able to review OPG's application for a licence to construct or CNSC staff's Commission Member Document (CMD) evaluating it, as both were only made available on June 28, 2024.

While early notice is important for public engagement opportunities, it should still only be provided at an appropriate time: one regulatory process should end before a subsequent one is initiated. This may take slightly longer than overlapping regulatory processes would, but it would render these processes more meaningful and better inform the public.

Further, the short time between the Record of Decision's release and OPG's application (as well as CNSC staff's CMD) meant that Commissioners' determinations relating to the EA were not directly addressed or incorporated into OPG or CNSC staff submissions. There was also little engagement, if any, by OPG or CNSC staff in their respective submissions with NTP's (and other intervenors') submissions from the EA proceeding for

the DNNP. This amounted to a missed opportunity where valuable insights provided by intervenors (which also indicated areas of public interest and concern) remain substantially overlooked in materials that constitute the evidentiary record for this current proceeding.

PART TWO:

Fragmenting the DNNP over consecutive regulatory proceedings

The current proceeding constitutes one in a relatively long line of regulatory decision-making processes for the DNNP. This included the original EA process in the mid-2000s to examine larger-scale reactor designs for the Darlington site and the recent hearing to determine whether the initial EA remained valid. It has also included two past hearings to grant and then renew OPG's licence to prepare its DNNP site. Further, should the current application for a licence to construct the BWRX-300 reactors be granted, OPG will still have to apply for a licence to operate the constructed reactors.

At each stage of regulatory review, certain aspects of OPG's proposed DNNP are known while others are deferred and yet to be determined. After intervening in, and following these regulatory proceedings, NTP has become concerned that the nature of these multiple hearings in effect interrupts and disjoins the overall body of evidence required to support the DNNP. When information gaps are permitted to persist over the course of multiple proceedings, it also effectively denies the CNSC Commissioners and public from being able to comment on a comprehensive description of the DNNP.

As noted above, NTP submits that transparency in this instance requires the public to be able to understand and assess the substance of OPG's application to construct new reactors at the Darlington site. Practically, this requires access to the evidentiary basis on which OPG's submissions rely: their technical studies, their modelling, the substance of their plans, and the exact criteria CNSC staff and Commissioners use to assess these things. At this time, several areas of OPG's application seems to rest on assurances that the work to support them will be performed at a future time – with accompanying assurances that the outcomes of those studies will support OPG's current assertions of safety and reasonableness.

On September 18, 2024, OPG held a virtual workshop for intervenors in the DNNP licence to construct proceeding. At that workshop, attendees asked about the design specifications for the BWRX-300 cooling bays for used fuel, including the size of cooling tanks and how long used fuel would be cooled there before being placed in dry storage containers (DSCs). OPG staff explained these remained project 'unknowns', and OPG's current proposal relied on what OPG considered "conservative estimates" for how long the fuel would need to cool before being removed and deposited in DSCs. Similarly, OPG

explained to intervenors that decisions related to the exact location of the interim storage of used fuel DSCs (the Independent Spent Fuel Storage Installation (ISFSI) for the DNNP) would only be finalized when OPG applied for a future licence to operate the BWRX-300 reactors. In both these examples, OPG assured attendees that while these issues remained unknown at this stage of the DNNP regulator review, any future decision or plan would adhere to applicable regulatory requirements.

Part four of these submissions below also canvass areas where information gaps identified during the DNNP EA hearing have yet to be filled in the evidentiary record for this current proceeding. In several of those instances, OPG has assured the CNSC that final project features will adhere to regulatory requirements. In other instances, OPG has promised to provide plans and studies in the future to support several aspects of its current licence request. In both cases, however, members of the public are rendered unable to understand or comment on these issues due to a lack of available information.

Again, while early engagement is an important principle in public consultation activities, this must be balanced with an equally important public interest to understand and comment on a comprehensive description of proposed projects. Should a licence to construct ultimately be granted to OPG, this would constitute an irreversible decision that would see the first new nuclear reactors built along the north shore of Lake Ontario in four decades – without a comprehensive public understanding of important technical aspects of the project, its potential effects, and how they will be managed.

PART THREE:

The context of climate change in this hearing

During the hearing to consider the EA for the DNNP, NTP's intervention included a recommendation for the Commissioners to adopt a consistent and transparent approach to addressing the larger context of climate change in their deliberations. NTP explained that the CNSC has historically sought a more limited framing of its jurisdiction in this area, refusing to opine over how Ontario's energy mix should respond to the challenges of climate change. Commissioners have generally deferred to provincial jurisdiction over determining sources of electricity within the province, retaining CNSC responsibility over the safety of nuclear infrastructure.

That being said, NTP noted in its previous intervention that this jurisdictional division has not always been strictly maintained. NTP highlighted examples where the context of climate change was evoked to support arguments relating to the need for the DNNP project: examples from OPG's EA submissions as well as Commissioners' comments

during the 2021 hearing to consider OPG’s application for a licence to prepare the DNNP site.¹ Reacting to this, NTP submitted during the EA hearing that,

“When navigating this jurisdictional tension... Commissioners should maintain a consistent approach: either scope out of this current review any references to climate change as it relates to energy supply mixes; or else include references to climate change and energy supply mixes but along clearly demarcated lines that include opportunities for the provision and evaluation of expert evidence by intervenors.”²

In OPG’s current application for a licence to construct its BWRX-300 reactors, it asserts these SMRs are required to support Ontario’s decarbonization efforts and argues “nuclear energy remains an important part of Ontario’s low-carbon energy mix” and will continue to do so into the future.³ In OPG’s oral submissions to the Commission during the Day One hearing for this matter, both Ken Hartwick and Mark Knutson asserted new nuclear facilities were “essential” for Canada to meet its climate targets.⁴

As public interventions in this proceeding are submitted, and as the Day Two hearings approach, there will likely be more public comments relating to climate change, decarbonization, and the role of nuclear energy. In the absence of a clear indication by the CNSC that it will consider these matters in the current proceeding, and with the absence of any explicit opportunity to enter and test evidence on this issue, NTP urges a consistent approach to addressing the context of climate change where CNSC staff and Commissioners observe and enforce their narrower jurisdiction relating to issues of unclear safety rather than energy policy.

PART FOUR: Persisting technical concerns relating to the DNNP

During the CNSC proceedings to consider OPG’s EA for the DNNP, NTP identified several information gaps in the public record. NTP’s submissions below sought to determine which of these previously identified gaps have been filled to date and ultimately found most of them remain unresolved.

¹ Nuclear Transparency Project, Submissions Re: Commission consideration of whether a new Environmental Assessment is required for Ontario Power Generation’s proposed Darlington New Nuclear Project, November 20, 2023 at p 6.

² *Ibid.*

³ Ontario Power Generation, Application for a licence to construct for the Darlington New Nuclear Project, at p 6.

⁴ Transcripts from Day One hearing, at pp 9, 10, 11, 15.

Below are brief outlines of the comments we made in our previous submissions relating to OPG's EA, with updates relating to their current status on the public record.

The composition of radionuclide releases

In its past submissions relating to the EA for the DNNP, NTP noted,

“The BWRX-300 design would release the largest amounts of three radioisotopes including iodines (I-132, I-134, I-135) and Fe-59 compared with any 2011 JRP-assessed reactor designs. More specifically, C14 and radioiodines are 1.25 and 1.01 times higher than emissions to air from reactor technologies assessed in the 2009 EIS. OPG and CNSC staff state that the overall radioactivity may not change. Though Dr. Markelova, examining the same data, notes even if overall dose from iodine is calculated to be lower per year, “net emissions are still higher”.⁵

Further, Dr. Fraz at that time found that

“35 isotopes will be released from BWRX-300 reactor buildings that no other reactor designs [assessed in the 2009 EA] would produce. These are: Kr-83m, Kr-89, Xe-137, I-132, I-134, I-135, Na-24, P-32, Mn-56, Fe-55, Ni-63, Cu-64, Zn-65, Rb-89, Y-90, Sr-91, Sr-92, Y-91, Y-92, Y-93, Mo-99, Tc-99m, Rh-103m, Rh-106, Ag-110m, Sb-124, Te-129m, Te-131m, Te-132, Cs-138, La-140, Ce-144, Pr-144, W-187, and Np-239.”⁶

To date, Dr. Markelova confirmed that there have been no additional studies or models provided in materials for the current hearing that explain how these different emissions will be understood and managed by OPG. In her more recent review, she highlights that Chapter 5.27 of OPG's licence to construct application (devoted to occupational dose assessments) notes a detailed strategy is yet to be fully developed and submitted. OPG assures the CNSC that “[t]he occupational radiological evaluation and safety assessment will be conducted in support of the LTC [licence to construct] application and the results will be documented in a report.”⁷

Dr. Fraz has similarly noted that after examining the materials for this current hearing, it appears as though more detailed study of the released radionuclides will only be conducted after a decision on the current licence to construct application is rendered by the Commission. In other words, as the DNNP project progresses through this next phase of its regulatory review, its exact management of BWRX-300 emissions (and how they

⁵ *Supra* note 1 at p 11.

⁶ *Supra* note 1 at p 11.

⁷ *Supra* note 3, Chapter 5.27.

differ to previously assessed reactor designs), remains either unknown, or at least unclear to the public.

In its DNNP EA submissions, Dr. Fraz explained,

“the effects of potential exposures to human and non-human receptors can differ significantly, depending on the type of radionuclide. As such, she finds it troubling that there is no publicly available assessment of the distinct potential impacts of human and ecological exposure to a different mixture of radionuclides (in terms of chemical composition, component ratios, and toxicity) than what was used in the EIS. Available materials have also failed to comprehensively characterize non-radioactive emissions to the air from the BWR-300 reactor. Knowing about the radioactivity and chemical toxicity of emissions, separately and combined, is crucial to understanding how they might behave when released into the air and how they might interact with people and the environment.”⁸

To date, Dr. Fraz confirms this information is not currently available to the public as it is not included on the public record for this hearing. The omission of this information from the earlier EA-specific proceedings meant that decision-makers and the public could not develop a detailed sense of the proposed reactors’ potential environmental effects and thus could not properly assess the desirability of OPG’s chosen reactor design. The omission of this information from the current proceedings effectively means the proposed reactors will be constructed – an irreversible event – without the public having an opportunity to learn about and assess how its exact emissions will interact with local environmental or human receptors.

Lower stack emissions height

In its DNNP EA submissions, NTP noted,

“the emission height from where these airborne contaminants will be released is 28% lower for the BWRX-300 than it would have been for any 2011-assessed reactor design: 35m rather than 48.8m. This lower release height may have implications for the movement of these contaminants in the environment. However, there is no assessment of this possibility in available environmental studies. More generally there is no information relating to whether effects on terrestrial and soil biota of these radionuclides have been, or will be, evaluated for dry and wet deposition – in other words, once released, it remains unclear how the particles

⁸ *Supra* note 1 at p 11.

may fall to the ground (on their own or via precipitation), and how plants, animals, and soil may be exposed to these emissions.”⁹

No details, including any BWRX-300-specific modelling, have been included or referenced in the current proceeding relating to the BWRX-300 stack height. The omission of this information from the earlier EA-specific proceedings meant that decision-makers and the public could not develop a detailed sense of how the proposed reactors’ releases would need to be modelled and safely managed. It further impaired the public’s ability to comment on the reasonableness of OPG’s chosen reactor design. The omission of this information from the current proceedings, however, effectively means the proposed reactors will be constructed without the public having an opportunity to understand exactly how releases to the air will interact with the local environment.

Liquid releases

NTP’s EA intervention explained that,

“between OPG’s earlier EIS for the BWRX-300 and later revisions, designs for the liquid effluent system for low level waste have changed significantly. At first OPG plans were for direct discharge after treatment. Then this changed to a system where effluent would be recycled and discharges of radioactive substances to the environment would only be expected in situations where liquid waste could not be recycled. To date, however, it remains unclear in which scenarios effluent may be released into the environment, how often this might happen, and what control measures there would be to handle such situations.”¹⁰

Further, NTP noted, “there is still no clear characterization of liquid effluent and their potential environmental effects on local surface water quality and aquatic ecosystem”.¹¹

The same was true for thermal pollution, where NTP noted,

“While the 2009 EIS technologies assumed a maximum of 9°C water temperature rise at maximum generation capacity, BWRX-300 assessments only indicate the technology “is able to achieve” the same. As such, it remains unclear whether this is true of routine or maximum operations, and it is difficult to discern how probable exceedances may be. While there seems to be some degree of uncertainty around the thermal pollution associated with BWRX-300 operations, this uncertainty is not quantified or otherwise explained. Further, virtually no information is provided to explain the exclusion of the need for cooling towers in the amended BWRX-300

⁹ *Supra* note 1 at p 11.

¹⁰ *Supra* note 1 at p 12.

¹¹ *Supra* note 1 at p 12.

design and the 100% reliance of lake water as a heat sink is not sufficiently justified”¹²

To date, there is still no publicly available overview of the BWRX-300 liquid effluent system or any detailed characterization of its liquid effluent. While NTP experts were able to get a better sense of thermal releases via additional requested baseline studies obtained from OPG, no thermal plume modelling was provided which prevents any comprehensive assessment of projected thermal releases from the BWRX-300.

Thermal pollution is not directly addressed in OPG’s application for a licence to construct the DNNP. Rather, the closest reference is the Condenser Cooling Water (CCW) System in chapter 6.3 of OPG’s application, which confirms that the system will use a once-through cooling approach. Significantly, it appears the CCW system is yet to be fully developed and submitted for more detailed CNSC staff review. As such, NTP has had no access to information on the frequency and control measures for liquid discharges into Lake Ontario. Nor is there a detailed discussion of how the thermal impact on Lake Ontario will be minimized.

No specific alternatives to the cooling system design have been made publicly available either. Nor are there any explanations of potential mitigation measures such as alternative diffuser designs or cooling technologies that could reduce the thermal load on the lake. Dr. Markelova has advised that a modern alternative is to upgrade the cooling water system with the use of electromagnetic technologies. These techniques can replace chemical additives for anti-scaling and anti-corrosion, while influencing the speed of water cooling to ambient temperatures. She notes this provides significant environmental benefits at various scales and has been deployed in the cooling systems of power plants in Denmark, Slovakia, Czech Republic, Poland, and Spain. NTP recommended that OPG look into this alternative measure in its EA submissions, however no mention is made of it by OPG or CNSC staff in their submissions in this matter.

The omission of this information from the current proceedings effectively means the proposed reactors will be constructed without the public having an opportunity to understand how these reactors will interact with surface water and the ecology of Lake Ontario. Permitting construction without this information being publicly released for comment permits an irreversible nuclear infrastructure development along the lakes northern shore to occur without adequately informed public input.

¹² *Supra* note 1 at p 19.

Solid wastes

In its EA intervention, NTP expert Dr. Fraz highlighted that it appeared

“36 isotopes may be exclusively present in solid wastes generated by BWRX-300 designs. These include Am-241, Am-242m, Am-243, Cm242, Cm243, Cm244, Cm245, Cm246, Cs-136, Cu-64, I-129, I-132, I-134, I-135, Mn-56, Mo-99, Np-237, Np-239, P-32, Pu-238, Pu-239, Pu-242, Rh-103m, Sr-89, Sr-91, Sr-92, Tc-99m, Te-129m, Te-131m, Te-132, W-187, Y-90, Y-91, Y-92, Y-93 and Zn-65.³¹ However, there is no fulsome assessment of any potentially different management needs for this unique waste composite”¹³

Looking into this issue further for the current hearing, Dr. Fraz has understood that several additional studies (including a Radioactive Waste Management Plan, Radiological Environmental Monitoring Program, and Probabilistic Safety Assessment Reports) will address this issue relating to the composition of solid wastes at a future time after the conclusion of this current hearing. This timeframe effectively prevents public comment on this issue before the irreversible step is taken to construct the new reactors, should a licence to construct be granted by the Commission Tribunal.

Mitigation strategies for species' habitat during construction

During the previous regulatory proceeding to consider the EA for the DNNP, NTP was interested in potential impacts to several species identified on or near the Darlington Nuclear site. At that time, the exact impacts on several species and their habitat were unknown. To date, specific mitigation strategies for impacts to species remains largely unknown. This includes specifics relating to the promised construction of artificial habitat during construction to protect bank swallow populations on nearby dunes. Despite the fact that the current application before the Commission is to consider construction activities, no detailed overview is available to the public concerning this artificial habitat or its expected success rate for bank swallows. Rather, OPG has committed to performing this study at a future time.

NTP's intervention in the EA proceeding also noted there was some ambiguity about how much bat habitat would be retained after BWRX-300 construction is completed. Exact impacts to insect and amphibian habitat from the project were also unknown. Since then, some helpful maps were provided in OPG baseline studies showing the DNNP footprint and approximate bat habitat that will be affected. However, Dr. Fraz has noted that a clear

¹³ *Supra* note 1 at p 13.

picture of habitat loss due to both direct and indirect effects of DNNP construction may only be available after this work is completed.

For habitat relied on by amphibians and insects, conservation will depend on the number of trees that survive after clearing and grubbing activities. Dr. Fraz also warns that effects of sediment runoff and any contaminants into wildlife habitats associated with Coots Pond during site preparation and construction activities will require stormwater management techniques to provide for adequate flow and water quality – strategies and techniques that have not been disclosed in detail on the public record.

Stormwater management and groundwater conditions

Erosion and sedimentation were identified as the most prominent feature of inland construction work and activities, with excavation, grading, and construction of various blocks and facilities.¹⁴ In NTP's EA submissions for the DNNP,

Dr. Fraz noted that a stormwater management description and plan is crucial for assessing: groundwater and stormwater interactions; impacts to natural features retained with the construction zone of BWRX-300 including ponds and wetlands; and any potential flooding, significant rains and snow melts, or changes in water levels due to climate change". Dr. Markelova agrees and notes more modelling is also required to better understand a wider variety of scenarios and assumptions for how BWRX-300 construction (and soil stockpiles) may impact local wetlands: both from stormwater runoff and changes in groundwater flow"¹⁵

NTP's EA intervention also noted that the organization was missing data referenced in an OPG report we had been provided which prevented our experts from being able to compare groundwater modelling between 2011-assessed reactor technologies and the BWRX-300. At that time, Dr. Markelova noted she had not had access to the results of a study commissioned by OPG in 2022 to determine how BWRX-300 construction and installation could affect an identified tritium plume in groundwater at the Darlington Nuclear site. This plume was the result of a spill from an Injection Water Storage Tank in 2009.¹⁶

We have since received a response to this query from OPG which noted that,
"although assessing groundwater seepage pathways from areas of elevated tritium concentrations was part of the scope for this particular study (NK054-REP-07730-

¹⁴ Ontario Power Generation, Aquatic Environment Assessment of Environmental Effects TSD- NK054-REP-07730-00013-R000, Table 3.1-1.

¹⁵ *Supra* note 1 at p 20.

¹⁶ *Supra* note 1 at p 18.

00059-R000), it was determined that there are no elevated levels of tritium in groundwater on the DNNP site. The modelling/assessment of seepage pathways was ultimately not required. OPG acknowledges that this should have been stated in the report.”¹⁷

While this response is appreciated, it fails to address exactly how OPG verified that groundwater quality in the vicinity of the proposed new build reactors was not an issue that required further study. It also fails to provide any data or other evidence of groundwater conditions in the vicinity.

A more detailed explanation of the decision to omit seepage pathway modelling, especially in light of the deeper reactor installation and the historical spill, would be in the public interest. More specifically, Dr. Markelova has suggested that OPG should clarify how future potential groundwater contamination risks are being addressed in the absence of a dedicated model. She also recommends that information on how stormwater will be controlled in extreme weather events (including significant rain and snowmelt events) should be provided, with a focus on potential flooding risks and climate change impacts.

Dr. Markelova further explained that the following risks are not addressed in OPG’s application for its licence to construct its DNNP:

- 1) the risk of environmental cross-contamination (leak scenarios) in a common reactor coolant water and feedwater system, as compared to separate systems; and
- 2) the introduction of hydrogen gas into the cooling system of the BWRX-300, including a risk assessment of malfunction of the hydrogen gas injector, risk assessment of malfunction of the off-gas system, and risk of hypoxia in the lake caused by discharged coolant water.

PART FIVE:

Comments relating to the new CNSC confidentiality process

During the current proceeding, the CNSC introduced a new process to more transparently render decisions concerning proponent applications for confidential treatment of submitted materials. In the past, such determinations were made separately between CNSC staff and project proponents, and not released with the public.

NTP commends the CNSC for making this process more transparent, and for inviting public comments on OPG’s application for confidentiality during the current proceedings.

¹⁷ NTP email correspondence with OPG, October 8, 2024.

However, no notice was provided at the start of this proceeding that there would, at a later date, be a process by which the public could comment on OPG's confidentiality filing. Further, by the time intervenors were notified of OPG's application, there were only ten days available to comment on thousands of pages of highly technical materials. This high volume was overwhelming in and of itself, but also made more challenging due to its formatting.

Additionally, no detailed rationales provided for each document or each portion of each document that OPG wanted redacted, which made it difficult to discern exactly what OPG was requesting and on what grounds. NTP submits that decisions on each requested redaction should also ultimately be provided by the responsible CNSC authorities, which was not done in this case.

Finally, in the future, NTP submits that requests for confidentiality should be made as soon as possible to allow adequate time for public review and comment. Further, where applications for confidentiality are expected, this should be noted in the notice for the hearing, with timeframes for these comments specified at that time. Further, participant funding for proceedings should note whether there will be confidentiality filings so that funded intervenors can include this in their proposed work plans.