Ontario Power Generation

New Nuclear at Wesleyville in Port Hope

Response to Summary of Issues

March 19, 2026

OPG

Table of Contents

List of Figures

List of Tables

i. Abbreviations and Short Forms

ANSI	Areas of Natural and Scientific Interest
APO	Annual Planning Outlook
CCME	Canadian Council of Ministers of the Environment
CIAR	Canadian Impact Assessment Registry
CNSC	Canadian Nuclear Safety Commission
DGR	Deep Geological Repository
IAAC	Impact Assessment Agency of Canada
IAEA	International Atomic Energy Agency
ED&I	Equity, Diversity and Inclusion
EMP	Environmental Monitoring Program
ERA	Environmental Risk Assessment
GBA Plus	Gender-based Analysis Plus
H-3	Tritium
IESO	Independent Electricity System Operator
ION	Indigenous Opportunities Network
ILW	Intermediate Level Waste
IPD	Initial Project Description
IS	Impact Statement
ISRW	Integrated Strategy for Radioactive Waste
LTPS	Licence to Prepare Site
NNW	New Nuclear at Wesleyville in Port Hope
NWMO	Nuclear Waste Management Organization
MECP	Ontario Ministry of the Environment, Conservation and Parks
MEM	Ministry of Energy and Mines
MOU	Memorandum of Understanding
MS-WTFN	Michi Saagiig Anishinaabeg Nations of the Williams Treaties First Nations
MW	Megawatts
ODWS	Ontario Drinking Water Quality Standards
OEB	Ontario Energy Board
OPG	Ontario Power Generation
PHAI	Port Hope Area Initiative
PM	Particulate Matter
PNERP	Provincial Nuclear Emergency Response Plan
PPE	Plant Parameter Envelope
PQQO	Provincial Water Quality Objectives
SACC	Strategic Assessment of Climate Change
SOI	Summary of Issues
SON	Saugeen Ojibway Nation

1. Introduction

Ontario Power Generation (OPG) is Ontario's largest low-carbon power generator, with one of the most diverse generating portfolios in North America, operating hydroelectric, nuclear, solar, biomass, and natural gas generating stations. OPG's current portfolio provides about half of Ontario's power needs.

With Ontario's Independent Electricity System Operator (IESO) forecasting the need to significantly increase the grid's generation capacity by 2050 (Independent Electricity System Operator, 2025)[1], the province has embarked on its most significant period of growth for the electricity sector. Increasing electricity demands are tied to growing populations, economic development, and the need to decarbonize other sectors.

OPG is committed to continuing to decarbonize Ontario's energy supply to meet Canada's climate change goals. OPG is focused on building mutually beneficial relationships with Rights-holding First Nations and interested Indigenous communities as it explores projects that support Ontario's clean energy transition. Nuclear power is an important part of Ontario's diverse and reliable electricity mix, which also includes hydroelectric generation, natural gas, battery storage, biomass, wind, solar, hydrogen, and other emerging technologies. Nuclear plays a unique role because it provides large-scale, low-carbon electricity around the clock. As Ontario continues to electrify its economy and reduce emissions, nuclear remains essential for delivering dependable, low-carbon electricity to homes, businesses, and communities across the province.

OPG carefully plans every project and investment it undertakes, helping ensure it delivers long-term value for customers and the province. OPG actively seeks innovative financing solutions, leverages regulatory mechanisms like concurrent cost recovery to reduce long-term costs, and benchmarks performance to drive efficiency.

OPG places strong emphasis on building enduring relationships with host communities and neighbours. OPG is proud to be part of the communities that host its generating stations not only as an employer, but as residents and community partners. Beyond producing safe, low-carbon electricity, OPG strives to be a good neighbour and an engaged community member that contributes to the economic and social well-being of Ontarians. OPG supports open, transparent, and ongoing communication with local communities, the public, and key stakeholders. In Port Hope, this approach is reflected

[1] The Annual Planning Outlook (APO) is the IESO's long-term electricity forecast, released each year to provide insights into Ontario's evolving energy needs and system planning considerations. Please refer to https://www.ieso.ca/Sector-Participants/Engagement-Initiatives/Engagements for a list of all active engagements including central hub for all APO engagement sessions, including current and previous years.

through collaboration with the Municipality, including a Memorandum of Understanding (MOU)[2] that supports sustained, forward-looking engagement.

OPG remains committed to being open and available to discuss questions or concerns throughout the impact assessment process and beyond. OPG appreciates the input and feedback received on the Initial Project Description (IPD). This submission forms OPG's Response to the Summary of Issues (SOI), as required by the Impact Assessment Agency of Canada (IAAC) (Impact Assessment Agency of Canada, 2026).

2. Approach to Summary of Issues

OPG submitted the New Nuclear at Wesleyville (NNW) in Port Hope Initial Project Description (IPD) (Ontario Power Generation, 2026) to the IAAC. IAAC, in collaboration, with the Canadian Nuclear Safety Commission (CNSC) conducted a public comment period on the NNW IPD from January 12, 2026, to February 11, 2026. OPG has considered the submissions on the Canadian Impact Assessment Registry (CIAR) project website (Reference Number #89802)[3] to inform the responses.

OPG understands that the SOI outlines the key issues that IAAC, with input from the CNSC, considers relevant for the federal integrated impact assessment process for the NNW Project (Impact Assessment Agency of Canada, 2026), and that IAAC was informed by input received to date from federal and provincial authorities, Rights-holding First Nations and other interested Indigenous communities, local governments, and the public on the Initial Project Description and its summaries in English and French.

OPG understands that this response to the SOI will support decision-making by IAAC on whether an impact assessment is required under section 16 of the *Impact Assessment Act*. If an impact assessment is required, the responses provided by OPG through this submission will inform the scope of the impact assessment, and the continued development and finalization of the Integrated Tailored Impact Statement Guidelines (Integrated Guidelines) as appropriate. OPG's current plan is to submit a Licence to Prepare Site (LTPS) application together with the Impact Statement (IS).

OPG has provided responses to the SOI in Table 1. For ease of reference, each issue in the SOI has been grouped by theme and numbered in the same order as they appear in the SOI. OPG has responded to the issues raised by the Michi Saagiig Anishinaabeg Nations of Williams Treaties (MS-WTFN) submission on the IPD as well as the Saugeen Ojibway Nation (SON) submission on the IPD. These submissions are available on the

[2] https://www.opg.com/story/opg-port-hope-sign-mou-to-collaborate-on-new-nuclear-development-at-wesleyville-site/
[3] https://www.iaac-aeic.gc.ca/050/evaluations/proj/89802?culture=en-CA

CIAR New Nuclear at Wesleyville Project Site (CIAR #568[4] and #623[5] respectively). The responses to the MS-WTFN and SON submissions are provided in Section 3.2 and Section 3.3, respectively.

OPG will continue to engage Rights-holding First Nations and interested Indigenous communities. Engagement with Rights-holding First Nations and interested Indigenous communities will be carried out based on agreed upon process, activities and participation. OPG is committed to supporting Rights-holding First Nations' approaches to identify all real or potential impacts of the NNW Project to Rights. OPG will continue to offer to work collaboratively with WTFNs to identify, understand, avoid, reduce, and where necessary, consider accommodations (including possible compensation) from real and potential impacts. To support ongoing awareness, OPG has provided some perspectives on the additional comments, guidance and recommendations provided by IAAC for informational purposes in the SOI in Annex A.

OPG is currently in the Planning Phase of the Impact Assessment (IA) process. OPG recognizes that the information provided in the IPD is preliminary, and as the Project is further refined and additional studies are conducted, more information will be provided on the potential positive and negative effects from the Project as part of the Impact Statement phase. OPG is in active discussions with the MS-WTFNs to support the development of a First Nation-led assessment of the NNW Project.

OPG notes a discrepancy between the timelines presented in Table 5 of the IPD[6] and Table 1 of the IPD Summary[7]. The timeline in Table 1 of the IPD Summary reflects the most accurate estimate of the overall decommissioning timelines and is therefore referenced below (Table 1).

[4] Comments of the Michi Saagiig Anishinaabeg Communities of the Williams Treaties First Nations on Ontario Power Generation's Initial Project Description for the New Nuclear Wesleyville Project available at: https://iaac-aeic.gc.ca/050/evaluations/proj/89802/contributions/id/65518
[5] Comment from Saugeen Ojibway Nation on Wesleyville New Nuclear Project Initial Project Description are available at: https://iaac-aeic.gc.ca/050/evaluations/proj/89802/contributions/id/65684
[6] The Initial Project Description is available on the Canadian Impact Assessment Registry: https://iaac-aeic.gc.ca/050/evaluations/document/164907
[7] The Summary of the Initial Project Description is available on the Canadian Impact Assessment Registry: https://iaac-aeic.gc.ca/050/evaluations/document/164910

Figure 1: Preliminary NNW Project Timeline

Project Phase	Estimated Start for First Unit	Estimated Finish for Last Unit	Estimated Phase Duration for All Units (Years)	Estimated Phase Duration for One Unit (Years)
Site Preparation	2030	2037	7	3
Construction	2033	2048	15	7
Operation and Maintenance	2040	2118	78	70
Decommissioning	2110	2160	50	42
Site Closure and Release from Regulatory Control	2160 and beyond		Not Applicable	

3. OPG's Response to Summary of Issues

3.1. Summary of Key Issues Raised Related to the Proposed Project

Preamble:

OPG is committed to listening to and considering feedback from engagement with Rights-holding First Nations and interested Indigenous communities, as well as local communities to inform project planning and assessments described throughout Table 1. OPG will work collaboratively with these communities to assess potential effects and develop mitigation measures. Mitigation measures may be developed based on the assessment results, applicable regulatory requirements and guidance, and engagement. Follow-up and monitoring programs will also be considered to validate IA predictions, assess the effectiveness of mitigation, and apply adaptive management, as needed.

Given the federal Cabinet Directive on Regulatory and Permitting Efficiency for Clean Growth Projects[8], and Ontario's Clean Energy Plan[9], OPG is actively evaluating ways to efficiently advance the New Nuclear at Wesleyville Project through the impact assessment process. OPG will also ensure compliance with permits, licences, authorizations and regulations.

[8] https://www.canada.ca/en/privy-council/services/clean-growth-getting-major-projects-done/cabinet-directive.html
[9] https://www.ontario.ca/page/powering-ontario

Table 1: OPG's Response to Impact Assessment Agency of Canada Summary of Key Issues Raised Related to the Proposed Project

Key Issues Raised		OPG's Response
Biophysical Environment		
Groundwater and Surface Water		
1	Concerns about potential impacts to groundwater and surface water quality and quantity, including those related to hydrological changes, pollution, and thermal discharges and the resulting effects on ecosystems.	Potential impacts to groundwater and surface water quality and quantity, including those related to hydrological changes, pollution, and thermal discharges and resulting effects on ecosystems will be assessed during the Impact Statement phase. Appropriate mitigation and monitoring will be developed and implemented as described in the preamble to this table. Section 5.11 of the IPD, including Tables 30 and 32, outlines the preliminary consideration of the NNW Project's potential effects on groundwater and surface water quality and quantity, including effects associated with hydrological changes, pollution, and thermal discharges, and describes potential future mitigation measures. Section 6.2 of the IPD outlines the studies, supplementing available information, that will help characterize existing conditions at the NNW site. The characterization of existing conditions will inform the assessment of potential NNW Project effects on groundwater and surface water quality and quantity, including those related to hydrological changes, pollution, and thermal discharges as part of the Impact Statement. The assessment will consider applicable provincial and federal criteria/standards, including: • Ontario Regulation 169/03 – Ontario Drinking Water Quality Standards (ODWS) under the Safe Drinking Water Act, 2002 • Health Canada Guidelines for Canadian Drinking Water Quality • Ontario Ministry of the Environment, Conservation and Parks (MECP) Provincial Water Quality Objectives (PWQO) • Canadian Council of Ministers of the Environment (CCME), Canadian Water Quality Guidelines for the Protection of Aquatic Life
Wildlife, Fish, Migratory Birds and their Habitat		
2	Concerns about impacts on wildlife, aquatic biodiversity, fish, migratory and non-migratory bird populations and their habitat, including any identified species at risk.	Potential impacts to wildlife, aquatic biodiversity, fish, migratory and non-migratory bird populations and their habitat, including any identified species at risk, will be assessed during the Impact Statement phase. Appropriate mitigation and monitoring will be developed and implemented as described in the preamble to this table. Section 5.11 of the IPD, including Tables 30 and 32, outlines the preliminary consideration of the NNW Project's potential effects on wildlife, aquatic biodiversity, fish, migratory and non-migratory bird

		populations and their habitat, including any identified species at risk, and describes potential mitigation measures. Section 6.2 of the IPD outlines the studies, supplementing available information, that will help characterize existing conditions at the NNW site. Targeted surveys for terrestrial, aquatic, and riparian/wetland species at risk are being conducted following standardized protocols, where available; for example, the Canadian Nightjar Survey Protocol (Knight, 2017) and Survey Protocol for Species at Risk Bats Within Treed Habitats (Ministry of Natural Resources and Forestry, 2017). The characterization of existing conditions will inform the assessment of potential NNW Project effects on wildlife, aquatic biodiversity, fish, migratory and non-migratory bird populations and their habitat, including any identified species at risk. The site-specific data, alongside applicable publicly available resources including those referenced in IAAC's guidance materials[10], will inform the Impact Statement.
3	Potential for landscape disturbances to impact terrestrial environments, watercourses, wetlands and the shoreline of Lake Ontario within the project area through the lifecycle of the project.	Potential impacts from project-related landscape disturbances to terrestrial environments, watercourses, wetlands and the shoreline of Lake Ontario through the lifecycle of the NNW Project will be assessed during the Impact Statement phase. Appropriate mitigation and monitoring will be developed and implemented as described in the preamble to this table. Section 2.6 of the IPD outlines the activities and infrastructure within the scope of the NNW Project throughout its lifecycle. Section 5.11 of the IPD, including Tables 30 and 32, outlines the preliminary consideration of the NNW Project's potential effects on the biophysical environment, including terrestrial environments, watercourses, wetlands and the shoreline of Lake Ontario within the project area, and describes potential mitigation measures. Section 6.2 of the IPD outlines the studies, supplementing available information, that will help characterize existing conditions at the NNW site. These studies include aquatic and terrestrial studies near and along the shoreline (such as wildlife and migratory bird surveys) and physical studies (such as erosion rates and ground stability). The characterization of existing conditions will inform the assessment of potential NNW Project effects, including from landscape disturbances, on the biophysical environment within the project area through the lifecycle of the NNW Project. Prior to any project-related landscape disturbances, an

[10] https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/technical-considerations-references-preparation-impact-statements.html

		archaeological assessment including a marine archaeological assessment within modern-day Lake Ontario is being conducted to identify archaeological resources of cultural and social importance along the shoreline within the NNW Project area. OPG understands the socio-ecological importance of the wetlands on site, including the on-site Provincially Significant Wetland. The potential direct and indirect effects on wetlands and wetland functions will be assessed during the Impact Statement phase and will inform project siting and mitigation measures for the entire project lifecycle.
4	Concerns about potential impingement, entrainment, injury, stress, or mortality of fish, and destruction and alteration of fish habitat, including Lake Ontario, Wesleyville Creek, provincially significant wetlands and significant areas of natural and scientific interest, resulting from dredging, dewatering, in-water works, operation of water intakes, and cooling infrastructure and other project activities.	Potential impacts to fish and fish habitat from NNW Project activities, including those related to impingement, entrainment, injury, stress, or mortality of fish, and destruction and alteration of fish habitat in or around Lake Ontario, Wesleyville Creek, the Provincially Significant Wetland and significant areas of natural and scientific interest will be assessed during the Impact Statement phase. Appropriate mitigation and monitoring will be developed and implemented as described in the preamble to this table. Section 5.11 of the IPD, including Tables 30 and 32, outlines the preliminary consideration of the NNW Project's potential effects on fish and fish habitat and describes potential mitigation measures. Section 6.2 of the IPD outlines the studies, supplementing available information (public resources and datasets), that will help characterize the existing conditions at the NNW site. These studies include targeted surveys in the NNW Project area of Lake Ontario, Wesleyville Creek, the on-site Provincially Significant Wetland and Areas of Natural and Scientific Interest (ANSIs). The characterization of existing conditions will inform the assessment of potential NNW Project effects on fish and fish habitat due to impingement, entrainment, injury, stress, or mortality of fish, and destruction and alteration of fish habitat from dredging, dewatering, in-water works, operation of water intakes, cooling infrastructure and other NNW Project activities. Refer to issue #5 for information relevant to cooling infrastructure.
5	Concerns about potential impacts to aquatic ecosystems from warm water discharged from cooling infrastructure, as well as from runoff, effluent,	Potential impacts to aquatic ecosystems from warm water discharged from cooling infrastructure, as well as from runoff, effluent, and other releases into waterbodies and watercourses will be assessed during the Impact Statement phase. Appropriate mitigation and monitoring will be developed and implemented as described in the preamble to this table.

	and other releases into waterbodies and watercourses.	Section 5.11 of the IPD, including Tables 30 and 32, outlines the preliminary consideration of the NNW Project's potential effects on aquatic ecosystems and describes potential mitigation measures. The characterization of existing conditions, as outlined in issue #4, will inform the assessment of potential NNW Project effects on aquatic ecosystems from water discharged from cooling infrastructure, as well as runoff, effluent, and other releases into waterbodies and watercourses. The assessment will consider applicable provincial and federal water quality guidelines, such as MECP Provincial Water Quality Objectives (PWQO) and CCME Canadian Water Quality Guidelines for the Protection of Aquatic Life. The following is planned as part of the Impact Statement development: • An alternative means assessment for circulating cooling water options, including the review and screening of options based on technical feasibility and economic viability. • A consideration of thermal impacts in the design of the discharge structure to mitigate against potential changes in fish behaviour and fish habitat suitability due to relatively warmer water discharged from cooling infrastructure.
Acoustic, Atmospheric and Visual Environment		
6	Concerns about potential impacts on the environment, including changes in ambient noise levels and the visual impact of project structures and facilities.	Potential impacts to ambient noise levels and the visual impact of project structures and facilities will be assessed during the Impact Statement phase. Appropriate mitigation and monitoring will be developed and implemented as described in the preamble to this table. Section 5.11 of the IPD, including Tables 30 and 32, outlines the NNW Project's potential effects on ambient noise levels and light, and describes potential mitigation measures. Section 6.2 of the IPD outlines the studies that will help characterize the existing conditions at the NNW site. These studies include acoustic surveys, and illuminance and skyglow monitoring. The existing visual environment is characterized by using photographs taken from a series of locations relevant to the site and applying relevant topographic information such as local land elevations. The characterization of existing conditions will inform the assessment of potential NNW Project effects on ambient noise as well as the visual impact of project structures and facilities. The assessment will predict noise levels during site preparation, construction, and operations using accepted predictive (modelling) methods (e.g., CadnaA; ISO 9613-2). Predicted conditions for noise will be assessed against applicable federal and provincial standards and guidelines, such as MECP's Environmental Noise Guideline Publication NPC-300 (Ministry of the Environment, Conservation and Parks, 2013) and associated supporting documents, and Health Canada's Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise (Health Canada, 2023).

		Understanding potential changes to the visual landscape includes comparing the current viewscape to the predicted view of a 3D representation of project structures and facilities with photographic simulations. The visual aesthetics assessment will apply recognized methods (e.g., LI/IEMA, 2013[11] and USDI BLM, 1986[12]).
7	Concerns about potential impacts on air quality from emissions and dust, particularly during construction and operation.	Potential impacts to air quality from emissions and dust, particularly during construction and operation, will be assessed during the Impact Statement phase. Appropriate mitigation and monitoring will be developed and implemented as described in the preamble to this table. Section 5.11 of the IPD, including Tables 30 and 32, outlines the NNW Project's potential effects on air quality from emissions and dust, and describes potential mitigation measures during different phases of the NNW Project, including construction and operation. Section 6.2, Table 33 of the IPD outlines the studies that will help characterize the existing air quality conditions at the NNW site. These studies will measure air contaminants of potential concern based on their potential interaction with the environment including nitrogen oxides, sulphur dioxide, carbon monoxide, ozone, particulate matter (total, PM2.5, and PM10), total suspended particulate matter, selected trace metals, volatile organic compounds, and polycyclic aromatic hydrocarbons. In addition, radiological contaminants including radon, tritium (H-3), carbon-14, particulates, and external gamma will be sampled. The characterization of existing conditions will inform the assessment of potential NNW Project effects on air quality. The assessment will predict project emissions during site preparation, construction, operations and decommissioning phases from stationary, mobile, and fugitive sources, including radiological emissions, using accepted predictive methods (e.g., CALPUFF model). Predicted concentrations will be assessed against applicable federal and provincial criteria/standards such as MECP's Ontario's Ambient Air Quality Criteria (Ontario Ministry of the Environment, Conservation and Parks (MECP), 2020), and the Canadian Council of Ministers of the Environment (CCME) Canadian Ambient Air Quality Standards (Canadian Council of Ministers of the Environment, 2025).
8	Interest in understanding the project's contributions to Canada's reduction of greenhouse gas emissions.	A preliminary assessment of how the NNW Project will support Canada's Net Zero goal is provided in Sections 2.2 and 5.9 of the IPD. During the Impact Statement phase, OPG will consider the NNW Project's contributions to Canada's greenhouse gas emissions reduction commitments. The

[11] https://landscapeinstitute.org/policy-practice/technical/assessments-standards/glvia3-panel/
[12] https://blmwyomingvisual.anl.gov/assess-simulate/blm/

		assessment will be undertaken in accordance with the Strategic Assessment of Climate Change (SACC) and the technical guides related to the SACC developed by the federal government. This will inform the understanding of how the project contributes to Canada's climate change obligations.
Health, Social, and Economic Conditions		
Human Health		
9	Concerns about the health impacts, including cancer risk, from potential changes to existing ambient radiological conditions, radiological exposures, and releases of radiological and non-radiological contaminants of potential concern in air, land and water.	Potential health effects of the NNW Project, including those related to interactions with the environment, will be assessed during the Impact Statement phase. To support this assessment, OPG will draw upon its decades of experience safely operating existing nuclear power plants in Ontario, with radiation doses to members of the public living near these facilities consistently well below regulatory dose limits, and at a small fraction of existing background radiation. The CNSC has studied radiation exposure and cancer incidence to populations living near nuclear power plants in Ontario and found no evidence of higher-than-expected number of childhood cancer cases (Lane, 2013). To support both the Impact Assessment process and the CNSC licensing process, OPG will prepare an Environmental Risk Assessment (ERA) per REGDOC-2.9.1. The ERA is a systematic process to assess project-related changes to air, land, and water quality, including both radiological and chemical contaminants as well as physical stressors such as noise. The initial ERA for the NNW Project Impact Statement phase will be a prediction of the effects from project activities. As a project proceeds through its lifecycle, the ERA is typically updated every five years in accordance with licence conditions using the latest environmental data to confirm there are no health impacts. The ERA will follow regulatory guidance on how to evaluate health impacts to both people and the environment. To do this, the ERA will: • Identify contaminants of potential concern • Model how these contaminants might be released from the nuclear facility, dispersed, and move through the environment (e.g., air, land and water) • Predict doses that people and ecological receptors could receive through inhalation, ingestion, and direct exposure pathways • Compare these doses to health-based standards (such as drinking water quality standards[13]) to estimate potential risk, including cancer risk from carcinogens

[13] https://www.ontario.ca/laws/regulation/030169

		The results of the ERA will be compared against the applicable federal and provincial criteria/standards related to the pathways being assessed (such as the water quality standards - Ontario Drinking Water Quality Standards[14], Health Canada Guidelines for Canadian Drinking Water Quality[15], CCME Canadian Water Quality Guidelines for the Protection of Aquatic Life[16], or similar guidance for air, soil or sediment quality). Mitigation, monitoring or adaptive management measures will be recommended based on the assessment outcomes. The ERA typically incorporates multiple conservative assumptions to ensure that risks are not underestimated. Some of these assumptions include assessment of maximum concentrations, and use of toxicity reference values with safety factors included. In addition to the ERA, safety analyses will be completed for the chosen reactor technology as part of the application for a Licence to Construct and Licence to Operate per REGDOC 2.4.1 and 2.4.2, respectively.
10	Concerns about impacts on human health due to noise and changes to air quality particularly for on-site individuals and residents or other receptors located near or adjacent to the project site.	During the Impact Statement phase, OPG will consider potential human health impacts associated with noise and changes to air quality during all phases of the NNW Project. Appropriate mitigation and monitoring will be developed and implemented as described in the preamble to this table. As noted in the response to issue #9, an ERA will be undertaken to evaluate potential exposures and associated health risks for human and ecological receptors located in the vicinity of the NNW Project site. The ERA will draw upon the results of the acoustic assessment (as described in the response to issue #6) and air quality assessment (as described in the response to issue #7), including studies of existing environmental conditions and predicted changes in noise and air quality, to characterize potential health risks. Noise and air quality health risks will be assessed against applicable federal and provincial health-based exposure guidelines, with consideration given to receptors in proximity to the NNW Project site. To address potential impacts to on-site individuals, the NNW Project will comply with all applicable provincial health and safety legislation, including the *Occupational Health and Safety Act (OHSA), R.S.O. 1990* and its associated regulations, including those related to noise and air quality.

[14] https://www.ontario.ca/laws/regulation/030169
[15] https://www.canada.ca/en/health-canada/services/environmental-workplace-health/water-quality/drinking-water/canadian-drinking-water-guidelines.html
[16] https://ccme.ca/en/res/wqimanualen.pdf

11	Concerns about the psychosocial impacts associated with living near the project, including perceived contamination of local foods and perceived risk to community safety.	OPG acknowledges that living near an energy generation project can raise concerns about well-being, including perceived risk to community safety and concerns regarding perceived contamination of local foods potential. OPG is committed to early, ongoing, and meaningful engagement and will continue, through all phases of the NNW Project, to address concerns through open and transparent communication. Potential psychosocial impacts of the NNW Project, including the perceived risks noted, above, will be assessed as part of the community well-being framework developed for the Impact Statement phase. The framework is founded on the premise that community well-being is maintained and supported whereby residents feel healthy, safe, financially secure and satisfied with and committed to living in their community. For the purposes of the assessment, five broad indicators will be examined that reflect public attitudes towards people's own wellness and that of their community. These are: • people's feelings of personal health • people's sense of personal safety • people's sense of financial/economic security • people's overall satisfaction with community • people's commitment to community OPG has a comprehensive Environmental Monitoring Program (EMP) in place for its operating nuclear facilities, and the same is expected to apply to future operations of the proposed NNW Project. This program includes routine sampling and analysis of air, water, soil, vegetation, and locally produced foods (including livestock products) at specific locations near the stations and determining the annual radiological dose to members of the public from site operations. EMP reports are made publicly available on OPG's website[17].
Socio-Economic Conditions		
12	Concerns about the cost of living, housing availability, local demand for housing, and increased housing and rental prices.	During the Impact Statement phase, OPG will characterize the existing housing stock, permanent housing and rental accommodations, and the demand the NNW Project workforce would place on the housing stock during the site preparation, construction and operations phases. Similarly, OPG will consider cost of living as a function of community well-being over the NNW Project's lifecycle, including potential changes as a result of the NNW Project. OPG supports the efforts of the Municipality of Port Hope and communities in Northumberland County to identify and articulate opportunities and challenges unique to the local area, as well as the

[17] OPG regulatory reporting information is available at: https://www.opg.com/reporting/regulatory-reporting/

		resources required to address current demand and growth and to prepare for potential future energy infrastructure projects. In February 2026, OPG and Port Hope signed a Memorandum of Understanding[18] to advance collaboration on the NNW Project as noted in Section 1. Through the agreement, OPG and Port Hope will work together to progress planning, community engagement, sustainable development, and economic growth.
13	Interest in understanding workforce composition and how training and long-term employment opportunities across a range of positions and seniority levels will be facilitated for Indigenous Peoples, the public, and underrepresented groups.	During the Impact Statement phase, OPG will describe the workforce requirements for the NNW Project and OPG's commitment to equitable employment practices to increase representation of the four designated groups under the Employment Equity Act. Accelerating equity, celebrating diversity, and fostering a culture of inclusion strengthens OPG's teams, drives innovation and elevates OPG's success. OPG launched its Equity, Diversity and Inclusion (ED&I) Strategy[19] in 2021 and was recognized as one of Canada's Best Diversity Employers in 2023. To maintain momentum, OPG identified new ED&I actions[20] for 2025–2027. OPG's recruitment programs support a diverse and innovative workforce. The Indigenous Opportunities Network (ION)[21] is dedicated to the recruitment of Indigenous Peoples through a network of employers in the energy industry and Kagita Mikam, an Indigenous employment and training agency. OPG is committed to advancing representation of qualified equity-deserving groups (Women, Indigenous Peoples, Racialized People, Persons with Disabilities) through OPG hiring and recruitment efforts.
14	Concerns about increased risk to vulnerable populations, including gender-based violence, due to a potential temporary workforce influx.	During the Impact Statement phase, OPG will assess potential risks to vulnerable populations related to the temporary NNW Project workforce influx including applying the lens of Gender Based Analysis Plus (GBA plus). OPG's established relationships with local municipalities and police departments, which will continue to be fostered as part of the NNW Project, will be relevant to understanding potential risks that could occur. The assessment will also take into account that any staff or contractor that would be at the NNW Project site for more than five days would be required to obtain and maintain site access clearance, which includes identity checks and verification of criminal history. Ethical conduct by employees, suppliers, consultants, contractors, subsidiaries, and business partners is critical to OPG's ongoing success. The Code of Business Conduct[22], and Supplier Code of

[18] More information regarding the Memorandum of Understanding Signed between Port Hope and Ontario Power Generation is available at: https://www.porthope.ca/en/news/memorandum-of-understanding-signed-between-port-hope-and-ontario-power-generation.aspx
[19] https://www.opg.com/wp-content/uploads/2022/03/OPG-2020-2030_EDI-Strategy-Actions-Refresh_MAY2025_FINAL-ua.pdf
[20] https://www.opg.com/documents/opg-edi-strategy-2020-2030-pdf/
[21] https://www.opg.com/about-us/our-commitments/indigenous-relations/programs-and-initiatives/
[22] https://www.opg.com/document/opg-code-of-business-conduct/

		Conduct[23] establishes OPG's values, and supplier expectations and priorities and sets the standard for business behaviour.
15	Interest in understanding how project construction and operation may facilitate regional economic development, including co-located related industries and opportunities for regional businesses.	The deployment of Small Modular Reactors at Darlington, alongside the refurbishment of OPG's nearby nuclear generating stations has invigorated local supply chains, providing a solid foundation to support a larger nuclear build[24]. The NNW Project is uniquely positioned to capitalize on a robust local supply chain. During the Impact Statement phase, OPG will assess regional economic development opportunities made possible by the NNW Project, including OPG's proactive approach to maximize local supply chain benefits where possible. OPG will continue to engage with Rightsholders, interested Indigenous communities and local municipalities to understand the diverse economic priorities and how the NNW Project may contribute towards them.
Infrastructure and Services		
16	Concerns regarding the potential strain on regional and municipal services and infrastructure from additional demands associated with an increased workforce, including transportation networks, water supply, wastewater and stormwater management, private wells, transmission infrastructure, emergency services, healthcare and schools.	The development of regional and municipal services and infrastructure such as transportation networks, water supply, wastewater and stormwater management, private wells, transmission infrastructure, emergency services, healthcare, and schools is a coordinated effort involving provincial, regional, and municipal governments and local school boards. OPG will continue engagement efforts to share information as project details are refined to support effective planning across all levels of government. During the Impact Statement phase, OPG will assess the increased demand the NNW Project workforce would place on existing services and infrastructure during the site preparation, construction and operations phases. Potential impacts on transportation networks will also be assessed. As noted in Section 1, OPG and the Municipality of Port Hope have signed a Memorandum of Understanding to advance collaboration. Through the agreement, OPG and Port Hope will work together to progress related planning, community engagement, sustainable development, and economic growth opportunities. The Municipality of Port Hope has developed a Strategic Plan[25] that will also guide departmental work plans, budgets, and performance measures through 2028. The

[23] https://www.opg.com/documents/supplier-code-of-conduct-pdf/
[24] https://www.ontario.ca/page/powering-ontario
[25] https://www.porthope.ca/en/your-municipal-government/resources/Plans%20Reports%20and%20Studies/Strategic%20Plan/StrategicPlan_WO-22977_lowres.pdf

		preparation for new nuclear investment in Port Hope through engagement, policy and infrastructure framework is included in the Municipality of Port Hope Strategic Plan under the "prosperous pillar".
Land Use		
17	Concerns about impacts to land use, including farmland, legacy underground infrastructure, built heritage and archeological resources and cultural heritage landscapes.	Potential impacts to land use, including farmland, legacy underground infrastructure, built heritage and archaeological resources and cultural heritage landscapes will be assessed during the Impact Statement phase. Appropriate mitigation and monitoring will be developed and implemented as described in the preamble to this table. Section 6.2 of the IPD outlines the studies that will help characterize the existing conditions at the NNW site. During the Impact Statement phase, these studies will inform siting and effects assessment due to changes in land use as a result of planned project activities, including areas within the site currently cultivated for agriculture (farmland) and areas where legacy underground infrastructure is present. Legacy underground infrastructure remains on site from the former partially constructed, but never operated, oil powered thermal generating station. Underground infrastructure is present on site in varying conditions and degrees of completion, including (but not limited to) stormwater and wastewater management systems, utilities, an oil storage tunnel, and circulating cooling water intake and outfall structures. OPG will assess legacy underground infrastructure for potential reuse, removal, or abandonment in place as project planning advances. The project works and activities associated with the NNW Project will be further described in the Impact Statement phase.
18	Concerns about potential impacts to livestock and agriculture.	During the Impact Statement phase, OPG will conduct an environmental risk assessment for the NNW Project (as described in the response to issue #9, above). The environmental risk assessment specifically examines potential pathways of exposure such as contaminated air, water, soil, or vegetation that could affect the health of animals or the safety of agricultural products. The results of the environmental risk assessment will be compared against the applicable federal and provincial criteria/standards. Based on OPG's operating experience, risks are expected to be low. OPG is committed to ensuring the safety and well-being of its neighbours living near current and future nuclear facilities. As a licence condition for its operating nuclear facilities, OPG maintains a comprehensive Environmental Monitoring Program (EMP) [26], and the same is expected to apply to future operations of the proposed NNW Project. OPG's Pickering and Darlington stations have operated for a combined 89 years and continue to operate in a manner that is protective of human

[26] OPG Environmental and performance reports are available at: https://www.opg.com/reporting/regulatory-reporting/

		health. Samples are collected from farms and dairy farms within a 5 or 10-kilometre radius of each respective station. In the last 10 years, public dose has remained at less than 1% of the regulatory public dose limit. This validates that operations have not negatively impacted local agriculture and food supply.
19	Concerns about potential changes to or loss of access to outdoor recreational areas (e.g., walking and cycling trails, shoreline access) as a result of landscape modifications and changes to the visual and acoustic environment.	Potential changes to or loss of access to outdoor recreational areas (e.g., walking and cycling trails and shoreline access) as a result of landscape modifications and changes to the visual and acoustic environment (see also response to issue #6) will be assessed during the Impact Statement phase. Appropriate mitigation and monitoring will be developed and implemented as described in the preamble to this table. OPG has owned and maintained the NNW site for more than 50 years. OPG is committed to ongoing public engagement throughout the lifecycle of the NNW Project, ensuring that community input regarding access to recreational areas and the use of outdoor spaces is considered as part of project planning.
20	Concerns about impacts to water navigation, particularly due to the location and operation of intake and outfall pipes.	Potential impacts on water navigation, particularly due to the location and operation of intake and outfall pipes, will be assessed during the Impact Statement phase. Appropriate mitigation and monitoring will be developed and implemented as described in the preamble to this table, and in accordance with Transport Canada's regulatory process under the *Canadian Navigable Waters Act*. OPG has not selected the circulating cooling water technology for the NNW Project at this time, as described in the response to issue #5, above.
Other Key Issues Related to the Federal Undertaking		
Management of Radioactive Waste		
21	Concerns about impacts on health and the environment related to the long-term management of low, intermediate and high-level radioactive waste.	Potential impacts from interim onsite storage of radioactive waste throughout the lifecycle of the NNW Project will be assessed during the Impact Statement phase. Nuclear energy, like all other forms of energy, produces waste that must be effectively managed. Radioactive waste storage and disposal facilities are subject to regulatory decision making, including a licensing process under the Nuclear Safety and Control Act. As part of the design and licensing phases for these facilities, safety assessments and radiological monitoring would be conducted to ensure the health of the public and the environment.

		Canada's Policy for Radioactive Waste Management and Decommissioning (Government of Canada, 2023) notes that the management of radioactive waste includes interim storage and long-term management, and should be undertaken according to the following four priorities: • Protection of health, safety, security of people and the environment, and ensuring nuclear non-proliferation • Inclusive engagement, openness, and transparency on radioactive waste management and decommissioning matters • Recognition of Canada's deep commitment to building partnerships and advancing reconciliation with Indigenous peoples related to the management of radioactive waste and decommissioning, based on the recognition of rights, respect, collaboration and partnership • Global excellence in the fields of radioactive waste management and decommissioning The CNSC and the International Atomic Energy Agency (IAEA) monitor and inspect nuclear waste sites and waste management facilities to ensure compliance with national and international nuclear safety regulations, which is a responsibility unique to the nuclear industry. In accordance with Canada's *Nuclear Fuel Waste Act* (SC 2002 c 23), all costs for the permanent storage/disposal of radioactive waste, including used nuclear fuel (also referred to as spent nuclear fuel), are to be fully funded by waste generators/owners in a trust, ensuring no financial burden is left to future generations. The *Nuclear Fuel Waste Act* mandates the establishment of a waste management organization. As a result, the Nuclear Waste Management Organization (NWMO) was established, as a not-for-profit entity for the long-term management of Canada's nuclear fuel waste. The Integrated Strategy for Radioactive Waste (ISRW) was developed by the NWMO at the request of Natural Resources Canada and the recommendations for the strategy were endorsed by the Minister of Energy and Natural Resources in October 2023. For intermediate level waste (ILW) and non-fuel high level waste, the ISRW determined that a DGR is appropriate for long-term management and the NWMO will implement a consent-based siting process for this. The planning process for this work is now underway with a discussion document available for public comment[27]. Per the ISRW, low level waste will be disposed in near surface disposal facilities, and it will be the responsibility of OPG as the waste generator and owner to develop such a facility. OPG supports the recommendations outlined in the ISRW and is developing lasting solutions for the permanent disposal of low-level radioactive materials.

[27] More information from NWMO on the Integrated Strategy for Radioactive Waste is available at: https://radwasteplanning.ca.

		OPG takes its role as a steward of nuclear waste seriously. With more than 50 years of operational experience and expertise managing the waste in its care, OPG is committed to ensuring waste management activities are informed and guided by Canada's Policy for Radioactive Waste Management and Decommissioning (Government of Canada, 2023) and the perspectives of First Nations and Indigenous communities whose rights may be impacted by such activities. OPG's safe and responsible management of nuclear waste includes preventing waste before it is created; managing waste by taking full responsibility for the entire lifecycle from interim storage to planning for its effective long-term management; and harnessing waste for valuable isotopes.
Accidents and Malfunctions		
22	Concerns about potential impacts on the environment and surrounding populations due to accidents, major malfunctions and malevolent acts impacting the facility.	During the Impact Statement phase, OPG will perform an assessment of bounding postulated accidents, malfunctions, and malevolent acts. The assessment will describe possible accidents and malfunction and malevolent act scenarios during each phase of the NNW Project (conventional and/or radiological when applicable depending on the project phase) and determine the probability and consequences of event sequences that may result in hazardous substance releases or large releases of energy to the surrounding environment as per REGDOC-1.1.1 Appendix F. The assessment will consider the consequences of conventional, nuclear and radiological accidents and malfunctions to ensure that design requirements are met in all cases.
23	Concerns about potential health effects of accidents and malfunctions on Indigenous Peoples, local and regional populations, particularly emergency preparedness and mitigation strategies for health impacts.	During the Impact Statement phase, OPG will perform an assessment of bounding postulated accidents and malfunctions, which will determine the likelihood and consequences of radiological, nuclear, or conventional accidents to the health of surrounding populations and Indigenous Nations and communities, depending on the project phase (See also response to issue #9). Mitigation measures will be considered for postulated accidents and malfunctions as per the requirements of Appendix F and Section 4.10 of REGDOC-1.1.1. The LTPS emergency preparedness framework will be developed commensurately with the hazards on the licensed site.

24	Interest in opportunities for regional co-development of emergency management and evacuation plans with host and neighbouring municipalities, First Nations and other Indigenous communities.	Emergency Management Ontario is the provincially designated body to implement and plan for emergencies affecting the public in Ontario, including radiological, nuclear and conventional emergencies. The Provincial Nuclear Emergency Response Plan (PNERP) identifies the roles and responsibilities of OPG and community partners, including designated and host communities. Off-site emergency planning and response is under the authority of the Province of Ontario. OPG will work with the PNERP-affected Regions and Municipalities to ensure OPG's plans align and connect with the various off-site partner plans as required. This is done through ongoing engagement with Rights-holding First Nations and other interested Indigenous communities as well as designated and host municipalities and is demonstrated and continually improved by conducting drills and exercises to test the coordinated implementation of those plans.
Radiological Conditions		
25	Concerns about legacy radiological contamination in soil and sediment in the Port Hope area and potential disturbance of these soils or sediments during excavation, infilling and other project activities.	The regional Port Hope area has been studied for decades due to concerns about historical practices around radioactive waste management and refining of radium and uranium. This concern is being addressed by the Port Hope Area Initiative's (PHAI) cleanup efforts. There is currently no indication from the available PHAI information that the NNW site is an area of concern[28]. Additionally, as described in Section 3.4.1.2.8 of the IPD, historical activities on the east/developed portions of the site prompted OPG to perform a targeted soil and groundwater investigation in 2021. Boreholes and monitoring wells were installed to determine if there was any potential contamination. There is no current indication that the NNW site soils and sediments contain radiological contamination above the applicable regulatory criteria/standards. The western and northern areas of the NNW Project site are currently undeveloped and are used primarily for agriculture. As described in Section 6.2, Table 33 of the IPD, OPG is currently conducting studies to characterize the existing environmental conditions in and around the NNW site, including testing for radiological quality of soil, rock and groundwater at borehole and monitoring wells across the entire on-land site (east, west, and north). Sediments will be characterized, including radiological parameters, as part of these studies. While these areas are not expected to have contamination as noted above, the sampling program will indicate the presence of any radiological material in the area. Management of any contaminated soils or sediments, if found, will be carried out in accordance with applicable regulatory requirements.

[28] https://www.phai.ca/port-hope-project/port-hope-project-sites/

Effects of the Environment on the Project		
26	Concerns about resilience to flooding, erosion and extreme weather events associated with climate change as well as other natural hazards, including seismic activity.	During the Impact Statement phase, OPG will assess the NNW Project's resilience to flooding, erosion and extreme weather events associated with climate change as well as other natural hazards, including seismic activity. The requirements of REGDOC-1.1.1 will be addressed as part of this assessment, including the evaluation of potential natural external hazards/events (e.g. earthquakes, flooding, erosion and extreme weather) and the impacts that climate change could have over the lifecycle of the NNW Project. The outcomes of this evaluation will inform project planning. OPG will evaluate resilience to climate-related risks informed by the SACC[29] and applicable technical guides[30,31], and will qualitatively and quantitatively assess the magnitude and frequency of hazards due to climate change, as appropriate. The proposed approach includes a review of climate-related studies and modelling of hazards, which will be informed by developments in climate science and internationally accepted scenarios.
Cumulative Effects		
27	Concerns about cumulative effects of existing nuclear facilities in the region in combination with this project, particularly on the health and socio-economic conditions of local and regional populations.	As part of the Impact Statement phase, OPG will assess potential cumulative effects that may be caused by the combined impact of new nuclear generation at Wesleyville and other existing or planned projects within the site, local and regional study areas, including other nuclear facilities. Section 6.2 of the Initial Project Description describes OPG's studies to characterize the existing environmental conditions at and around the NNW site. These studies include characterization of health and socio-economic conditions of the local and regional populations, which will inform the assessment of potential cumulative effects of the NNW Project, in combination with other past, present or reasonably foreseeable future projects.

[29] https://www.strategicassessmentclimatechange.ca/16736/widgets/65686/documents/40846
[30] https://www.canada.ca/en/services/environment/conservation/assessments/strategic-assessments/draft-second-technical-guide-strategic-assessment-climate-change.html
[31] https://www.canada.ca/en/environment-climate-change/corporate/transparency/consultations/draft-technical-guide-strategic-assessment-climate-change.html

3.2. OPG response to MS-WTFN

In response to the Michi Saagiig Anishinaabeg Communities of Williams Treaty First Nations (MS-WTFN) Submission #568[32], OPG has issued a letter to the Consultation staff of Alderville First Nation, Curve Lake First Nation, Hiawatha First Nation, and the Mississaugas of Scugog Island First Nation. A copy of this letter is included in this submission as Attachment 1.

3.3. OPG response to SON

In response to the Saugeen Ojibway Nation (SON) Submission #623[33], OPG has issued a letter to the SON Nuclear Advisory Committee. A copy of this letter is included in this submission as Attachment 2.

3.4. Conclusion

This document is OPG's response to IAAC's SOI that was issued on February 20, 2026 following a 30-day public comment period on the New Nuclear at Wesleyville in Port Hope Initial Project Description. OPG appreciates the feedback provided by all participants during the comment period. Multiple future opportunities for public input will be available for individuals, communities, and organizations with an interest in the NNW Project to remain involved[34].

OPG places great importance on building strong relationships and partnerships with local communities, neighbours and Rights-holding First Nations and interested Indigenous communities on whose traditional territory we operate and OPG is available to discuss any questions or concerns throughout the process[35].

[32] Comment of the Michi Saagiig Anishinaabeg Communities of the Williams Treaties First Nations on Ontario Power Generation's Initial Project Description for the New Nuclear Wesleyville Project available at: https://iaac-aeic.gc.ca/050/evaluations/proj/89802/contributions/id/65518

[33] Comment from Saugeen Ojibway Nation on Wesleyville New Nuclear Project Initial Project Description are available at: https://iaac-aeic.gc.ca/050/evaluations/proj/89802/contributions/id/65684

[34] https://iaac-aeic.gc.ca/050/evaluations/proj/89802?culture=en-CA

[35] For OPG updates on the NNW Project and/or to get in touch with OPG please visit: www.opg.com/projects-services/projects/new-generation-opportunities/wesleyville/

Annex A: Additional Comments, Guidance and Recommendations

To support ongoing awareness, OPG has provided some perspectives on the additional comments, guidance and recommendations provided by IAAC for informational purposes in the SOI.

Alternatives to Consider

- Concerns about the project need and alternatives to the proposed project, particularly in the consideration of nuclear power compared to renewable energy sources.

On January 15, 2025, the Ontario government[36] asked OPG to explore opportunities for new nuclear energy generation at the Wesleyville site.

> *The Wesleyville site, which is maintained by OPG, located near existing transmission, road, and railway infrastructure, and already zoned for new electricity generation, is well-suited to support a large new nuclear site. Based on early assessments by OPG, this site could host up to 10,000 megawatts (MW) of new nuclear generation, which could power the equivalent of 10 million homes.*

The NNW Project is in direct response to Ontario's electricity needs, under *Energy for Generations*[37], clean, affordable and reliable nuclear power will continue to serve as the backbone of the province's electricity system.

As described in the Provincial Authority Advice Record[38] provided during the comment period on the IPD for the NNW Project, the Ministry of Energy and Mines (MEM) will exercise powers related to carrying out the project as part of its policy oversight of Ontario's electricity sector including long-term supply planning and representing the Government of Ontario as the sole shareholder of OPG. The sole shareholder of OPG, the Government of Ontario as represented by MEM,

[36] https://news.ontario.ca/en/release/1005585/ontario-exploring-new-nuclear-energy-generation-in-port-hope
[37] https://www.ontario.ca/files/2025-07/mem-energy-for-generations-en-2025-07-18.pdf
[38] https://registrydocumentsprd.blob.core.windows.net/commentsblob/project-89802/comment-65829/MEM%20-%20PAAR%20Response%20for%20the%20NNW%20Project%20-%20ENGLISH.pdf

must provide concurrence before the NNW Project can proceed to construction, and concurrence is contingent on a variety of factors.

At the request of the Minister of Energy, Ontario's Independent Electricity System Operator (IESO) prepared and released reports on future projections on Ontario's electricity needs and supply, and how to address the expected growing large gap between such needs and supply. In the process of considering these issues, the IESO sought and received input through public consultation. This important work laid the groundwork for future government decision making. The findings of the *IESO's Pathways to Decarbonization*[39, 40] report and IESO's *Decarbonization and Ontario's Electricity System*[41] report affirmed the need for an all-of-the-above approach that continues to integrate new energy sources, as well as new nuclear and hydroelectric generation, to ensure the electricity system can meet growing demand in a cost-effective way. The NNW Project is a key part of the Ontario government's response to such findings.

IESO's approach included evaluating different approaches to decarbonization including contributions from new nuclear, conservation, demand response, renewables, and emerging low-carbon generating technologies like hydrogen and renewable natural gas. In 2025, the IESO Annual Planning Outlook (APO)[42, 43] cited nuclear power as an important resource to help in meeting the increasing demand while providing a reliable source of baseload supply. Canada recognizes the key role of nuclear energy and technologies in reducing greenhouse gas emissions, meeting climate change targets, supporting the UN Sustainable Development Goals, and delivering energy security (Government of Canada, 2024).

The IESO's reports provide valuable insights into Ontario's evolving energy needs, and set the foundation *for Powering Ontario's Growth*[44], released by the Ontario government in 2023, which laid out the first steps for new electricity production in the province. *Ontario's Affordable Energy Future*[45] reaffirmed the government's commitment to energy policies that support economic growth, job creation, and

[39] https://www.ieso.ca/en/Learn/The-Evolving-Grid/Pathways-to-Decarbonization
[40] In February 2023, the government launched a 90-day public consultation on IESO's Pathways to Decarbonization report, focusing on IESO's immediate "no-regret" recommendations. The public consultation closed on May 14, 2023.
[41] https://www.ieso.ca/-/media/Files/IESO/Document-Library/gas-phase-out/Decarbonization-and-Ontarios-Electricity-System.ashx
[42] https://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/2025/2025-Annual-Planning-Outlook.pdf
[43] IESO is committed to an open, two-way dialogue with stakeholders and communities including on the 2025 Annual Planning outlook, please refer to IESO's website for more details: https://www.ieso.ca/Sector-Participants/Engagement-Initiatives/Engagements
[44] https://www.ontario.ca/files/2023-07/energy-powering-ontarios-growth-report-en-2023-07-07.pdf
[45] https://www.ontario.ca/files/2024-11/energy-ontarios-affordable-energy-future-en-2024-11-07.pdf

cost stability for families and businesses. These commitments are reflected in the principles that now form the foundation of *Ontario's Integrated Energy Plan Energy for Generations* (Ministry of Energy and Electrification, 2025) – affordable, secure, reliable and low-carbon energy – and guide the decisions made that shape the future of Ontario's energy system and, in doing so, the future of Ontario's economy. The NNW Project is an important part of that plan.

The *Ontario's Integrated Energy Plan Energy for Generations* calls for up to 12 large new nuclear units to be in service by 2050, with up to 10,000MW of new large nuclear potential at the Wesleyville site. To generate the same amount of energy as a potential 10,000MW nuclear station at Wesleyville, the province would need to set aside approximately 100 times more land for solar and 500 times more land for wind, highlighting the energy density and land efficiency of nuclear power (Ministry of Energy And Electrification, 2025).

IAAC guidance[46] rightly recognizes that the alternatives to the project need not include alternatives that are contrary to, or not consistent, with a province's formal plans or directives (Impact Assessment Agency of Canada, 2020). As an example, this guidance indicates that, in the case of a nuclear energy project, an assessment of energy mandates established through federal and provincial legislation/policy may not be within the scope of the impact assessment (IA). In the case of the NNW Project, the application of this guidance should result in the IA for the NNW Project not including consideration of the alternatives to this project, including due to the recent opportunities for public participation on Ontario's planning for its long-term supply mix and the fact that OPG is advancing the NNW Project at the direction of the Government of Ontario, who must provide concurrence before the NNW Project can proceed to construction.

[46] https://www.canada.ca/content/dam/iaac-acei/documents/policy-guidance/practitioners-guide/guidance-need-for-purpose-of-alternatives-to-and-alternative-means.pdf

- **Concerns about technology selection, including interest in economic independence and supply chain resiliency of fuel and materials.**

  While it is possible that a preferred technology may be identified by OPG prior to the completion of the IA process, OPG is pursuing the Plant Parameter Envelope (PPE) approach instead of choosing a preferred technology at the outset of the Impact Assessment. This PPE approach is described in Section 2.3.1 of the IPD. The use of a PPE is consistent with acceptable licensing approaches per REGDOC-1.1.1. This approach is beneficial to both OPG and the ratepayer as it allows OPG to maintain flexibility and leverage competition as it evaluates and selects a reactor technology.

  OPG will choose a technology that is safe, reliable and low-carbon, beneficial to Ontario ratepayers, and supportive of the broader economic interests of Ontario and Canada. Other considerations will include the ability for OPG and its supply chain to fuel and service the chosen technology for its full lifetime.

- **Concerns about the project's name creating confusion or perceived links to local organizations.**

  OPG will consider all input and feedback regarding the NNW Project name in future lifecycle phases should the NNW Project continue beyond the Impact Assessment process.

Rate Payer Impacts

- **Concerns about the cost to Ontario taxpayers to support nuclear energy production and potential increased debt compared to cheaper alternative energy sources.**

  OPG carefully plans every project and investment it undertakes, to ensure it delivers long-term value for customers and the province. OPG actively seeks innovative financing solutions, leverages regulatory mechanisms like concurrent cost recovery to reduce long-term costs, and benchmarks performance to drive efficiency. OPG operates as part of a balanced and diverse electricity system. While wind and solar are important sources of energy, they are intermittent - meaning their output depends on weather and time of day. For Ontario to ensure

a reliable power supply, wind and solar must be paired with dispatchable resources. These additional costs and system needs are often not fully captured in simple cost comparisons.

Replacing nuclear with wind and solar would also require building significantly more infrastructure, using much more land, and incurring greater costs to achieve the same level of reliable, low-emissions power. For example, according to the Independent Electricity System Operator (IESO), replacing 2,200 MW output of small modular reactors baseload generation would require approximately ~11,300-15,100 MW of wind and solar, paired with battery storage[47]. Today, Ontario's three nuclear sites – Darlington, Bruce and Pickering – have a combined installed capacity of over 12,000 MW. These facilities currently deliver reliable electricity at a price lower than any other resource with the exception of Ontario's hydroelectric fleet. This cost reflects a proven, low-emission technology that limits land use impacts (Ministry of Energy And Electrification, 2025).

The positive economic impacts of potential future nuclear generation at the NNW site will be characterized during the Impact Statement phase. As part of the initial feasibility assessment, a conservative estimate by the Conference Board of Canada (The Conference Board of Canada, 2025) indicates that over the course of 95 years (including design, construction, operations, and maintenance) the NNW Project would:

- Contribute $235 billion to Ontario's GDP over its 95-year life. The direct economic benefits are concentrated in Ontario, with indirect and induced effects transmitted across Canada through supply chains.
- Support an estimated annual average of 14,900 jobs nationally for the design and construction phase and 10,300 for the operations and maintenance phase.
- Include 1,700 new jobs in Port Hope, representing an average 15 to 20 per cent boost to overall employment levels in the local area.
- Allow Port Hope and other local communities to benefit from additional co-located industry, supply chain spending and municipal property taxes from the station, which according to the Conference Board of Canada could be an estimated $10.5 million annually.

[47] https://ieso.ca/-/media/Files/IESO/Document-Library/Technical-papers/Hybrid-Resource-Equivalency-Assessment.pdf

- Concerns about changes in electricity rates and taxes.

  OPG is a regulated generator, not a retailer, with rates set by the OEB. All proposed rates and underlying costs are also subject to detailed review and approval by the Ontario Energy Board (OEB)[48], ensuring that only prudent and reasonable expenses are included in electricity rates. OPG is the only electricity generator in the province that undergoes a public review of its rates by the OEB. OPG files an application and the rates set by the OEB ensure we can continue to deliver low-carbon, safe, and reliable energy. As mandated by the *OEB Act*[49], these application proceedings are conducted in an open and transparent manner and OPG's application documents are publicly disclosed on OPG's website[50].

[48] Please see https://www.oeb.ca/ to learn more about OEB projects and provide feedback on initiatives and consultations.
[49] https://www.ontario.ca/laws/statute/98o15
[50] https://www.opg.com/about-us/governance-regulation/oeb-applications/

References

Ministry of Natural Resources and Forestry. (2017). *Survey Protocol for Species at Risk Bats Within Treed Habitats.*

Canadian Council of Ministers of the Environment. (2025). *Canadian Ambient Air Quality Standards Handbook.* Retrieved from https://ccme.ca/en/res/caaqshandbook.pdf

Government of Canada. (2023). *Canada's Policy for Radioactive Waste Management and Decommissioning.* Retrieved from https://natural-resources.canada.ca/our-natural-resources/energy-sources-distribution/nuclear-energy-uranium/radioactive-waste/canadas-policy-for-radioactive-waste-management-and-decommissioning/24987

Government of Canada. (2024). *Canada's National Statement: Nuclear Energy Summit*. Retrieved from https://natural-resources.canada.ca/energy-sources/canada-s-national-statement-nuclear-energy-summit-2024

Government of Ontario. (2025, January 15). *Ontario Exploring New Nuclear Energy Generation in Port Hope*. Retrieved from https://news.ontario.ca/en/release/1005585/ontario-exploring-new-nuclear-energy-generation-in-port-hope

Health Canada. (2023). *Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise.* Retrieved from https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-noise.html

Impact Assessment Agency of Canada. (2020, January 23). *Guidance: "Need for", "Purpose of", "Alternatives to" and "Alternatives means".* Retrieved from https://www.canada.ca/content/dam/iaac-acei/documents/policy-guidance/practitioners-guide/guidance-need-for-purpose-of-alternatives-to-and-alternative-means.pdf

Impact Assessment Agency of Canada. (2026). *Summary of Issues New Nuclear at Wesleyville Project.* Retrieved from https://iaac-aeic.gc.ca/050/evaluations/document/165072

Independent Electricity System Operator. (2022). *Pathways to Decarbonization.* Retrieved from https://www.ieso.ca/en/Learn/The-Evolving-Grid/Pathways-to-Decarbonization

Independent Electricity System Operator. (2025). *Annual Planning Outlook, Ontario's Electricity.* Retrieved from https://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/2025/2025-Annual-Planning-Outlook.pdf

Independent Electricity System Operator. (2025). *Planning Outlook, Ontario's Electricity System needs: 2026-2050.* Retrieved from https://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/2025/2025-Annual-Planning-Outlook.pdf

Knight, E. (2017). *Canadian Nightjar Survey Protocol.* Regroupement Quebec Oiseaux, Bird Studies Canada, Environment and Climate Change Canada, WildResearch.

Lane, R. D. (2013). Radiation Exposure and Cancer Incidence (1990 to 2008) around Nuclear Power Plants in Ontario, Canada. *Journal of Environmental Protection*, 4, 888-913. . Retrieved from 2013. Radiation Exposure and Cancer Incidence (1990 to 2008) around Nuclear Power Plants in Ontario, Canada. Journal of Environmental Protection, 4, 888-913.

Ministry of Energy And Electrification. (2025). *Energy for Generations: Ontario's Integrated Plan to Power the Strongest Economy in the G7.* Retrieved from https://www.ontario.ca/files/2025-07/mem-energy-for-generations-en-2025-07-18.pdf

Ministry of Energy and Mines. (2026). *Enclosure 1: Provincial Authority Advice Record – New Nuclear at Wesleyville Project.* Retrieved from https://registrydocumentsprd.blob.core.windows.net/commentsblob/project-89802/comment-65829/MEM%20-%20PAAR%20Response%20for%20the%20NNW%20Project%20-%20ENGLISH.pdf

Ministry of Natural Resources and Forestry. (2017). *Survey Protocol for Species at Risk Bats Within Treed Habitats.*

Ministry of the Environment, Conservation and Parks. (2013). *Environmental Noise Guideline–Stationary and Transportation Sources–Approval and Planning (NPC-300) (No. PIBS 9588e).* Retrieved from https://www.ontario.ca/page/environmental-noise-guideline-stationary-and-transportation-sources-approval-and-planning

Ontario Ministry of the Environment, Conservation and Parks (MECP). (2020). *Ambient Air Quality Criteria.* Retrieved from https://www.ontario.ca/page/ontarios-ambient-air-quality-criteria

Ontario Power Generation. (2026). *New Nuclear at Wesleyville in Port Hope - Initial Project Description.* Retrieved from Canaidan Impact Assessment Registry, Initial Project Description of a Designated Project: https://iaac-aeic.gc.ca/050/evaluations/document/164907

The Conference Board of Canada. (2025). *Economic Impact of a Potential Nuclear Facility at the OPG Wesleyville Site - Briefing Note.* Retrieved from Ontario Power Generation: Economic Impact

Attachment 1: Copy of OPG Response Letter to MS-WTFN

A PDF copy of the letter has been provided on the following pages for ease of reference.

To: Alderville First Nation

Curve Lake First Nation

Hiawatha First Nation and;

The Mississauga's of Scugog Island First Nation

March 16, 2026

Re: Comments of the Michi Saagig Anishinaabeg Communities of the Williams Treaties First Nations on Ontario Power Generation's Initial Project Description for the New Nuclear at Wesleyville Project

---

Ontario Power Generation (OPG) acknowledges receipt of the letter from the Michi Saagig of the Williams Treaties First Nations (MS-WTFNs), submitted to the Impact Assessment Agency of Canada (IAAC) and Canadian Nuclear Safety Commission (CNSC), regarding the Initial Project Description (IPD) for the proposed New Nuclear at Wesleyville Project.

OPG would like to thank the MS-WTFNs for their detailed and thoughtful submission. OPG recognizes the MS-WTFNs as Rights-holders with deep, enduring connections to the lands and waters within the project area. OPG appreciates the collaborative work to date, including MS-WTFN's contributions to the IPD, and acknowledge the importance of ongoing, respectful, and transparent dialogue.

Ongoing Collaboration and Information Sharing

OPG would like to respectfully note that the New Nuclear at Wesleyville (NNW) Project team has been actively sharing information and engaging with the MS-WTFNs throughout the pre-planning phase, including both prior to and during the development of the IPD. OPG remains committed to providing timely and transparent updates, and to receiving and appropriately incorporating feedback from the Nations at all opportunities. This includes, but is not limited to regularly scheduled monthly meetings, MS-WTFNs review and comment on archaeological reports, participation in discussions, providing input to plans, observations of site sampling field work, and providing input on cultural heritage matters. OPG is committed to continuing this collaborative approach as the project advances.

© Ontario Power Generation Inc., 2026. This document has been produced and distributed for Ontario Power Generation Inc. purposes only. No part of this document may be reproduced, published, converted, or stored in any data retrieval system, or transmitted in any form by any means (electronic, mechanical, photocopying, recording, or otherwise) without the prior written permission of Ontario Power Generation Inc.

First Nation-Led Assessment

OPG's NNW Project team is in active discussions with the MS-WTFNs to better understand and support the development of a MS-WTFNs-led assessment process. OPG's NNW Project team is currently working together with the MS-WTFN to define this approach and have drafted an agreement to guide the collaboration throughout the Impact Assessment. OPG is committed to supporting the MS-WTFNs leadership in this process, including through appropriate funding and capacity supports, ensuring their perspectives in the MS-WTFN-led assessment will be used to inform the IA.

General Response to Key Issues Raised

- **Collaboration and Engagement:** OPG remains committed to a collaborative, transparent, and tailored approach with the MS-WTFNs, both within the federal Impact Assessment process and through the proposed First Nation-led Impact Assessment. OPG respects that beyond their relationship with OPG, the Nations have a Nation-to-Nation relationship with the Crown.
- **Information Sharing:** OPG acknowledges the importance of timely and transparent information sharing and will continue to work proactively to keep the MS-WTFNs updated and engaged, as has been the NNW Project team's practice to date.
- **Cultural and Ecological Values:** OPG recognizes the significance of Manoomin (Wild Rice), other Relatives, and cultural landscapes identified by the MS-WTFNs. OPG will continue to work closely with the MS-WTFN to ensure the understanding, consideration and appropriate protection of the cultural and ecological values within the NNW Impact Assessment.
- **Cumulative Effects and Rights**: OPG is committed to working with the MS-WTFNs and the Crown to assess from a cumulative effects perspective, potential and real impacts of the NNW Project on asserted and proven Aboriginal and Treaty rights as well as the environment. As informed by the MS-WTFNs, OPG will endeavour to conduct this assessment using both Western and Indigenous frameworks of understanding, identification, evaluation and analysis.
- **Archaeology and Heritage:** OPG has actively sought and will continue to seek MS-WTFNs' input on archaeological investigations, reports, and site monitoring opportunities to ensure that cultural heritage values are respected and that appropriate protocols are in place. To accommodate concerns raised by the MS-WTFNs, OPG also made changes to its archaeological service delivery, including changing archaeological vendors, to better align with MS-WTFNs expectations and support culturally appropriate archaeological practices.
- **Ongoing Dialogue:** OPG welcomes continued engagement with the MS-WTFNs, IAAC, and CNSC, including in the development of workplans, governance structures, and monitoring programs.

In closing, OPG reiterates its commitment to a respectful, collaborative, and transparent approach as both the Impact Assessment and First Nation-led Impact Assessment processes move forward. OPG looks forward to finalizing the agreement with the MS-WTFNs and to an ongoing partnership with the goal of ensuring that the Rights (as defined in the IPD), perspectives, and responsibilities of the MS-WTFNs are fully considered throughout the lifecycle of the project. OPG welcomes continued dialogue and feedback from the MS-WTFNs as we work together to advance a process that meaningfully reflects the values and priorities of the MS-WTFNs.

Attachment 2: Copy of OPG Response Letter to SON

A PDF copy of the letter has been provided on the following pages for ease of reference.

To: Paul Jones

Co-Chair of the SON Nuclear Advisory Committee

The Joint Chiefs and Councils of the Saugeen Ojibway Nation

March 16, 2026

Re: Wesleyville New Nuclear Project Initial Project Description

---

In response to the Saugeen Ojibway Nation (SON) Submission #623[1]

OPG is committed to ensuring waste management activities are informed and guided by Canada's Policy for Radioactive Waste Management and Decommissioning (Government of Canada, 2023) and the perspectives of First Nations and Indigenous communities whose rights may be impacted by such activities. OPG's safe and responsible management of nuclear waste includes: preventing waste before it is created; managing waste by taking full responsibility for the entire lifecycle from interim storage to planning for its effective long-term management; and harnessing waste for valuable isotopes.

OPG also remains committed to continuing to share information about OPG's waste management activities.

The construction and operation of any radioactive waste management facility, including but not limited to OPG's Western Waste Management Facility ("WWMF"), must proceed in accordance with licensing requirements under the Nuclear Safety and Control Act. Prior to issuing any licence, the Canadian Nuclear Safety Commission will consider comprehensive assessments of health, safety and the environment, and offer opportunities for Indigenous Nations and communities to provide their perspectives. These proceedings are the appropriate forum for consultation with Indigenous Nations and communities whose established and/or asserted rights could be impacted by the contemplated licensed activities. To the extent any such impacts are identified, the Canadian Nuclear Safety Commission must consider appropriate accommodations, if applicable, prior to issuing a licence.

[1] https://iaac-aeic.gc.ca/050/evaluations/proj/89802/contributions/id/65684

© Ontario Power Generation Inc., 2026. This document has been produced and distributed for Ontario Power Generation Inc. purposes only. No part of this document may be reproduced, published, converted, or stored in any data retrieval system, or transmitted in any form by any means (electronic, mechanical, photocopying, recording, or otherwise) without the prior written permission of Ontario Power Generation Inc.

Regarding the specific concerns raised by SON about waste management, OPG has interim storage options for low and intermediate-level waste beyond the Western Waste Management Facility. OPG will continue to consider all waste management options available for the interim and long-term storage of low, intermediate, and high-level waste and in accordance with the nuclear regulatory review framework and other applicable legal requirements. OPG remains committed to continuing our discussions with SON and to working collaboratively to address concerns as this project advances.