



# WESLEYVILLE (PORT HOPE) NEW NUCLEAR PROJECT

IAA Reference # 89802

Comments by Northwatch on  
IAAC'S Draft Integrated Tailored Impact  
Statement Guidelines

May 7, 2026



## Introduction

Northwatch is providing comments on the Draft Integrated Tailored Impact Statement Guidelines for the impact assessment of Ontario Power Generation's proposed "New Nuclear at Wesleyville Project.

Northwatch has previously commented on the OPG's Initial Project Description and described Northwatch and Northwatch's areas of interest in that document, and will not repeat those introductions in this submission, given that our earlier comments are available on the public registry.

As a first step in our review of the draft guidelines, we created a list of the issues we had identified during the comment period on the IPD as one lens through which we will evaluate the efficacy of the draft guidelines.

In general, our review of the Initial Project Description determined that OPG had not provided a sufficient description of their project or its components, activities, and anticipated and potential adverse effects. While problematic in an Initial Project Description, the same approach is wholly unacceptable in the impact statement and supporting documents.

The Integrated Tailored Impact Statement Guidelines must provide the OPG with direction that is sufficiently detailed to result in a detailed impact statement which must support an evidence-based assessment of OPG's proposal and its potential effects. The Agency must ensure that the guidelines are sufficiently thorough and comprehensive in order to achieve a credible and scientifically and socially rigorous review process.

The issues which Northwatch identified during the review of the Initial Project Description as being necessary information in the impact statement – and so requiring identification in the integrated impact statement guidelines – included the following:

- Discussion of the need or purpose of the project was unduly limited and poorly supported, limited to broad policy statements by different levels of government
- Alternatives to the project were not presented (i.e. alternative means of meeting the need or purpose)
- Alternative means of carrying out the project were not adequately presented
- The presentation of a list of four potential reactor designs as "alternative means" of carrying out the project is at odds with the required approach, which is to have a project (i.e. a reactor design) which is the evaluated against other reactor designs as "alternative means of carrying out the project"; in the absence of OPG having selected a reactor design their "alternative means" presentation is not only inadequate (or reasons outlined elsewhere) but also an unacceptable approach
- There was no substantive description or presentation of the Plant Parameter Envelope (PPE) or its application or the outcome of its application for this project
- The selected technology (reactor type) was minimally presented (limited to naming four "examples of reactor technologies which have been considered as part of OPG's PPE")

with no actual description of the technologies or any related safety analysis or descriptions for either the fuel or the wastes to be generated

- There were only very summary sections pertaining to the various project stages (site preparation, construction, operation, decommissioning and abandonment) and these largely consisted of listing of items rather than a description
- We found no descriptions of accident scenarios, including worst case scenarios, or of malfunctions or malevolent (terrorist) acts
- There were either inadequate or no descriptions of health, environmental and social impacts and potential impacts related to the wastes that will be generated and their management systems at each project stage (operations, closure and decommissioning)
- There were minimal references and no substantive descriptions or discussion of the radioactive wastes that will be generated (low, intermediate, high) and how they will be managed in the short, medium, and long-term
- There were no radioactive waste volume estimates included in the initial project description for any of the four referenced technologies
- There was no discussion of the fuel type, source, and risk factors for any of the four named reactor designs
- The potential for / responses to accidents, malfunctions and malevolent acts (e.g. terrorist attacks) were wholly absent; note that there are references to “accidental spills” but no discussion of accident potential, or of reactor malfunctions or malevolent acts, all of which could result in large and even catastrophic releases but are not even acknowledged
- Proliferation and security risks related to fuel sourcing and production, operations, and waste generation and management are absent
- The costs and financing for each operating stage, including decommissioning and long-term waste management were absent

## **Review of Draft Integrated Tailored Impact Statement Guidelines**

As a first step in our review of the draft guidelines, we considered the issues we had identified during the comment period on the IPD as one lens through which we will evaluate the efficacy of the draft guidelines. In general, our assessment is that the draft guidelines failed to set out adequate direction on those issues and others and does not sufficiently require OPG to describe the need for the project, the alternatives to the project, or the many components, activities, and anticipated and potential adverse effects that will be part of or result from the project.

Secondly, we did a section-by-section review of the draft guidelines and generated a table with commentary on key sections. As per our primary area of interest in the generation and management of radioactive wastes, our review focused on issues related to radioactive waste, but not exclusively. Our section-by-section review is presented below.

Location in GL	Draft Guideline Text	Northwatch Commentary
1 Introduction, Page 2	The Integrated Guidelines use the word “must” to describe information requirements under the IAA or which form part of the licensing basis. In certain instances, the word should, instead of must, is used to advise the proponent to follow specific guidance or methods to meet the associated requirement. A concordance table, included in Appendix 1 identifies where these broadly overlapping information requirements are found	The word “should” is used almost as often in the draft guidelines as the word “must”, and frequently in contexts where the requirement should be firm, as a “must” would indicate. For example, the following three instances express fundamental requirements: 1) The proponent should reject any unacceptable or inappropriate site before applying for a LTPS (pg 3), 2) The proponent should clearly describe and justify any proposed alternative approaches (pg 7); and 3) The proponent should clearly itemize all high-level activities proposed to be conducted under the LTPS (pg 12). It undermines the guidelines to <u>encourage</u> rather than <u>require</u> the direction be followed.
1 Introduction, Page 2	It is the intention that the requirements in the final Integrated Guidelines will be focused on key issues anticipated to be material to decision-making	This is ill-defined and introduces the opportunity for the applicant to omit important information and then fashion an argument that by their subjective assessment it was not “key” to decision-making. Throughout, the guidelines should be more explicit and directive.
1 Introduction, Page 2	These requirements may be further refined and focused during the remainder of the planning phase based on feedback received.	This is ill-defined. Is the Agency indicating that the weight of public and Indigenous and federal government review team comments during this comment period only <u>may</u> result in improvements to the draft guidelines?
1.1 Scope of the impact assessment, Page 2	In determining what information and studies are required in the proponent’s Impact Statement, as set out in these Integrated Guidelines, IAAC took into account the factors listed in subsection 22(1) of the IAA, and focused on elements anticipated to be material to decision making under the IAA.	This raises a concern that IAAC took only those factors listed in Subsection 22(1) which they deemed to be “material decision-making under IAA” rather than taking into account <u>all</u> factors in section 22(1). This section should be revised to provide further explanation, and IAAC should demonstrate how they have considered <u>all</u> factors in section 22(1) in developing the guidelines.
1.2.1 Site evaluation, Page 3	Site evaluation is the process of evaluating sites for new nuclear reactors. It is done before the proponent submits a licence application and continues throughout the lifecycle of the project, to ensure that the facility’s design basis and safety case remains current with changing environmental conditions or modifications to the facility itself. Site evaluation information is also a key input into reactor facility design and subsequent lifecycle phases. The proponent should reject any unacceptable or inappropriate site before applying for a LTPS.	The guidelines must be more explicit in setting out the information and rationale required of OPG in describing their site selection process and site evaluation. The description required of OPG should include their site selection process, the criteria they used in identifying candidate sites and then in evaluating the various alternatives or optional sites, how public / community and Indigenous consent and acceptance factored into their selection, how that consent and acceptance has been demonstrated, and how the features of the site and its ability to accommodate all project stages – including the short, medium and long-term

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		storage of low, intermediate and high-level (used fuel) radioactive wastes were evaluated. Further, the guidelines should require OPG to describe how their site evaluation method and their subsequent site selection interplays or informs their selection of reactor technology and selection of their radioactive waste storage systems.
1.2.2 Site preparation, Page 3	The proponent is applying for a LTPS for a Class IA nuclear facility under the NSCA. The proponent is required to hold an LTPS before any work is done on the site.	The guidelines must require OPG to be explicit in differentiating between which activities will occur during the site preparation stage (and under a LTPS) versus in the construction stage, and operational stage. This should include how OPG will carry out site planning in advance of site preparation with respect to the design, configuration and placement of all project facilities, including the reactor(s) and ancillary functions, including the irradiated fuel bays, fuel waste processing building, dry storage areas for used fuel, and all waste management facilities for low and intermediate level radioactive waste. If the applicant anticipates off-site transfer of the wastes at any point in time, the site planning must also include any additional facilities that might be required for future transfer of the wastes, for example from on-site storage to transportation containers.
1.3 Selection of Valued Components, Page 6	Additional VCs for decision-making factors under section 63 of the IAA <ul style="list-style-type: none"> <li>▪ Job creation and procurement opportunities.</li> <li>▪ Education and training</li> <li>▪ Potential effects and benefits of changed demographics through increased employment, business, and procurement opportunities.</li> <li>▪ Potential benefits including education and training opportunities.</li> </ul>	This section should also require an examination of lost opportunity costs and negative effects on other local businesses and employers (including in the service industry) as a result of OPG having a competitive advantage in attracting employees through being able to offer higher wages due to not having to meet market or competitive conditions due to access to funds through electricity rates and government subsidies.
1.4 Preparing the Impact Statement, Page 7	The Impact Statement must address requirements outlined in these Integrated Guidelines as well as in IAAC's Generic Requirements for Impact Statements, including the requirements on assessment methodology, general information, description of change to the project that may be caused by the environment, description of <u>potential malfunctions and</u>	The guidelines should be explicit that this requirement applies to all stages of the project, including waste management, and including any off-site transfers or off-site management of radioactive wastes that have been generated by the project; as will be addressed later in this commentary, the risk associated with acts of terrorism or sabotage (malevolent acts) should be detailed, rather than relegated to a single

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	<u>accidents</u> that may occur in connection with the project,	bullet in the “accidents” section of the guidelines
1.4 Preparing the Impact Statement, Page 8	The proponent is encouraged to engage IAAC and the CNSC as early as possible to clarify the requirements in the Integrated Guidelines and to support <u>early resolution of issues</u> .	This statement should be clarified. At present, it might be taken to suggest that the impact assessment process accommodates private negotiations between the applicant and the regulators to “resolve issues”. All communications and exchange of documents between the applicant and the regulators should be part of the public record and posted to the project registry.
2.4 Evaluation against safety goals from a site perspective, Page 11	The proponent must evaluate reactor facility designs against applicable safety goals, taking into account the characteristics of the site, the risks associated with external hazards (including any potential cliff-edge effects that may arise from small increases in the severity of external hazards), and the potential negative effect of the reactor facility on the environment. The evaluation must include the effects of multiple unit events and, where applicable, effects from events that may affect multiple units.	The guidelines should be expanded to describe or define what is meant by “applicable safety goals”. Are these “goals” set by the regulators or the applicant? Are these “goals” a substitute for standards? The guidelines should be explicit in describing what risk assessments and safety analysis must be carried out for all parts of the projects, including those activities related to waste handling, storage and containment, and for each of the various reactor technologies under consideration and fuel types that might be utilized. Particular attention should be to additional risks associated with enriched fuel.
2.4 Evaluation against safety goals from a site perspective, Page 11	To support this evaluation, the proponent must provide a summary of the process by which the different nuclear reactor technologies being considered have been included in the site evaluation. Bounding approaches for site evaluation may be considered; however, bounding limits for a proposed facility must be based on credible information from designs being considered for that site.	Any potential use of a plant parameter envelope (PPE) or bounding exercises must be supported by detailed assessment – and description – of any reactor technologies being considered. A PPE approach cannot be accepted as a substitute for detailed assessment of each reactor technology under consideration, based on detailed information describing the reactor design and function, the fuel, and the reactor wastes, including nuclear fuel waste the characteristics, dimensions and hazards of the irradiated fuel.
2.5 Project overview, Page 12	The Impact Statement must: describe the project, key project components and ancillary activities (both nuclear and non-nuclear), scheduling details, the timing of each phase of the project <sup>4</sup> , the total lifespan of the project and other key features. If the project is part of a larger sequence of projects, the Impact Statement must outline the larger context;	The guidelines must make explicit that this description must include detailed descriptions and risk analysis of the project components related to waste generation, waste handling, waste management, and waste storage (short, medium and long-term).
2.5.1 Decommissioning	The Impact Statement must describe a preliminary decommissioning strategy	The guidelines should be modified to clarify what is required is a <u>detailed</u> decommissioning

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and Post-Closure Management, Page 12	consistent with applicable CNSC regulatory requirements (REGDOC-2.11.2) [17], including anticipated approaches to decontamination, dismantling, waste management, and site end-state objectives	strategy, which describes the approach and outcomes of reactor station decommissioning in sufficient detail a) to evaluate the risks and impacts and b) the applicant demonstrates that they have an actual plan, rather than an intention to form a plan at a later date
2.5.1 Decommissioning and Post-Closure Management, Page 12	The Impact Statement must describe anticipated used nuclear fuel quantities, storage methods, duration of on-site storage, and reasonably foreseeable long-term management pathways (e.g., transfer to an authorized disposal facility or continued monitored storage), sufficient to support the assessment of potential adverse federal effects across the full project lifecycle.	We welcome the requirement that the applicant be required to describe used nuclear fuel quantities, storage methods, duration of on-site storage, and long-term management, but are concerned by the guidelines including what reads as a qualifier “sufficient to support the assessment of potential adverse federal effects across the full project lifecycle”. It is unclear if this is asserting the requirement or weakening it by inviting an interpretation of what is “sufficient”.
2.5.1 Decommissioning and Post-Closure Management, Page 13	The Impact Statement must assess potential long-term and post-closure effects on relevant valued components, including groundwater, surface water, the biological environment, and Indigenous Rights, and describe proposed monitoring, follow-up, and financial assurance mechanisms applicable to decommissioning and post-closure phases.	The guidelines should clarify that this requirement applies to waste management facilities at all stages, and should explicitly identify related impacts, including those which have been identified at other reactor stations operated by Ontario Power Generation, such as ground and groundwater contamination from waste storage facilities and from the irradiated fuel bays.
2.6 Project components and activities, Page 13	The Impact Statement must: describe project components and activities to be carried out during each project phase...for each project activity, describe its location, method used to carry it out, schedule (expected start date, time of year, duration and frequency), magnitude and scale, identify activities that involve periods of increased disturbance related to adverse federal effects and impacts on First Nations and other Indigenous communities and their rights; and	The guidelines should clarify that this requirement applies to waste management facilities at all stages, and should explicitly identify related impacts, including those which have been identified at other reactor stations operated by Ontario Power Generation, such as ground and groundwater contamination from waste storage facilities and from the irradiated fuel bays.
2.6.1 Plant Parameter Envelope Approach, Page 13	The proponent indicated that the Impact Statement will present potential reactor technologies as part of a bounding approach referred to as the “Plant Parameter Envelope (PPE)”. The PPE is a listing of values that supports (or informs) the bounding envelope that can be used in the Impact Statement to assist in predicting the potential safety and environmental effects of a nuclear reactor facility at a particular site.	Any potential use of a plant parameter envelope (PPE) or bounding exercises must be supported by detailed assessment – and description – of any reactor technologies being considered. A PPE approach cannot be accepted as a substitute for detailed assessment of each reactor technology under consideration, based on detailed information describing the reactor design and function, the fuel, and the reactor wastes, including nuclear fuel waste the

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		characteristics, dimensions and hazards of the irradiated fuel.
2.6.1 Plant Parameter Envelope Approach, Page 14	<p>Furthermore, to the extent possible:</p> <ul style="list-style-type: none"> <li>• the proponent is encouraged to narrow the envelope to the most plausible choices of technology to reduce the quantity and complexity of information that will need to be reviewed; and</li> <li>• the proponent is encouraged to engage with the public on the use of the bounding approach during their outreach, and to report the results of this engagement in the Impact Statement.</li> </ul>	<p>The proponent should be required to select their preferred technology, and present alternative technologies as “alternative means” of carrying out their project.</p> <p>While we support the notion that the proponent should reduce the opaqueness of the PPE and “bounding” approach by presenting information about their proposed technology, the public interest is in risk and impacts of the project, and risk and impacts need to be evaluated / understood / presented in relation to actual reactor designs.</p>
2.7 Receiving environment, Page 15	<p>The Impact Statement must describe the project’s location, including the geographical setting, meteorological conditions and socio-ecological context required to understand the effects of the project on VCs including and, where appropriate, located on map(s): ...proposed conventional and radiological waste transfer and storage areas</p>	<p>In addition to locating the radiological waste transfer and storage areas on a site map – a requirement we support – the guidelines should be explicit that these the radiological waste transfer and storage areas must be described in detail, and their design, function, operation and potential releases and impacts described in relation to each of the technologies under consideration.</p>
2.8.3 Alternatives to the project, Page 16	<p>IAAC will rely on the proponent’s Initial Project Description demonstrating that there are no alternatives to the project that are technically and economically feasible to meet the need for the project and achieve its purpose. The selection of electricity generation technologies and the broader energy supply mix in Ontario are matters determined through provincial energy planning and policy processes, including Ontario’s Integrated Energy Plan.</p>	<p>The Impact Assessment Act requires an examination of alternatives to the project (Section 22(1) and the assessment of alternatives to the project are integral to the assessment process. While electricity planning may be in the purview of the province, that does not relieve the Agency of administering the Impact Assessment Act in its fullness. Northwatch adopts to the submission of the Canadian Environmental Law Association (Ref.#852) on the matter of alternatives to the project.</p>
2.8.4 Alternative means of carrying out the project, Page 17-18	<p>The Impact Statement must:</p> <ul style="list-style-type: none"> <li>• determine the preferred means of carrying out the project, and justify the exclusion of alternative means, considering: <ul style="list-style-type: none"> <li>- address key project elements in its alternative means analysis, including, but not limited to, the following: <ul style="list-style-type: none"> <li>▪ route or corridor and means options for transportation (e.g. marine shipping, moving fuel or waste);</li> <li>▪ management options for used nuclear fuel;</li> </ul> </li> </ul> </li> </ul>	<p>We appreciate the guidelines requiring an examination of any transportation of fuel waste and management options for used nuclear fuel, but are of the view that this direction needs to be more explicit, and clearly direct the proponent to include in the impact statement a detailed description of:</p> <ul style="list-style-type: none"> <li>- any potential off-site transportation, including the means of transport, and the design, safety assessment and testing of any transportation containers to be utilized and any potential route(s) and the related means of security, community notification and emergency</li> </ul>

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		<p>and accident response along that route including responses to malevolent acts, and radioactive releases and exposures under normal and upset conditions along that route</p> <ul style="list-style-type: none"> <li>- any off-site location or facility that might be utilized, and a detailed description of that off-site facility, including design, safety assessment, licensing status, and the related means of security, community notification and emergency and accident response for that facility including responses to malevolent acts, and radioactive releases and exposures under normal and upset conditions</li> </ul>
<p>3 Description of Engagement with First Nations and other Indigenous Communities Page 20</p>	<p>Additionally, project-specific requirements have been identified during consultation and engagement activities carried out to date. In addition to the standard requirements, the Impact Statement must:</p> <ul style="list-style-type: none"> <li>• clearly outline the proposed waste management plan for the project and demonstrate efforts to engage with First Nations and other Indigenous communities with rights and interests may be affected in relation to potential locations in Canada under consideration for waste management activities in relation to the project.</li> </ul>	<p>We appreciate the guidelines requiring the applicant to outline the proposed waste management plan for the project and demonstrate efforts to engage with First Nations and other Indigenous communities with rights and interests may be affected in relation to potential locations in Canada under consideration for waste management activities in relation to the project. This must be detailed and explicit and include responses by First Nations and other Indigenous communities to Ontario Power Generation’s agent, the Nuclear Waste Management Organization, including negative responses. The description should clearly differentiate between concepts, plans, future plans, future concepts and actual operating facilities, and should – with respect to actual operating facilities – include a status report on the acceptability to First Nations of future or continued import of radioactive wastes into their territory in any instance that includes potential transfer into other treaty areas.</p>
<p>4 Assessment Methodology, Page 21</p>	<p>In addition to the standard requirements, the Impact Statement must also:</p> <ul style="list-style-type: none"> <li>- consider temporal boundaries explicitly accounting for nuclear lifecycle effects, including interim, on-site waste management, decommissioning, post-closure monitoring, and intergenerational impacts;</li> </ul>	<p>This section must include detailed waste characterization for the used fuel and other radioactive wastes that would be generated by each of the reactor technologies under consideration. The waste inventory must include forecasted volumes, describe the physical, chemical and radiological characteristics (including the gamma, beta and alpha activity) and describe the dimensions, volume, weight of the wastes.</p>

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5.3.2 Effects to topography, soil and sediment, Page 25	<p>The Impact Statement must describe all effects of the project on topography, soil and sediment including:</p> <ul style="list-style-type: none"> <li>- potential and likelihood of new soil contamination (e.g., by radiological sources and others, such as potential sources of polyfluoroalkyl substances (PFAS), etc.);</li> </ul>	<p>The description of potential for contamination of soil from radiological sources must explicitly include the potential for contamination from radioactive waste storage and handling facilities, including but not limited to the irradiated fuel bay, and related contamination of groundwater and potential for migration to surface.</p>
5.4.2 Changes to radiological conditions, Page 26	<p>For all phases of the project and all applicable VCs the Impact Statement must:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> describe changes to radiation and radioactivity present in the terrestrial, aquatic, and atmospheric environments; and</li> <li><input type="checkbox"/> document plans and strategies for characterizing effects of the project related to radiological impacts on humans and wildlife and to the release of radionuclides to the environment,</li> </ul>	<p>The guidelines should be explicit that the description of potential release or radionuclides to the environment include the potential for radioactive from radioactive waste storage and handling facilities, including but not limited to the irradiated fuel bay.</p>
5.7.2 Effects on groundwater and surface water, Page 37	<p>The Impact Statement must:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> describe the effects of the project on surface and groundwater, including effects related to:</li> <li><input type="checkbox"/> project use of surface water or groundwater resources;</li> <li><input type="checkbox"/> changes to water flow or watercourse diversions; and</li> <li><input type="checkbox"/> discharge of water, effluent, wastewaters or other substances to the environment, including those from waste storage areas, such as irradiated fuel bays;</li> </ul>	<p>We support the inclusion of discharge of water, effluent, wastewaters or other substances to the environment, <u>including those from waste storage areas, such as irradiated fuel bays</u>. This section should explicitly include fugitive releases and migration of radionuclides through ground and groundwater from the irradiated fuel bay as a result of various failure mechanisms in the irradiated fuel bay design and / or function, including failed sumps and pumps and structure decay or failure.</p>
6.4.2.2. Effects on economies and economic participation, Page 70	<p>The Impact Statement must:</p> <ul style="list-style-type: none"> <li>• assess potential positive and adverse effects to the local, Indigenous, regional, provincial and national economies (e.g., job creation, youth retention in the area, and indirect effects on local businesses total dollar value of contracts):</li> <li><input type="checkbox"/> provide an estimate of the anticipated levels of local and regional economic participation in the project in comparison to the total project requirements (e.g., total dollar value of contracts);</li> <li><input type="checkbox"/> include a description of effects on First Nations and other Indigenous communities' ability to manage or improve social and economic conditions including in relation to engaging in traditional and other economic activities;</li> </ul>	<p>This section should also require an examination of lost opportunity costs and negative effects on other local businesses and employers (including in the service industry) as a result of OPG having a competitive advantage in attracting employees through being able to offer higher wages due to not having to meet market or competitive conditions due to access to funds through electricity rates and government subsidies.</p> <p>Lost opportunity cost evaluation should be linked to the study of alternatives to the project, and should compare jobs per dollar of investment and electricity generated per dollar of investment comparing new nuclear generation to a mix of renewables, storage and efficiency measures.</p>

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6.4.2.2. Effects on economies and economic participation, Page 71	<ul style="list-style-type: none"> <li>• describe situations when the project may directly or indirectly create economic hardships for, or the displacement of, businesses such as non-nuclear companies in the region (e.g., construction industry and low wage jobs);</li> </ul>	This section should also require an examination of negative effects on other local businesses and employers (including in the service industry) as a result of OPG having a competitive advantage in attracting employees through being able to offer higher wages due to not having to meet market or competitive conditions due to access to funds through electricity rates and government subsidies.
6.5 Mitigation and enhancement measures for health, social and economic conditions, Page 71	<p>The Impact Statement must:</p> <ul style="list-style-type: none"> <li>• describe the proposed mitigation and enhancement measures for effects on human health, including: <ul style="list-style-type: none"> <li>- how radiation protection measures maintain doses to the public and the environment to a level that is As Low As Reasonably Achievable (ALARA) through the application of Best Available Technology and Techniques Economically Achievable (BATEA);</li> </ul> </li> </ul>	<p>The description of potential adverse effects on human health should be presented as a stand-alone examination, rather than being submitted through a ALARA and BATEA lens.</p> <p>The description of potential adverse effects on human health should encompass activities related to radioactive waste management, including initial management and storage in the irradiated fuel bay, the transfer to dry storage containers, and any eventual transfer from the initial dry storage containers to any replacement containers (this description should be explicit in when transfers from dry storage containers to other containers would be subaqueous or “in-air” (e.g. in hot cells) and include release and dose estimates for each of the management stages.</p>
6.5 Mitigation and enhancement measures for health, social and economic conditions, Page 72	<p>The Impact Statement must:</p> <ul style="list-style-type: none"> <li>• describe the proposed mitigation and enhancement measures for effects on human health, including: <ul style="list-style-type: none"> <li>- Calculated doses to persons, both on and offsite, should be traceable to the input data (for example, receptor exposure characteristics, relevant radiological data). Sample dose calculations should be included that demonstrate the link from input data (such as concentrations of radionuclides in air) to doses to persons, with all relevant assumptions provided;</li> </ul> </li> </ul>	The calculated doses to persons should encompass activities related to radioactive waste management, including initial management and storage in the irradiated fuel bay, the transfer to dry storage containers, and any eventual transfer from the initial dry storage containers to any replacement containers.
6.5 Mitigation and enhancement measures for health, social and economic conditions, Page 72	<p>The Impact Statement must:</p> <ul style="list-style-type: none"> <li>• describe the proposed mitigation and enhancement measures for effects on human health, including: <ul style="list-style-type: none"> <li>- Identification of mitigation and prevention measures to eliminate</li> </ul> </li> </ul>	Identification of mitigation and prevention measures to eliminate or minimize the radiological hazards through design and engineering controls should encompass activities related to radioactive waste management, including initial management and

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	or minimize the radiological hazards through design and engineering controls;	storage in the irradiated fuel bay, the transfer to dry storage containers, and any eventual transfer from the initial dry storage containers to any replacement containers.
8 Security Considerations, Page 82	The following requirements and guidance on security considerations apply to the entire project lifecycle.	This section should be made more explicit to confirm that the security considerations apply to off-site management of radioactive wastes, including during transportation and disposition in an off-site waste management facility.
8.1 Physical protection, Page 82	The proposed physical protection requirements must ensure that the appropriate detection, delay, and response considerations are taken into account	This section should be made more explicit to confirm that the proposed physical protection requirements apply to off-site management of radioactive wastes, including during transportation and disposition in an off-site waste management facility.
8.2 Transportation routes, Page 83	The Impact Statement must consider the transportation routes in close proximity of the site, to ensure that they are adequately taken into account during future site development activities. IAAC proposes to assess the potential adverse effects of project-related transportation on applicable valued components within a defined geographic scope. This scope will be established at the end of the Planning Phase when these Guidelines are finalized and will focus on transportation activities in close proximity to the project site	This section should be expanded to be made clearer that a description of project-related transportation includes transportation for disposition to any off-site waste management facility.
9 Effects of Potential Accidents or Malfunctions, Page 84-85	The Impact Statement must: <ul style="list-style-type: none"> <li><input type="checkbox"/> identify hazards for each project phase that could lead to accidents and malfunctions related to the project;</li> </ul>	This section should be expanded to be made clearer that it includes on-site and off-site radioactive waste handling and management, and any proposed transportation for disposition to any off-site waste management facility.
9.1 Risk assessment, Page 85	The Impact Statement must: <ul style="list-style-type: none"> <li><input type="checkbox"/> identify hazards for each project phase that could lead to accidents and malfunctions related to the project;</li> </ul>	This section should be expanded to be made clearer that it includes on-site and off-site radioactive waste handling and management, and any proposed transportation for disposition to any off-site waste management facility.
9.1 Risk assessment, Page 85	The Impact Statement must: <ul style="list-style-type: none"> <li>include consideration of: <ul style="list-style-type: none"> <li>- malevolent acts, including the potential for vandalism or sabotage;</li> </ul> </li> </ul>	This section should be expanded to be made clearer that it includes on-site and off-site radioactive waste handling and management, and any proposed transportation for disposition to any off-site waste management facility.
9.1 Risk assessment, Page 85	include consideration of: <ul style="list-style-type: none"> <li>- vehicle accidents and collisions;</li> </ul>	This section should be expanded to be made clearer that it includes any proposed transportation of radioactive waste for disposition to any off-site waste management facility.

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9.1 Risk assessment, Page 85	The Impact Statement must: - describe the plausible worst-case scenarios, representative severe accident sequences, and the more-likely but lower-consequence alternative scenarios,	This section should be expanded to be made clearer that it includes on-site and off-site radioactive waste handling and management, and any proposed transportation for disposition to any off-site waste management facility.
9.1 Risk assessment, Page 86	identify and justify the spatial and temporal boundaries for the effect assessment associated with accidents and malfunctions. The spatial boundaries identified for effects from potential accidents and malfunctions will generally be larger than the boundaries for the project effects alone, and may extend beyond Canada's jurisdiction.	This section should be expanded to be made clearer that it includes on-site and off-site radioactive waste handling and management, and any proposed transportation for disposition to any off-site waste management facility.
9.1 Risk assessment, Page 86	describe long-term consequences of accidental releases (i.e., as shown from studies of major nuclear accidents);	This section should be expanded to be made clearer that it includes on-site and off-site radioactive waste handling and management, and any proposed transportation for disposition to any off-site waste management facility.
9.1 Risk assessment, Page 87	Mitigation and enhancement measures The Impact Statement must: <input type="checkbox"/> describe security measures to reduce the potential for malevolent acts that could lead to accidents or malfunctions, including: <input type="checkbox"/> protection of prescribed information; <input type="checkbox"/> site security program; <input type="checkbox"/> site access clearance; <input type="checkbox"/> security arrangements with offsite response forces; <input type="checkbox"/> physical security; <input type="checkbox"/> cyber security; and <input type="checkbox"/> security program officer;	This section should be expanded to be made clearer that it includes on-site and off-site radioactive waste handling and management, and any proposed transportation for disposition to any off-site waste management facility.
9.2 Emergency management, Page 88	The Impact Statement must describe an emergency response plan and, as part of this plan, must: - describe any waste management plan as it pertains to waste generated during an emergency response	This section should be expanded to include waste destination and worker protections with respect to the clean up and management of wastes generated during an emergency response. It also needs to be expanded to be made clearer that it includes on-site and off-site radioactive waste handling and management, and any proposed transportation for disposition to any off-site waste management facility.
10.1.2 Climate change commitments, Page 92	As part of its decision, should the Governor in Council determine that the adverse federal effects are, to some extent significant, the Governor in Council must consider only whether the extent to which the effects that are likely to be caused by the carrying out of the project, contribute to the Government of Canada's ability to meet its commitment in respect of climate	This section should be expanded to include an evaluation of the lost opportunity cost in addressing climate change as a result of the significant delay time in bringing electricity for new nuclear builds onto the grid compared to the time required to bring new supplies of electricity onto the grid using renewable energy sources. The evaluation should also include a cost comparison in benefits to climate action

Location in GL	Draft Guideline Text	Northwatch Commentary
	change, when considering whether the effects are justified in the public interest.	comparing investment costs in new nuclear builds to investment cost of news supply through renewables coupled with storage and energy efficiency measures.

### Additional Comments

In addition to issues raised by Northwatch in our commentary on the Initial Project Description and those identified in our section-by-section review (above), we have several other substantive concerns with the guidelines as currently drafted, many of which have been addressed by other review participants. Those issues include:

#### Human Health

The Draft Integrated Tailored Impact Statement Guidelines discussion of human health is too limited, and do not require adequate coverage of health concerns in relation to this project, particularly given the close proximity of the project to Port Hope which has already experienced long term impacts from radioactive contamination from the operation generations of uranium processing facilities; we note that Section 6.2.2 does require a Human Health Risk Assessment (HHRA), which is a positive, but are concerned with the bullet point in the same section that states that “where exposure pathways, contaminants, or receptors are excluded from the HHRA, or where a complete HHRA is not undertaken, provide a clear scientific rationale and describe how First Nations and other Indigenous communities’ input and concerns were considered in that decision”; this should be amended to disallow exclusion of exposure pathways, contaminants, or receptors from the HHRA.

#### Community Impacts

During both comment periods there have been a multitude of comments from local residents and from organizations and even municipalities in the area expressing concern about community impacts and / or poor communication or engagement in the planning process or site selection leading up to OPG’s application and the commencement of this impact assessment. Many, such as the Township of Hamilton, are not expressing opposition to the project per se, but raise serious concerns related to engagement, noting that the only engagement they have received in Hamilton Township has been the result of the Township reaching out rather than the proponent, host community, or others proactively engaging with them.

For communities who may be impacted by the transportation of the radioactive wastes or the transfer of radioactive wastes from the point of generation (the Wesleyville Nuclear Project) to their area or region, this is absolutely the case. Ontario Power Generation’s agent, the Nuclear Waste Management Organization, continues to play a shell game with final disposition plans for radioactive wastes to be generated from new nuclear builds, and neither OPG or the regulators are communicating with those communities about the risks that may be imposed upon them by this project.

## Cumulative Effects

While the guidelines include multiple references to cumulative effects, including a statement that “the Generic Requirements address methodological areas of the IA related to: spatial and temporal boundaries, baseline conditions, effects assessment, mitigation measures, residual effects assessment, cumulative effects assessment, extent of significance, follow-up program, and uncertainty and bias”, the document lacks a stand-alone section providing direction on the carrying out of a cumulative effects assessment. This is a serious oversight, particularly given the close proximity of the site to Porth Hope (already an impacted community).

A cumulative effects assessment must be undertaken and must identify and include the multiple sources of radiological and toxic stresses, and include the cumulative effects of other past and present nuclear activities and non-nuclear industrial activities in the area. In particular, it must include the cumulative effects of radio-active wastes that will be generated by the project and the legacy radioactive wastes already in Porth Hope and area. The cumulative effects assessment must also address radioactive waste and the cumulative effect of adding the wastes volumes from the project to the already existing – and growing – provincial and national inventory, and the financial and environmental and human health burden of managing those wastes into perpetuity. The latter area of examination must include any potential off-site transfer, transportation or disposition of the radioactive wastes.

## **Conclusions**

We close with five overarching observations:

- the comment period was too short, and limited public opportunities for analysis and comment
- the draft guidelines are inadequate, and must be subject to serious revision
- it would be appropriate to provide the public with an opportunity to comment on the revised guidelines prior to their being finalized
- inadequate guidelines are likely to result in a deficient assessment
- the Agency must take the necessary steps now to protect the impact assessment process and build trust with the public that it is acting in good faith and in the interests of sound assessment, environmental protection, and the public good

