canadian nuclear association cna anc association nucléaire canadienne

February 20, 2019

Maxime Fortin
Committee Clerk
Standing Senate Committee on Energy, the Environment and Natural Resources
E-mail: maxime.fortin@sen.parl.gc.ca

Canadian Nuclear Association submission on Bill C-69 to the Standing Senate Committee on Energy, the Environment and Natural Resources

The Canadian Nuclear Association (CNA) appreciates the opportunity to make a submission to the Standing Senate Committee on Energy, the Environment and Natural Resources. The CNA has been actively involved in all aspects of the federal assessment review process, including appearing before the House of Commons Standing Committee on Environment and Sustainable Development and, before that, the Minister's Expert Panel as well as participating in the Multi-Interest Advisory Committee and providing comments on the Expert Panel Report and the federal government's Discussion Paper.

The CNA has approximately 100 members representing over 60,000 Canadians employed directly, or indirectly, in uranium mining and exploration, fuel processing, electricity generation, and the production and advancement of nuclear medicine.

Nuclear Energy and GHG Reductions

Today, nuclear energy produces approximately 20% of Canada's non-emitting electricity, including 63% of Ontario's and approximately 30% of New Brunswick's. Looking to the future, nuclear energy will play an increasingly important role in Canada's overall clean energy mix portfolio.

The single largest reduction of GHG emissions in Canada was the Ontario government's province-wide coal generation phase out. We note with some pride that this phase out was largely enabled through the refurbishment of 6 nuclear reactors. The CNA believes that the Ontario model provides a blueprint for other provinces.

If Canada is serious about achieving its Paris Accord climate targets, then the route is through greater electrification. Nuclear and hydro are the only two large baseload sources of non-emitting generation that can enable us to achieve that goal. Building on the Ontario model nuclear can and must play a significant role in Canada achieving those targets. In 2017, coal

1610 – 130 rue Albert St. Ottawa ON K1P 5G4 cna.ca

fired generation emitted 79MT of emissions in Canada. The installation of 2800 MW of nuclear generation would offset 21MT. The installation of 7700MW would offset 54MT. Nuclear projects have typically been large mega projects and, while they take time, projects of this scale yield the vast amounts of generation at low cost to the consumer. In recognition of the low carbon requirements, the nuclear industry is also developing a range of small more flexible nuclear power sources that can be installed more quickly.

The same challenge applies on the world stage. To put this issue in perspective, it should be noted that between 1997-2017 global electricity grew on average 571TWh a year. In 2017, the world generated 25,570 TWh of electricity. Nuclear power generated 2637TWh (10%) in 2017, coal generated 9566 TWh (37%), Natural Gas 5944TWh (23%) and oil 997 TWh (4%). By contrast, wind, solar and geo-thermal generated approximately 1300TWh (6%). It is clear that the world faces an enormous challenge just to limit the growth of fossil fuels, never mind beginning to reduce their usage.

It is also clear that the world needs to use all sources of non or low emitting generation. In 2017, China which accounted for 32% of the global wind capacity, produced 286 TWh of wind-generated electricity. Given the current electricity growth (not counting greater electrification), the world would need to install twice as much wind capacity as China has each year just to meet growth. Germany has the most installed solar energy in Europe. In 2017, German solar produced 40TWh. It would take 14 times as much capacity each year just to meet growth. This is simply not feasible. If Canada and the world are to achieve the Paris targets, then all forms of low emitting generation must be used.

Other Benefits of Nuclear Energy

The Canadian nuclear industry is also Research & Development intensive, which furthers our national manufacturing and engineering capabilities. Nuclear technology is central to almost every technical field, including advanced electronics, material development, aerospace, automotive, environmental technology, food processing, and, of course, nuclear medicine. Thanks to nuclear science and technology, Canada meets nine of the seventeen United Nations Sustainable Development Goals.

Canada's nuclear industry is the originator of nuclear medicine and now a leading nation globally in this vital health sector. For example, Canada is the world leader in the production of Cobalt-60, a key asset for the sterilization of medical equipment and in the diagnosis and treatment of various diseases.

Canada's nuclear industry also works closely with Indigenous peoples and communities to enable proactive engagement and create mutually beneficial opportunities. Our member, Cameco, as an example, has demonstrated the power of partnerships in improving the economic and social well-being for communities and the benefits of working together to bring about real change. Cameco has engaged with Indigenous communities in northern Saskatchewan for decades on environmental stewardship, community investment, employment, education and training and contracting opportunities.

1610 – 130 rue Albert St. Ottawa ON K1P 5G4 cna.ca

canadian nuclear association cna anc association nucléaire canadienne

Bill C-69

With respect to Bill C-69, the CNA would highlight that the concept of 'cumulative impact' is not only a key issue with respect to the environment, but also with respect to sustained investment in Canadian energy projects. Large energy projects, whether a nuclear plant, a hydroelectric dam, a mine or a pipeline, require large amounts of capital. Capital is fluid and investors do not like uncertainty.

Right now, investment in Canada is facing significant challenges – including uncertainty around a suite of changes to federal regulatory policies as well as provincial regulatory policies, trade restrictions, corporate and individual tax rates and, in fairness, such things as commodity prices, which are out of Canada's control.

The CNA believes it is important to keep in mind the impact on investment when considering all legislation and policies. Our review of Bill C-69's proposed *Impact Assessment Act (IAA)* has flagged several areas where the IAA has the potential of creating lengthy timelines and uncertainty, thus further weakening Canada's investment climate. However, with amendments and focused implementation, the IAA has the potential to achieve the federal government's objective of enabling good projects to go ahead and resources get to market.

Single Agency and Joint Panels

The Bill proposes that a single government agency be responsible for impact assessment reviews. In the case of the nuclear industry, the Bill only provides for the option of an Agency-led Joint Panel Review. While we have had joint panels in the past, the CNA does not believe this will be an improvement over the current process.

Many of the potential impacts considered in relation to nuclear projects are related to radiation protection and international commitments on safeguards and non-proliferation. That work must be overseen by a regulator with significant and specialized scientific expertise. The (Canadian Nuclear Safety Commission (CNSC) is the only place in government with that expertise. This is implicitly acknowledged by the need for joint panels. The CNA believes that assessments should remain at the CNSC as the most efficient and effective way of conducting reviews.

As a full-life cycle regulator, the CNSC licensing regime and regulatory framework already covers the entire life-cycle of the project, which is subject to the requirements of the *Nuclear Safety and Control Act* (NSCA) and its regulations. This allows the CNSC to not only conduct the assessment in the planning phase of a proposed new project, but also to ensure that monitoring programs and follow up conditions required by this process are directly integrated into the licensing process throughout the various stages of the assessed projects. Our industry is unique and the CNSC has the expertise to best manage our activities.

Recommendation: Amend the Bill so that the CNSC shares equal responsibility with the Agency for the conduct of the entire Joint Panel Review process for nuclear projects including the Early Planning and Engagement Phase

1610 – 130 rue Albert St. Ottawa ON K1P 5G4 cna.ca

canadian nuclear association cna anc association nucléaire canadienne

Uranium Mines and Mills

The CNA would also like to propose some specific amendments with respect to uranium mining. The CNA is requesting simple amendments to section 43 (and related provisions) of the IAA to ensure uranium mines and mills are treated consistently with other mines and mills in Canada.

Currently, the draft IAA automatically imposes a review panel process on designated uranium mining and milling projects, when designated projects of similar complexity for other mines and mills (e.g., coal, gold, silver, etc.) are not automatically subject to a review panel process.

This arbitrary referral is dissimilar to all prior versions of federal environmental assessment legislation and is not supported by any science or evidence. In fact, the uranium mining industry is a top performer in Canada with respect to social, environmental, safety, and health issues, including regulatory compliance. Furthermore, it is the only mining and milling sector in Canada that is already subject to continuous, dedicated oversight by a federal lifecycle regulator – the Canadian Nuclear Safety Commission.

For the IAA to be workable for Canadian uranium producers, uranium mines and mills must be treated like other metal mines and mills. This would require the following IAA provisions to be amended as indicated by the underscored text:

> 39(2) However, the Minister is not authorized to enter into an agreement or arrangement referred to in subsection (1). (a) the Nuclear Safety Control Act other than a uranium mine or mill.
>
> 43 The Minister must refer the impact assessment of designated project to a review panel if the project includes physical activities that are at a nuclear facility regulated under any of the following Acts:
>
> (a) the Nuclear Safety Control Act other than a uranium mine or mill.
>
> 44(1) When the Minister refers an impact assessment of a designated project that includes activities regulated under the Nuclear Safety Control Act, other than a uranium mine or mill, to a review panel…
>
> 46 For the purposes of conducting…, including preparing a report with respect to that impact assessment, a review panel referred to in s. 43 may exercise the powers…
>
> 67(1) The Minister…the Nuclear Safety and Control Act other than a uranium mine or mill, designate…

Recommendation: Amend section 43 of the IAA to exclude uranium mines and mills from an automatic referral to the review panel process.

1610 – 130 rue Albert St. Ottawa ON K1P 5G4 cna.ca

Early Planning Phase

The CNA supports the government's attempt through the early engagement phase to clarify scope, information and studies required, confirming regulatory responsibilities, minimizing overlap and including other permits, authorizations and licensing criteria in the review. We are skeptical, however, that the proposed early engagement process will be effective or provide more clarity or certainty.

As the early planning phase occurs after the proponent has provided an initial project description, the proponent will have already undertaken stakeholder engagement to ensure the business case and to have some degree of confidence that issues can be mitigated. The CNA believes that the current process already allows for a responsible proponent to conduct the all-important engagement with local communities, indigenous groups and public stakeholders.

The CNA recognizes that not all proponents undertake as detailed early engagement as necessary, but we do not believe that the default position should be a second early planning phase led by the IAA. This punishes "good proponents" and is not always necessary. In our view, the government's objectives could be achieved by having the IAA conduct a federal verification or confirmatory review of the proponent's early engagement process.

This could be further enhanced by the development of best practice guidelines and communication of these, which could ensure a consistent and positive approach to early engagement.

In addition to the uncertainty caused by creating a new agency-run early engagement process, Bill C-69 dramatically increases the scope of assessment by adding several new elements of review. While the criteria, aims and goals of environmental assessment are well understood and measurable, there is a great deal of uncertainty around some of the new elements of assessment.

Recommendation: The Bill be amended to change the early engagement phase to an IAA verification or confirmatory review of the proponent's early engagement process. Furthermore, best practice guidelines be developed to clarify expectations and help create a consistent approach to proponent-led early engagement.

Scoping

CNA is concerned with the multiple scoping phases provided for in the process. The planning phase was intended in part to improve certainty and predictability by determining the requirements the proponent would have to meet early in the process. In our view, the Bill does not achieve that goal.

The proposed Act sets out an initial scoping by the agency as informed by federal authorities, all other jurisdictions, the public and Indigenous groups. However, the Act also allows at least two additional scoping phases – one by the sole discretion of the Agency and one by the review panel. The latter two scoping phases are well into the process and could change the scope of

1610 – 130 rue Albert St. Ottawa ON K1P 5G4 cna.ca

the project after the proponent has spent years and millions of dollars to comply with the original scoping.

For review panel reviews, a "one project, one review" process can only occur if the scoping stage is coordinated amongst the Agency, the review panel and all federal regulators as well as harmonized with provincial or other jurisdictional requirements.

Recommendation: The CNA recommends that a single, consolidated scoping led by the review panel occur early in the process and be agreed to by all jurisdictions and all federal authorities with permitting or approval responsibilities.

Cost Recovery

The Canadian nuclear industry is subject to cost recovery under the *NSCA*. The CNA is concerned that there is the potential for multiple cost recovery charges and regulatory fees to be applied by multiple regulators in the federal family in addition to similar provincial charges.

Recommendation: Cost recovery and regulatory fees should be transparent, predictable, reasonable, set per assessment and exclude out-of-scope costs such as regional or strategic assessments. Participant funding costs should also be excluded from cost recovery.

Timelines

CNA members also have significant concerns over the proposed timelines. As mentioned earlier, investors look for certainty of process. Nuclear projects are by nature lengthy projects that require large capital investments. Anything that creates uncertainty around timelines and/or process makes it more difficult to attract and sustain investment.

The government's own timelines estimate 5 years of federal time for a Joint Review Panel assessment. Our members believe it will be significantly longer. There should be more work completed to clarify the process including around the application of the numerous extension and suspension provisions.

Our members also believe the Bill creates several opportunities for significant delays, including multiple opportunities for judicial review applications as well as the potential for significant delays caused by additional scoping.

Taking into account all of the steps in the process, C-69's proposed timeline will be much longer than previous federal assessment timelines and does not provide any greater transparency or certainty to investors. As stated earlier, these are capital intensive projects and uncertainty makes it extremely difficult to raise investment capital, especially when there are significant costs and time required before one even gets approval to start construction.

Recommendations: Clarifications around the early planning phase, a clearly defined project list, along with a clearly defined and limited list of opportunities for suspension of the timelines should help improve certainty.

1610 – 130 rue Albert St. Ottawa ON K1P 5G4 cna.ca

Broader Policy Issues

The CNA would like to see a process or venue developed to address broader policy issues. Bill C69 does not adequately address the need to find a separate and appropriate venue to debate and resolve broader public policy issues.

In the view of the CNA, while the IA process should consider and be aligned with the government's broader policy objectives, such as climate change and Indigenous reconciliation, the IA should not become the place where those policies are debated, much less resolved.

In the case of the nuclear industry, most opponents to our projects are ideologically opposed to nuclear energy and thus will never support the project no matter what approach is used. While these groups and individuals have the right to express their views, the CNA does not believe that project impact assessment is the appropriate place to persuade them about the merits of a policy. The assessment should focus on the impact of the project not the policy.

Recommendation: Bill C-69 be implemented in such a way to ensure that the IA address the specific impact of a project rather than be used as a venue to debate a specific policy.

Decision Making Process

Our members also have concerns over how closure will be achieved with respect to issues raised through the review process. It is our view that, without some decision-making process that allows closure on contentious issues, the new IA process will simply add uncertainty, increase timelines, create additional work with minimal benefits for the project and result in early legal challenge.

Conclusion

The Canadian Nuclear Association and its members share the government's objective of creating a clear and transparent impact assessment process that will allow good projects to proceed and resources to get to market.

In our view, the proposed Bill in its current form does not do that. However, we believe with appropriate amendments, such as outlined in this submission and with careful and disciplined implementation, the proposed legislation could be tailored to make it more likely to achieve those objectives.

The CNA would note that it is difficult to assess the impact of Bill C-69 without the accompanying regulations. In particular, the revised Designated Physical Activities Regulations (i.e. the Project List) is critical to fully assess the effect of this legislation. If minor projects or projects on existing sites are forced to undergo a full panel assessment, then it will have a significant negative effect on the Canadian nuclear industry. Similarly, if improvements are not made to the proposed timeline, then it will limit the number of projects proposed.

1610 – 130 rue Albert St. Ottawa ON K1P 5G4 **cna.ca**

canadian nuclear association cna anc association nucléaire canadienne

The CNA is encouraged by the willingness of the committee to consider amendments that will have a positive impact on the proposed legislation and look forward to providing any further information the Committee might require.

For further information, please contact Steve Coupland, Director, Regulatory and Environmental Affairs, Canadian Nuclear Association at couplands@cna.ca

Sincerely,

John Barrett, Ph.D.
President and CEO
Canadian Nuclear Association

1610 – 130 rue Albert St. Ottawa ON K1P 5G4 cna.ca