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**Written submission from the
Chippewas of Kettle and Stony
Point First Nation**

**Mémoire de la Première
Nation des Chippewas de
Kettle et Stony Point**

**Regulatory Oversight Report for
Canadian Nuclear Power Generating
Sites in Canada: 2021**

**Rapport de surveillance
réglementaire des sites de centrales
nucléaires au Canada : 2021**

Commission Meeting

Réunion de la Commission

November 3, 2022

Le 3 novembre 2022



September 23, 2022

Attn:

Canadian Nuclear Safety Commission
P.O. Box 1046, Station B
280 Slater Street
Ottawa, ON K1P 5S9

Re: Regulatory Oversight Report for Nuclear Power Generating Sites: 2021

Chippewas of Kettle and Stony Point First Nation (CKSPFN) Written Submission

CKSPFN Reviewed the following reports and attended the following information session in preparation for these comments:

- Regulatory Oversight Report for Canadian Nuclear Power Generating Sites for 2021 (e-Doc 6835691)
- Regulatory Oversight Report for Canadian Nuclear Power Generating Sites for 2019 and Darlington Refurbishment Update (e-Doc 6394079)
- Bruce Power – 2019 Environmental Protection Report (B-REP-07000-00012 R000)
- September 8, 2022 Engagement Session – 2021 Regulatory Oversight Report for Nuclear Power Generating Sites

Please note, CKSPFN is submitting the following written comments only and is not requesting to make an oral presentation during the November 3, 2022 Commission meeting.

Summary:

In 2017, CKSPFN passed a band council resolution asserting ownership to the lakebeds and waterways within the CKSPFN traditional land base (Appendix A). Specifically, "Declaration to the waterways and lakebeds within its traditional territory for the management, use and enjoyment of the first nation and its peoples". This assertion includes Lake Huron. CKSPFN has a keen interest in the impacts of the Bruce Nuclear Facility and the Western Waste Management Facility on the water and the species and communities that rely on the water.

Bruce Nuclear Generating Station:

Overall, CKSPFN is satisfied with the safety reporting and compliance for the Bruce Nuclear Generating Station. That said, CKSPFN would like to gain a better understanding of the emergency response process

in the event of a nuclear accident or malfunction. For example, if an event included a radioactive release or impact to Lake Huron:

1. How would CKSPFN be notified?
2. Who at CKSPFN would be notified?
3. How quickly would someone at CKSPFN be notified?
4. How could CKSPFN be involved in environmental remediation?

Fisheries Act Authorization

On page 93 of the 2021 ROR for NPGS, CNSC states:

“In December 2019, Fisheries and Oceans Canada (DFO) issued a Fisheries Act authorization (FAA) for the ongoing operation of BNGS A and B. The authorization covers the death of fish through impingement and entrainment due to the water intakes that draw water from Lake Huron for the cooling water systems. The conditions of the FAA include monitoring and inspections, as well as maintenance of mitigation structures (velocity cap/chain rope barrier) at the water intake to reduce fish impingement.”

According to page 111 of the 2019 ROR for NPGS, CNSC noted, “Bruce Power was also required to submit a final impingement and entrainment monitoring plan by March 2023 after engaging with Indigenous Groups.”

It is unclear whether the Department of Fisheries and Oceans Canada consulted CKSPFN regarding the above 2019 *Fisheries Act* authorization. This is especially concerning given the historic lack of consultation during the construction period of the Bruce Nuclear Generating Station. Further, CKSPFN has not been contacted by Bruce Power to provide input on the impingement and entrainment monitoring plan currently in development. CKSPFN has constitutionally protected rights and takes stewardship of the unceded waters in the territory very seriously. CKSPFN requests that Bruce Power reach out to the Consultation Department at consultation@kettlepoint.org to discuss opportunities for collaboration, including in the March 2023 monitoring plan and ecological stewardship in general.

For specific environmental questions and comments, please refer to Appendix B attached here.

Western Waste Management Facility:

In general, CKSPFN is satisfied with the safety and environmental compliance reported for the Western Waste Management Facility. CKSPFN notes that page 111 of the 2021 ROR for NPGS states:

“In 2021, OPG constructed two additional DSC storage buildings (Storage Buildings #5 and #6). Under the WFOL for the WWMF, OPG is authorized to construct 2 additional DSC storage buildings (Storage Buildings #7 and #8), 11 additional LLSBs, 270 additional in-ground containers, 30 in-ground containers for heat exchangers, 1 large object processing building, and 1 waste sorting building. The new structures will provide additional storage for used nuclear fuel and additional storage to manage L&ILW.”

CKSPFN was unaware of the work outlined above and asks that OPG contact the CKSPFN Consultation Department at consultation@kettlepoint.org for any projects that may impact the water in CKSPFN's

traditional land base, including an increased amount of used nuclear fuel and waste being stored near the shorelines of the unceded waters in the territory.

CKSPFN understands that nuclear waste from CNSC-regulated facilities other than Bruce Nuclear Generating Station is transported to and stored at the Western Waste Management facility. CKSPFN seeks to learn more about the transportation route and safety precautions to ensure that our traditional lands are protected.

Overall Impacts of Nuclear Energy in CKSPFN Treaty Lands and Unceded Waters:

CKSPFN wishes to highlight several issues related to the Bruce Nuclear Generating Station and Western Waste Management Facility that were not addressed / may be outside the scope of the Regulatory Oversight Report, but which have real impacts to the CKSPFN community.

Nuclear power construction and refurbishment are multi-billion-dollar initiatives, with tangible socio-economic impacts. CKSPFN was not consulted on the initial approval for the Bruce Nuclear Generating Station and the Western Waste Management Facility. As far as CKSPFN understands, there was also no dialogue around the impacts of the Bruce refurbishment project either. These large-scale projects often result in an influx of workers and put pressures on an already fragile housing market. Large projects can drive up the cost of housing in surrounding communities, impacting those nearest to the poverty line the worst. CKSPFN faces a critical housing shortage, and this kind of external pressure only exacerbates the problem. In the absence of a baseline study prior to the development of the Bruce Nuclear Generating Station, CKSPFN has no way to measure the historical impacts of the nuclear industry on the housing market in our territory.

CKSPFN is not aware of any baseline or monitoring related to substance abuse or the illicit drug economy related to the workforces associated with large scale nuclear refurbishment and economic growth/workforces related to the supply chain. Further, CKSPFN has not seen or participated in any studies to measure the impacts on CKSPFN's traditional and current small-scale fisheries operations.

If any of the above studies have been completed, CKSPFN welcomes the opportunity to discuss with the CNSC staff. Overall, CKSPFN seeks to improve information sharing and collaboration with the CNSC, Bruce Power, and OPG.

Conclusion and Next Steps:

CKSPFN appreciates the opportunity to submit these comments for the CNSC's consideration. In the spirit of the United Nations Declaration on the Rights of Indigenous Peoples Act¹, CKSPFN looks forward to developing a positive, ongoing relationship with CNSC, Bruce Power, and OPG.

Miigwetch,

CKSPFN Consultation Department

¹ <https://parl.ca/DocumentViewer/en/43-2/bill/C-15/royal-assent>

Appendix A – CKSPFN Declaration to the Waterways and Lakebeds within Traditional Territory



Chippewas of Kettle & Stony Point First Nation

6247 Indian Lane
Kettle & Stony Point FN, Ontario, Canada N0N 1J1

Wednesday, May 31, 2017

Minister Carolyn Bennett
Indigenous Affairs and Northern
Development Canada
Terrasses de la Chaudière
10 Wellington, North Tower
Gatineau, Quebec
K1A 0H4



Dear Minister Bennett:

Re: Chippewas of Kettle and Stony Point First Nation Band Council Resolution # 2851

Enclosed please find the Chippewas of Kettle and Stony Point First Nation BCR #2851 regarding the affirmation of the First Nation's declaration of ownership to the lakebeds and waterways located within our traditional land base.

Please direct inquiries to Chief Thomas Bressette at your convenience.

Sincerely,

Toni George
Council Assistant

Attach. (1)

c: Ministry of Indigenous Relations & Reconciliation
Ministry of Natural Resources
Ministry of Environment
Municipality of Lambton Shores



FIRST NATION COUNCIL RESOLUTION

REFERENCE NO. 2851	DATE OF DULY CONVENED MEETING: 2017 / 05 / 29 (YEAR/MONTH/DAY)	PROVINCE OF ONTARIO
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THE CHIPPEWAS OF KETTLE AND STONY POINT FIRST NATION DO HEREBY RESOLVE:

WHEREAS the "Chippewas Nation of Indians and His Majesty King George IV as represented by the Superintendent of Indian Affairs" entered into the Provisional Agreement of 1825 and Treaty of 1827 regarding a certain tract of land in Southwestern Ontario and which surrendered certain parts of the tract and created the Reserves designated as Kettle Point #44 and Stony Point #43, and,

WHEREAS in neither agreement or Treaty was there a surrender of the waterways known as Lake Huron including the lakebed or any other waterways within the traditional territory; and

WHEREAS under Aboriginal and Treaty Rights, the Chippewas of Kettle and Stony Point First Nation assert ownership and jurisdiction over said waterways to the International Boundary and the land underlying the waterways (lakebed); and

WHEREAS the Chippewas of Kettle and Stony Point First Nation make DECLARATION to the waterways and lakebeds in its traditional territory including the waterway known as Lake Huron to the International Boundary, and including the lands under the waterway of Lake Huron known as the lakebed; and

WHEREAS the Lake Huron waterways are described as the point of intersection of the surrendered lands with Lake Huron as its most northerly point, extending directly out into Lake Huron to the International Boundary, then running along the International Boundary to the southerly limit of the herein described lands at the water's edge of the St. Clair River, and the land underlying this portion of Lake Huron (lakebed) and assert this waterway and lakebed has never been surrendered; and

THEREFORE BE IT RESOLVED THAT the Chippewas of Kettle and Stony Point First Nation hereby notify each government- Federal, Provincial and Municipal, company, individual, or groups of individuals, and any others who use or who plan to use any part or portion of this territory that they must disclose their use to the First Nation, and seek express permission from the government of the First Nation, namely the elected Chief and Council for the proposed usage; and

FINALLY THEREFORE BE IT RESOLVED the Chief and Council of the Chippewas of Kettle and Stony Point First Nation pass and affirm this "DECLARATION TO THE WATERWAYS AND LAKEBEDS WITHIN ITS TRADITIONAL TERRITORY FOR THE MANAGEMENT, USE AND ENJOYMENT OF THE FIRST NATION AND ITS PEOPLES" as confirmed within the First Nation's Aboriginal and Treaty Rights.

QUORUM 6

(CHIEF)

(COUNCILLOR)

(COUNCILLOR)

(COUNCILLOR)

(COUNCILLOR)

(COUNCILLOR)

(COUNCILLOR)

(COUNCILLOR)

(COUNCILLOR)

(COUNCILLOR)

Appendix B – CKSPFN Comments on the 2019 Environmental Protection Report, Bruce Power - B-REP-07000-00012

Text from EPR	Comments
Fish Impingement and Entrainment	
<p><i>Bruce Power received a Fisheries Act Authorization from Fisheries and Oceans Canada (DFO) in December 2019. The Authorization requires Bruce Power to quantify fish losses through continued monitoring fish impingement and entrainment, and then to quantify fish gains through monitoring improvements to the Lake Huron watershed.</i></p>	<ul style="list-style-type: none"> • CKSPFN requests further information on how these fish losses and gains are quantified via improvements to the Lake Huron watershed. The EPR suggests that the main impacts to Lake Huron from Bruce A and B are mainly direct implications of thermal water emissions on fish, as well as fatalities resulting from the facilities’ usage of lake water for cooling. • While improvements to the Lake Huron watershed are appreciated and should continue, what is Bruce Power doing to compensate for the fish directly lost as a result of facility operations?
<p><i>Fish impingement monitoring was completed at both Bruce A and Bruce B. Fish baskets are routinely monitored for debris loading on a daily basis at Bruce A and Bruce at each unit.</i></p>	<ul style="list-style-type: none"> • Bruce Power should consider monitoring fish baskets for debris loading and/or trapped fish twice per day if possible. Even if this does not decrease fish impingement, it will likely lead to more accurate species identification due to less decomposition between monitoring. • The quantity of fish lost in one year (8,946 fish) is of great concern to CKSPFN, as a top priority is the protection of our lands, waters, and all living relatives. Lake Huron is within our traditional territory, and fish impingement directly interferes with our ability to exercise our rights to fish and hunt. Please explore further opportunities to limit impingement and entrainment of fish.
<p><i>A total of 8,946 fish were collected in 2019. A total of 447 were too decomposed to initially assign to a species therefore the distribution of species present in the week of impingement was used to determine the probable species. These 447 species were reassigned and are accounted for in Table 1.</i></p>	
Thermal Emissions	
<p><i>Bruce A has a temporary amendment of thermal ECA to allow operational flexibility conditions that permit an increase in the maximum effluent temperature limit by 2.3°C to 34.5°C for a maximum of 30 aggregate days and for no more than a maximum of 15 consecutive days for each event, during the ECA window of June 15 to September 30 each year.</i></p>	<ul style="list-style-type: none"> • The EPR mentions the ongoing research into the impacts of thermal emissions on developing fish embryos in Lake Huron. • Given the sensitivity of certain cold water fish species to the effects of changing lake temperatures (lake whitefish), further explanation is required as to why Bruce Power was awarded an amendment to the ECA allowing further increase in effluent temperatures.
<p><i>This flexibility requires the development of a thermal monitoring plan in collaboration with</i></p>	<ul style="list-style-type: none"> • CKSPFN is interested in collaborating on and/or receiving the thermal monitoring plan

<p><i>local Indigenous communities. This plan has been developed in collaboration as required and successfully implemented in 2019.</i></p>	<p>created with other local First Nations, as we share rights and interests in the lake and its health.</p>
<p><i>Risks to fish and wildlife populations due to physical stressors were generally considered to be negligible, with a low to moderate risk related to thermal effects for cold water species such as Round Whitefish. This low to moderate risk is expected to be limited to a small geographic area and thermal monitoring and modelling will continue in order to further refine the risk related to thermal effluent and cold water fish species.</i></p>	<ul style="list-style-type: none"> • It is not reasonable to conclude that risks to fish and wildlife populations as a result of physical stressors are negligible, nor are the risks limited solely to thermal impacts on cold water species. This statement should make mention of the ~9,000 fish impingements per year at Bruce A and B facilities, and discuss mitigation for these risks as well.
<p>Waterborne Effluents</p>	
<p><i>Since 2017, Unit 5 at Bruce B has been experiencing a minor ongoing boiler tube leak. The leak rate is monitored regularly and has remained controlled within acceptable values so as to continue operation until it can be repaired. The leak was inspected during a planned outage in 2019 and a repair strategy was developed. The repair is scheduled to occur in 2022.</i></p>	<ul style="list-style-type: none"> • Please quantify the leak rate for the minor ongoing boiler tube problem at Bruce B. Given the cumulative effects of all ongoing operations at Bruce Power on the aquatic environment, it should be of critical importance to fix any leaking equipment as soon as possible. Ideally repairs and inspections would not take 5 years to occur.
<p><i>A review of the effluent monitoring program at the WWMF is in progress. The review was divided into three phases and includes all potential radiological emission sources and pathways including stormwater and subsurface drainage, the incinerator, building ventilation as well as fugitive emissions from waste storage. The review is being completed in consideration of site expansion, historic performance, industry best practice, and updated standards. This expected to be complete in the 2nd quarter of 2020.</i></p>	<ul style="list-style-type: none"> • CKSPFN requests receipt of the Effluent Monitoring Program results to better understand all emission sources from Bruce Power facilities.
<p>Biological Offsetting</p>	
<p><i>An Authorization under Paragraph 35(2)(b) of the Fisheries Act [R-102] requires the proponent to undertake offsetting. This consists of remediation projects which are designed to increase fish biomass within the greater Lake Huron watershed, and are intended to offset on site losses that occur from fish I&E.</i></p>	<ul style="list-style-type: none"> • It is appreciated that Bruce Power is undertaking offsetting designed to increase fish biomass within the watershed, however this does not account for the natural variation in fish that become impinged or entrained at the plant. • Remediation projects may be able to offset some of the on-site fish losses, but how will Bruce Power ensure that the same variation in

	<p>fish species and ages remains consistent in the watershed? Please identify how offsetting measures will be designed in a way that is beneficial to all fish species and life stages that are commonly impacted by I&E.</p>
<p><i>In addition to the Truax Dam removal, Bruce Power is conducting two other offset measures. One is a joint environmental monitoring program with the Saugeen Ojibway Nation as a complementary measure. The objective is to increase the understanding of the overall aquatic ecology in the Lake Huron watershed, with an emphasis on the aquatic ecosystem in the vicinity of Bruce Power. The other is engaging with Indigenous Nations and Communities to develop an offsetting plan focused on improving fish and fish habitat in the Lake Huron watershed. A minimum of three cost-effective projects are to be planned for implementation within the duration of the Fisheries Act Authorization [R-102].</i></p>	<ul style="list-style-type: none"> • As per the above comment, CKSPFN appreciates the offsetting measures proposed and the collaboration with other Indigenous Nations on monitoring programs and plans. Please ensure that offsetting measures aimed at improving fish and fish habitat account for all species and life stages of fish typically affected by Bruce A and B.
<p><i>Bruce Power has been helping with the control of Phragmites since 2013 initially in partnership with the Municipality of Kincardine and the Lake Huron Centre for Coastal Conservation. The first few years' involved financial support and in-kind professional services, including field and data collection, and development of a Phragmites Management Plan. In 2017, Bruce Power provided funding to the Invasive Phragmites Control Centre (IPCC) allowing them to purchase the Truxor, an amphibious machine that can operate in any water depth and efficiently cut and remove large, dense Phragmites infestations from coastal areas. In 2019, funding provided continued the ongoing efforts of Phragmites control along the Lake Huron shoreline from Sarnia all the way to Oliphant.</i></p>	<ul style="list-style-type: none"> • CKSPFN notes the presence of phragmites on the Kettle Point shoreline, and lack of long-term management of the invasive species. We are interested in opportunities surrounding phragmites control and management, as well as ecological restoration and offsetting in regard to this project.
<p>Collaboration with Indigenous Communities</p>	

During the 2018 licence renewal process, Bruce Power presented their commitment to working with Saugeen Ojibway Nation (SON), Métis Nation of Ontario (MNO) and Historic Saugeen Métis (HSM) in a manner that best suits their communities to enhance involvement in environmental monitoring. Recognizing that every community has a unique set of interests, in 2019 we worked with each community to further these discussions.

Bruce Power is working with local Indigenous communities, the CNSC, and the DFO to define and implement a number of additional fisheries related offsets that will be tied to the authorization, including aquatic habitat restoration projects and a coastal waters monitoring program. Bruce Power has also funded a significant number of other aquatic habitat improvements led by neighboring conservation authorities and environmental groups demonstrating our ongoing commitment to corporate social responsibility.

- CKSPFN is interested in furthering discussions with Bruce Power and the CNSC to develop a collaborative relationship, stay informed, and learn more about opportunities in environmental monitoring, aquatic habitat restoration, and beyond.