



CMD 23-M36.12

Date: 2023-10-30

File / dossier : 6.02.04

Edocs pdf : 7157789

Oral Presentation

Exposé oral

Written submission from the Nuclear Transparency Project

Mémoire du Projet de transparence nucléaire

Regulatory Oversight Report for
Canadian Nuclear Power Generating
Sites: 2022 and Mid-term update for
Ontario Power Generation's Pickering
Nuclear Generating Station

Rapport de surveillance réglementaire
des sites de centrales nucléaires au
Canada : 2022 et Rapport de mi-parcours
d'Ontario Power Generation pour la
centrale nucléaire de Pickering

Commission Meeting

Réunion de la Commission

December 13 and 14, 2023

13 et 14 décembre 2023



nuclear
transparency
project

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

Submitted via email

October 30th, 2022

To Members of the Canadian Nuclear Safety Commission,

Re: Canadian Nuclear Safety Commission Staff's Regulatory Oversight Report on Nuclear Generating Facilities in Canada: 2022 and Mid-Term Licence Update from Ontario Power Generation for the Pickering Nuclear Generating Station

We would like to begin by thanking the Commission for this opportunity to provide comments on this Regulatory Oversight Report (ROR) and mid-term licence update. We would also like to recognize the efforts of Canadian Nuclear Safety Commission (CNSC) staff, Canadian civil society organizations, and Indigenous Nations for their informative publicly available materials and submissions on this matter. NTP is also grateful for the comments in writing by CNSC staff in response to the NPRI-related information requests that accompanied our ROR intervention last year.

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 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 Dr. Tamara Fuciarelli and Alan Rial, M. Eng. who performed NTP's data analysis.

Our submissions have been divided into four parts. The first part contains a review of the current ROR for Canadian nuclear generating facilities. The second part contains more general findings and recommendations relating to publicly accessible data on which this ROR relies as part of its evidentiary basis. The third part contains NTP's more general recommendations to improve the ROR intervention process for future ROR meeting proceedings. Our comments in these three parts have been drafted to build on last year's recommendations, elaborating further on some of them and reporting on the progress of implementing others. Finally, these submissions will provide a series of comments and recommendations relating to the mid-term licence update for the Pickering Nuclear Generating Station.

PART ONE: NTP's review of the ROR

We can understand how demanding RORs must be to prepare. The size and complexity of nuclear generating stations must also make them a challenging subject to cover. Of all the categories of CNSC licensee, generating facilities are also amongst the ones that proactively share the most data and information with the public. It is interesting then, that the ROR for generating facilities has the least amount of data compared to most other RORs, especially the RORs for uranium and nuclear processing facilities and uranium mines and mills. While the volume of environmental data from nuclear generating stations is high, some cursory analysis by the regulator could assist members of the public in their understanding of facilities' operations each year.

Recommendation 1: for CNSC staff to comment on the feasibility and desirability of providing summaries of environmental data in its ROR similar to what is done in RORs for uranium and nuclear substance processing facilities and uranium mines and mills.

Further, there are some areas in the ROR where information is provided without sufficient explanation or context to facilitate public understanding and transparency. One example of this is the Fitness for Service portions of the current ROR. Here, there are no definitions for the different categories of maintenance work, nor are there descriptions of the relative severity of listed maintenance works. The tables provided for each generating station in this portion of the ROR merely note the number of maintenance works in each category and assess whether this number is greater or less than previous years or other facilities. No further descriptions of each of these works is provided.

The result is a series of comparisons in the ROR that are difficult to situate in the real world. Their significance is almost impossible for us to discern. However, with many reactors operating toward the end of the design lives (or beyond), the issue of repairs and maintenance is especially important. We have sent a series of information requests to CNSC staff on this issue to deepen our understandings of the factors at play and staff's analysis.

PART TWO: NTP's review of publicly accessible data for generating facilities

Last year, NTP made a series of recommendations to improve the breadth of data disclosures and advocated for greater standardization of reported data between generating facilities. We are still in the process of compiling more detailed recommendations regarding this issue and will continue to follow-up on last year's recommendations in the meantime.

OPG and Bruce Nuclear also have several online applications (“apps”) that share environmental data with members of the public in interactive ways. OPG has two GIS portals on which select groundwater monitoring wells are shown with averaged sampling results. Bruce Power has one app that provides thermal discharge data and another app that provides environmental monitoring data for soil, sediment, groundwater, and surface water on and around the Bruce Nuclear site. All these apps have filters whereby members of the public can search for data from particular time periods or different contaminants.

For all three apps, it is unclear at times how spatial boundaries and monitoring frequencies were determined for some sampling locations and ecological receptors. Further, for the Bruce Power apps, some parameters have multiple years' worth of missing from datasets without any corresponding explanation for these data gaps. NTP understands that all data must be scoped in order to render it more manageable. However how this scoping is done should be transparent and scientifically defensible.

As these apps continue to be refined and developed, and as potentially more licensees develop similar apps, the CNSC must ensure this area does not become a regulatory gap. CNSC staff should work with the public to develop best practices and standardize licensee's use of online applications to disclose environmental data.

During the mid-term licence update for the Bruce Nuclear Generating Station, NTP made recommendations relating to the need for greater transparency and standardization of licensees' apps used to convey environmental monitoring.¹ At the Commission meeting for this matter, CNSC staff noted they were not “ready yet to regulate applications” nor were they “planning to do that in the near future”. Rather, CNSC staff undertook to “work with the licensees, with the applicants and members of the public to make sure that the flow of information is optimized and efficient for the purpose”.²

NTP would like to take this moment to clarify that regulation of these emerging apps would not be different from any other method by which licensees share their monitoring data. Rather, as a nuclear regulator with a mandate to share technical information with the public, NTP argues that the CNSC should work to verify the accuracy and comprehensiveness of these apps to ensure they do not confuse or mislead the public.

¹ Nuclear Transparency Project, Written Submission for Bruce Power Mid-Term Update of Licensed Activities, CMD 23-M27.29, August 3, 2023, online: <https://nuclearsafety.gc.ca/eng/the-commission/meetings/cmd/pdf/CMD23/CMD23-M27-29.pdf>.

² p 165 Transcripts from September 20th Commission meeting to consider BNGS mid-Term

Much of this would be achieved by ensuring that licensees clearly communicate how they are scoping their data for release.

Recommendation 2: that CNSC staff work to oversee licensee's data visualization resources and review them for accuracy and completeness

PART THREE: NTP's recommendations for future ROR intervention processes

Last year, we made three recommendations relating to the ROR intervention process that were not specific to any particular ROR. First, NTP requested more time to prepare interventions; second, we requested the ability to present oral submissions at Commission meetings to consider RORs; and third, we requested that the CNSC's PFP develop more specific intervenor funding criteria in consultation with members of the public and public interest organizations.

This year, we were very grateful for an additional two months of preparation time for this intervention. While CNSC staff's Commission Member Document (CMD) was released at roughly the same time as last year (in early September), the additional preparation time allowed our experts to more easily schedule their reviews and follow up with CNSC staff to obtain responses to last year's information requests and submissions.

We have also been offered the opportunity to deliver oral submissions for certain RORs this year, which is likewise appreciated. We hope these opportunities to make oral submissions are extended to all interested members of the public and civil society organizations, and that they may include the opportunity to meaningfully contribute to the public record for these ROR proceedings.

The review of the PFP funding criteria is an outstanding item that NTP would again like to propose for the CNSC's consideration. The scoping of ROR interventions by the funding conditions intervenors receive can effectively shape the substantive content of ROR proceedings and impact the public record and any outcomes from Commission meetings. Developing a broader definition of the types of analysis and experts eligible for funding could expand the scope of funded interventions while still remaining consistent with the Commission's mandate.

Recommendation 3: that the CNSC's PFP develop more specific and expansive intervenor funding criteria, in consultation with members of the public and public interest organizations.

PART THREE: NTP's comments on the Pickering Nuclear Generating Station's mid-term licence update

After reviewing Ontario Power Generation's (OPG's) mid-term licence update for the Pickering Nuclear Generating Station (PNGS), we have become concerned that these mid-term licence updates are not valuable opportunities for public input when they are appended to ROR meetings.

First, there is hardly any information in OPG's submission relating to the last five years of operations at the facility. Some graphics are included throughout the report, but to limited use. For example, a chart on page 16 is meant to detail staff combined annual radiation exposure. However, the chart's axes are illegible and thus give the impression of data being shared, rather than sharing data via this report in reality.

Second, no additional funding or time was provided to review this updates. Funding and timeframes for ROR reviews are already tight, as explained above. Trying to tack on a facility's mid-term licence review to this already demanding ROR intervention is exceedingly challenging. Further, when the information in these mid-term licence updates is of a low quality, it puts more of an onus on intervenors to draft information requests to supplement their analysis. The process of drafting information requests and reviewing and following up on the responses received usually takes a number of months. ROR timeframes cannot provide sufficient support for such a process.

With licence terms increasing significantly in length, mid-term licence proceedings will also become increasingly important mechanisms by which members of the public can continue to oversee and understand facilities' operations. Ensuring sufficient time for this is crucial.

Recommendation 4: that intervenors receive at least 6 – 12 months to prepare submissions for future mid-term licence updates.

Finally, NTP submits that mid-term licence updates can be coordinated with moments of greater routine information sharing. For example, they can coincide with the release of Environmental Risk Assessments (ERAs) and Probabilistic Safety Assessments (PSAs) for facilities, thus allowing intervenors a supported public forum for reviewing and analyzing these more rigorous technical documents. Further, mid-term licence updates could also provide opportunities for licensees to release larger machine-readable datasets relating to their operations since their last licence renewal hearing. Given the many years between licence renewal hearings and mid-term licence updates, there is potentially significant preparation time for the CNSC and licensees to ensure meaningful evidentiary bases for public interventions.

Recommendation 5: that the CNSC consider coordinating mid-term licence update proceedings to coincide with licensees' release of ERAs, PSAs, and larger machine-readable datasets.