

ATTACHMENT: April 25, 2023
 Federal Authority Advice Record
 ECCC response due to Agency by May 25, 2023
 Aspen Power Station Project, Saskatchewan Power Corporation
 Agency File: 84525

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1. Is it probable that your department or agency may be required to exercise a power or perform a duty or function related to the Project to enable it to proceed?

If yes, specify the Act of Parliament and that power, duty or function.

ECCC does not expect that it will be required to exercise a power or perform a duty or function related to the Project to enable it to proceed. This may change if additional activities or Project components are established by the Agency. The following requirements that may apply to this Project:

Species at Risk Act permits

A *Species at Risk Act* (SARA) permit is highly unlikely to be required considering that the Project is not located on federal lands, that there are no orders (currently) in place, and the geography and small footprint of the Project. It is possible that prohibitions may come into force in the future through orders in Council for individuals, residences and critical habitat on Project-implicated, non-federal lands. If such an order is put in place, a SARA permit may be required. The information following may be used to inform the need for a permit.

For species listed in Schedule 1 of the *Species at Risk Act* (SARA) as Extirpated, Endangered or Threatened, a permit may be required from ECCC (section 73 of SARA) for activities that affect a listed terrestrial wildlife species, any part of its critical habitat, or the residences of its individuals, where those prohibitions are in place. Such permits may only be issued if: all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted; all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and the activity will not jeopardize the survival or recovery of the species. Permits are also required by those persons conducting activities that contravene the critical habitat destruction prohibitions (subsection 58(1)).

Prohibitions are in place for individuals and residences on federal lands in a province, reserve or any other lands under the *Indian Act*, or lands under the authority of the Minister of the Environment, and for birds listed under the *Migratory Birds Convention Act, 1994* wherever they occur regardless of land tenure.

Furthermore, prohibitions may be in force on land other than federal land pursuant to other orders or regulations under SARA. It is possible that further prohibitions may come into force in the future through orders in Council for individuals, residences and critical habitat on non-federal lands and / or through ministerial order for critical habitat on federal lands. It is also possible that, over the course of the assessment or after the assessment, additional species could be listed under SARA; permits may be required for Project activities that affect these additional species. Proponents are advised to monitor for such developments on the SARA Registry <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>.

Examples of activities that could require a *Species at Risk Act* permit include:

- Species surveys that would affect individuals or residences;
- Site preparation (clearing, grubbing, site access, staging, blasting);
- Construction and operation of temporary and permanent works and infrastructure;
- Creation of new roads, rail lines, or power lines;
- Infilling of wetlands or watercourses;
- Any monitoring that requires capture/release of individuals; and
- Sensory disturbance effects (artificial lighting, noise, vibration, human activity, vehicular traffic).

ECCC will require detailed information on the potential effects of the Project, including locations and/or occurrences of species at risk, their use of habitat and critical habitat within the Project area, and specific effects on federal land, before ECCC can determine whether a SARA permit is required.

Links to publicly available documents:

- [Guidelines for permitting under Section 73 of Species at Risk Act](https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/policies-guidelines/permitting-under-section-73.html) <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/policies-guidelines/permitting-under-section-73.html>
- [Species at Risk Permitting Policy](https://species-registry.canada.ca/index-en.html#/consultations/2983) <https://species-registry.canada.ca/index-en.html#/consultations/2983>

In the event that a SARA permit is required, ECCC would evaluate and determine consultation requirements, if any.

ECCC-led Indigenous Consultation related to the issuance of SARA permits will be coordinated with broader Consultation during the impact assessment where possible.

If a permit is issued, the description of the activity and how SARA's preconditions were met will be posted on the SARA Registry here: <https://species-registry.canada.ca/index-en.html#/permits>

If not fully described in the Initial Project Description (IPD), the Proponent should provide any anticipated need for species at risk permits during all phases of the Project in the Detailed Project Description if possible. The Proponent is encouraged to collect and submit the information necessary to determine if a SARA permit is required during the impact assessment process, and to submit their application well in advance of the proposed activities to avoid delays.

Further information regarding species at risk permits will be provided in the Permitting Plan.

Migratory Birds Convention Act permits

The Migratory Birds Regulations, 2022 (MBR 2022) protect migratory birds, their eggs and their nests, by prohibiting activities that may harm them. Unless permitted authorized it, the following activities are prohibited:

- Capturing, killing, taking, injuring or harassing a migratory bird or attempting to do so;
- Destroying, taking or disturbing an egg; and
- Damaging, destroying, removing or disturbing a nest, nest shelter, eider duck shelter or duck nesting box, unless the following exceptions apply:
 - The nest does not contain a live migratory bird or a viable egg; and,
 - The nest was not built by a species listed in Schedule 1.

Modernization of the MBCA in 2022 has additionally identified 18 species of birds whose nests are protected year-round (Schedule 1 of MBR 2022). The nests of species listed in Schedule 1 are protected at all times, unless the following conditions are met:

- Notification of the unoccupied nest has been submitted/received through the Registry for Abandoned Nests; and,
- The waiting time designated in the regulations has passed, during which time the nest has not been occupied by a migratory bird.

In some situations, it may be possible to obtain a permit to move or destroy an unoccupied nest of a Schedule 1 species. For more information, please visit: <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html>

1b. Please describe any Indigenous or public consultation that will be undertaken in relation to the excise of that power, duty or function, including when it would take place.

ECCC does not expect to exercise any powers or perform a duty or function under any Act of Parliament in relation to the Project that will involve public and Indigenous Consultation.

2. Is your department or agency in possession of specialist or expert information or knowledge that may be relevant to the conduct of an impact assessment of the Project?

Specify the specialist or expert information or knowledge.

ECCC has specialist or expert information that may be relevant to the impact assessment in the areas listed below; in each of these subject areas we have expertise related to establishing an adequate baseline, assessing potential effects to biophysical valued components, the effectiveness of mitigation measures, methods for monitoring and follow-up, as well as information regarding federal policies, standards, and regulations that may be relevant to the assessment (Note: ECCC does not assess proposed Projects for regulatory compliance, but instead provides technical input to the Agency to inform the assessment). When the scope of the Project and of the assessment are established by the Agency, this list may change.

Air Quality: ambient air quality; sources of emissions; emissions estimation and measurement; atmospheric transport, transformation and dispersion modelling; and follow-up monitoring.

Greenhouse gas emissions and climate change: estimations of greenhouse gas (GHG) emissions (net and upstream); impact on carbon sinks; GHG mitigation measures and determination of Best Available Technologies/Best Environmental practices (BAT/BEP); credible plan to achieve net-zero GHG emissions by 2050; climate change science to inform evaluation of potential changes to the environment and Project resilience to effects of climate change; climate change policies; and national GHG Projections.

Water quality and quantity: surface water quality; contamination sources for surface water and groundwater, including effluent; wastewater; water quality predictions and modelling; seepage and runoff effects; management of contaminated soils or sediments; hydrology (streamflow rates data and modelling, flooding and extreme events management, drainage control, water levels, water balances); geochemistry; cumulative effects and follow-up and monitoring.

Wildlife, species at risk, and habitat: priority species and places as outlined in the Pan-Canadian Approach to transforming species at risk conservation in Canada¹; migratory birds, their nests, eggs, and habitat under authority of the Migratory Birds Convention Act 1994; species assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC); species at risk, individuals, their residences, habitat and critical habitat including recovery strategies, action plans and management plans under ECCC's mandate; ecological function of wetlands; and ecotoxicology

Environmental emergencies: emergency management planning and guidance, including where the release of hazardous substances could affect species at risk and/or migratory birds; atmospheric transport and dispersion modelling of contaminants in air; fate and behaviour; and hydrologic trajectory modelling of contaminants in water.

Climate and Meteorology: long-term climate patterns and norms and weather.

3. Has your department or agency considered the Project; exercised a power or performed a duty or function under any Act of Parliament in relation to the Project; or taken any course of action that would allow the Project to proceed in whole or in part?

Specify.

ECCC has not considered or exercised a power, performed a duty, or taken any course of action as part of the Project.

4. Has your department or agency had previous contact or involvement with the Proponent or other party in relation to the Project? (for example: an enquiry about methodology, guidance, or data; introduction to the Project)

Provide an overview of the information or advice exchanged.

As indicated by the Proponent (Initial Project Description, Table 3.3.1) and based on information readily available, ECCC has not had any direct involvement with the Proponent or other parties that would be relevant to the assessment of this Project. ECCC Prairie and Northern Region has not been in contact with the Proponent regarding permitting or authorizations for the Project.

5. Does your department or agency have additional information or knowledge not specified, above, including information on the geographic, environmental, economic or social context of the Project? (e.g. location of protected or sensitive areas, previous history between local communities and Proponent or similar Projects, local or regional social or economic concerns)?

Specify as appropriate.

Not at this time.

6. What are the key issues likely to be relevant to the public interest decision, *based on the mandate and area(s) of expertise of your department*, and which should be addressed in an impact assessment of the Project, should the Agency determine that one is required?

For each key issue:

- Describe the effect or the nature of the issue, including any relevant context;
- Provide the rationale and/or evidence for why it is a key issue;
- Identify briefly solutions to the issue, including any information or studies that should be required in the Tailored Impact Statement Guidelines, potential mitigation measures, and/or regulatory requirements relevant to the issue;
- Provide a concise, plain-language summary of the issue for inclusion in the Summary of Issues.

The information provided will be used by the Agency to determine if and an impact assessment is required and where appropriate to develop Project-specific draft Tailored Impact Statement Guidelines that focus on the key issues likely to be relevant to the public interest decision.

Please use table 1 to respond to this question.

7. Where possible, identify any clarifications or additional information the Proponent could include in the Detailed Project Description or in the response to the Summary of Issues that would:
- give confidence that an issue or effect could be addressed and managed;
 - inform the decision as to whether an impact assessment is required; or
 - aid in tailoring the Impact Statement Guidelines, if an impact assessment is required.

These clarifications and additional information will be included as specific questions in the Summary of Issues provided to the Proponent.

Please use table 2 to respond to this question

Andrea McLandress

Name of Departmental / Agency Responder

Regional Director, Environmental Protection and Operations Directorate, Prairie and Northern Region

Title of Responder

May 25, 2023

Date

Table 1: Key Issues to inform decision-making

The Agency asks that federal authorities align expert advice with the Agency’s approach to tailoring, which focuses on key issues or effects that are likely to be relevant to the public interest decision. In identifying key issues, federal authorities should be mindful of the Project’s context (size, scope, location), Indigenous knowledge and perspectives, and public concerns. Key issues that may be relevant to the public interest decision include:

- effects that may be significant, based on federal experts’ knowledge and experience with past Projects;
- effects that may impact Indigenous peoples and their rights, based on Indigenous knowledge and perspectives or experience with past Projects;
- effects on key species or habitats (e.g. at risk, important to Indigenous communities, commercial importance, provide important ecosystem function);
- issues or effects that may result from novel Project activities, components or technology;
- effects with large uncertainties, including in the effectiveness of mitigation measures;
- transboundary effects where mitigation measures are limited;
- positive effects, including where Project may support other governmental priorities, including reconciliation with Indigenous peoples; and
- key concerns raised by Indigenous or local communities.

Effects that are anticipated to be minor or which can be managed using well understood mitigation measures, existing guidance, and/or other regulatory processes may have simplified information requirements or may be removed entirely. Measured advice from federal authorities on key issues and solutions —and on the scope and detail of any required information and studies — will enable the Agency to focus assessments on issues that are important to participants and to decision-makers.

Comment ID	Valued Component or Factor to Consider	Description of Key Issue (Context and Rationale)	Solutions	Plain language summary for inclusion in Summary of Issues
<p>Please identify comments by organization and comment number. e.g.: IAAC-01</p>	<p>Identify valued component(s) or factor to consider—within the mandate of your department or agency—to which the effect or issue applies.</p>	<p>Provide a brief description of the issue and rationale for being a key issue. Include, where relevant,: the pathway of effects; social, economic or environmental context which are relevant to it being a key issue; key uncertainties that should be addressed in the impact assessment; Indigenous or public concerns or perspective; potential for differential effects among diverse subgroups; scientific evidence or traditional knowledge, including from past Project experience, which supports inclusion as a key issue.</p>	<p>Where applicable, briefly identify solutions to address the potential issue or effects including Information or studies required to describe and characterize the effect, should an impact assessment be required; including any guidance for data collection and/or analysis or existing data sources to inform the assessment; Any powers, duties or functions that your department or agency has that may mitigate, manage, or set conditions related to the effect; Guidance or policies for mitigating effects or any standard and well-understood mitigation measures that would address the effect, including follow-up monitoring activities; and/or Commitments the Proponent could make to respond to the issue. Where available, please refer to existing text in the TISG template.</p>	<p>For issues to be included in the Summary of Issues, provide a concise, plain language synopsis of the key issue and any questions or directions for the Proponent.</p>
<p>ECCC-T1-01</p>	<p>Climate Change Resilience</p>	<p>The Proponent indicates that the Project will be in operation until around 2049 followed by a short period of decommissioning (until around 2052). Climate over the lifetime</p>	<p>The Strategic Assessment of Climate Change (SACC) (published in 2020) provides guidance</p>	<p>The Project’s resilience to future climate change should be described and, where</p>

		<p>of the Project is projected to be different from past and current climate in the Project area. Given these projected changes in future climate, climate change considerations are relevant to the Project review.</p> <p>Baseline conditions may be altered due to climate changes in the Project area such as possible changes in mean and extreme precipitation and temperature, along with related environmental conditions. These changes can have implications for climate sensitive aspects of Project design, such as water management infrastructure. The Proponent should identify where there is potential for climate change to affect the Project which, in turn, may have impacts on the surrounding environment (e.g., through accidents or malfunctions).</p>	<p>related to climate change throughout the impact assessment process. Should the Project be subject to an impact assessment under the IAA, the SACC would apply. The SACC outlines information that the Proponent should provide during the impact assessment process related to climate change resilience.</p> <p>If the Proponent is required to prepare an Impact Statement, further information would be required through the Tailored Impact Statement Guidelines (TISG) on how the Project is resilient to, and at risk from, the current and future impacts of a changing climate.</p> <p>More details are provided in the 'draft Technical Guide Related to the Strategic Assessment of Climate Change: Assessing climate change resilience' published in March 2022.</p> <p>Links: "Strategic Assessment of Climate Change" https://www.strategicassessmentclimatechange.ca/</p> <p>draft Technical Guide Related to the Strategic Assessment of Climate Change: Assessing climate change resilience https://www.canada.ca/en/services/environment/conservation/assessments/strategic-assessments/draft-second-technical-guide-strategic-assessment-climate-change.html</p>	<p>relevant, considered in Project design.</p>
ECCC-T1-02	Environmental Emergencies	<p>The Project includes a water treatment facility, underground natural gas supply lines, relocation of existing natural gas lines, a hazardous material storage area, storm water and evaporation ponds. As such, there is potential for adverse environmental effects from accidents and malfunctions, such as hazardous material spills and pipeline ruptures. Adverse effects to air quality, water quality, wildlife and wildlife habitat could result from the accidental release of fuel, ammonia and other contaminants to surrounding waters.</p> <p>Optimized spill prevention, preparedness and response measures and systems will be important given the risk of spills of hazardous substances to the environment, especially to nearby waterways and environmentally sensitive areas.</p>	<p>Part 8 of the <i>Canadian Environmental Protection Act, 1999</i> (CEPA 1999) on environmental emergencies (sections 193 to 205) addresses prevention, preparedness, response to and recovery from environmental emergencies caused by uncontrolled, unplanned or accidental releases. It also addresses the reduction in likelihood of foreseeable releases of toxic or hazardous substances listed in Schedule 1 of the Environmental Emergency Regulations. CEPA 1999 may apply if Schedule 1 substances onsite meet or exceed the regulated threshold.</p>	<p>The Proponent should refer to part 8 of CEPA 1999 on environmental emergencies (sections 193 to 205) when developing the emergency preparedness plan. The Proponent should also follow all storage limits and regulations within the Act.</p>

ECCC-T1-03	Environmental Emergencies	<p>The Initial Project Description (IPD) discusses mitigations to prevent the release of fuels, chemicals and wastes to the environment. Per the IPD, a Spill Contingency Plan should be developed that identifies protection and emergency response measures to use if there is a release of hazardous materials.</p>	<p>Proactive spill prevention mitigations should be incorporated into all aspects of the Project (i.e., design, construction, operations and decommissioning).</p>	<p>As part of the impact assessment review, the Proponent should develop and submit a Spill Contingency Plan.</p>
ECCC-T1-04	Water Quality	<p>The activities linked to the construction, operation, and decommissioning of linear Projects can have adverse effects on the quality of surface water.</p> <p>Contaminants may be introduced into waterbodies through spills (e.g., fuel, sewage) resulting in adverse effects on water quality. Contaminants may enter the environment through the accidental release (e.g., seepage, overflow) of wastewater pond contents, resulting in potential adverse effects on groundwater and surface water quality.</p> <p>The deposition of airborne particulate matter generated by the Project could also be a source of surface water contamination. Adverse effects to water quality could, in turn, result in adverse effects to sensitive ecosystem receptors.</p>	<p>Environment and Climate Change Canada (ECCC) is responsible for the administration of subsection 36(3) to (6) of the <i>Fisheries Act</i> which prohibits the deposit of a deleterious substance in waters frequented by fish unless authorized by regulations.</p>	<p>It is the Proponent's responsibility to be aware of its obligations stemming from the <i>Fisheries Act</i> and its regulations.</p>
ECCC-T1-05	Greenhouse Gas Emissions	<p>Canada's environmental obligations and climate change commitments include the Paris Agreement, the 2030 Emissions Reduction Plan and the <i>Net-Zero Accountability Act</i>. Canada's emissions reduction target is 40 to 45 percent below 2005 levels by 2030, and to achieve net-zero emissions by 2050.</p> <p>The Government of Canada is also taking action to reduce greenhouse gas (GHG) emissions from the generation of electricity to achieve a net-zero electricity supply by 2035.</p> <p>The construction, operation, and decommissioning of the proposed Project may result in greenhouse gas (GHG) emissions, and/or impact to carbon sinks, and may hinder or contribute to the Government of Canada's ability to meet its commitments in respect of climate change.</p> <p>In the IPD, the Proponent estimated the Project's construction, operations, and decommissioning GHG emissions. However, ECCC notes that the Proponent did not estimate the emissions related to land use changes, resulting in a potential underestimation of emissions (see input into Table 2 for details).</p>	<p>The SACC provides guidance related to climate change throughout the impact assessment process. Should the Project be subject to an IAA impact assessment the SACC would apply. The SACC outlines information that the Proponent should provide during the impact assessment process on GHG emissions, impact on carbon sinks, impact on federal emissions reduction efforts and global GHG emissions, GHG mitigation measures and climate change resilience. The SACC also outlines the circumstances in which an upstream GHG assessment would be required and the circumstances in which a credible plan to achieve net-zero emissions by 2050 will be required.</p> <p>More details are provided in the draft Technical Guide Related to the Strategic Assessment of Climate Change: Guidance on quantification of net GHG emissions, impact on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment' published in August 2021.</p>	<p>Should the Project be designated under the IAA, the SACC would apply. The Project's GHG emissions and climate change impacts should be assessed consistent with guidance in the SACC to ensure that GHG emissions are mitigated. The Proponent should develop a plan to achieve net-zero emissions by 2050 as the Project's lifetime, including decommissioning, is anticipated to go beyond 2050.</p>

		<p>If the Project is designated the Proponent may be asked to prepare an upstream GHG assessment, as the Project may cause incremental upstream GHG emissions.</p> <p>The Proponent also indicates in the IPD that the Project would be in operation until around 2049 followed by a short period of decommissioning until around 2052. The Proponent did not make a commitment to be net-zero by 2050 for any activity that goes beyond 2050. However, the Proponent made a commitment that the Project will be compliant with the forthcoming Clean Electricity Regulations.</p>	<p>Links: draft Technical Guide Related to the Strategic Assessment of Climate Change: https://www.canada.ca/en/environment-climate-change/corporate/transparency/consultations/draft-technical-guide-strategic-assessment-climate-change.html</p>	
ECCC-T1-06	Wildlife, species at risk, and habitat	<p>The activities linked to the construction, operation, and decommissioning of the Project and associated infrastructure could have negative effects on terrestrial wildlife, migratory birds and species at risk (e.g., amphibians, arthropods, birds, lichens, terrestrial mammals, mosses, reptiles, and vascular plants) listed on the <i>Species at Risk Act</i> (SARA), and their habitat (e.g., wetlands) and critical habitat. During all phases of the Project, there is the potential for direct impacts (e.g., mortality, loss of habitat) or indirect impacts (e.g., sensory disturbance) of terrestrial wildlife species and migratory birds, including species at risk.</p> <p>The nature of effects to wildlife and habitat (including residences and critical habitat defined under the SARA) can vary based on a number of factors, including: Project location, duration, scale, configuration, ancillary Project activities (e.g., land clearing, dredging, and flaring), existing cumulative effects, the type of habitat that may be disturbed, and sensitivity of species found in the Project area.</p> <p>The pathway through which potential effects are conveyed will depend on the land, air, and water constituents associated with the site, along with the behavioral adaptability, presence and interaction with important habitat features (e.g., habitat supporting staging, nesting, roosting or foraging) and population resilience.</p>	<p>If the Project is designated, the Agency will have obligations under s.79 of SARA to implement measures to lessen or avoid impacts and monitor effects to listed species at risk, in a manner that is consistent with existing recovery strategies or action plans.</p> <p>Although no surveys were conducted for Western Tiger Salamander (<i>Special Concern</i> under SARA), the Proponent did observe one incidentally. The wetland on the northern part of the Project area (NE 36-33-24 W2) is likely suitable habitat for this species, and individuals may be present during construction. Project impacts may include loss of wetland habitat and direct mortality of individuals onsite during Project activities. Additional studies should be completed to assess whether the species is present and assess its potential to be on the Project site during construction and operation and determine appropriate mitigations to prevent potential impacts.</p> <p>The Proponent stated that there is potential breeding habitat for Northern Leopard Frog (listed as a species of <i>Special Concern</i> under SARA) within the Project area. Project impacts may include habitat loss (i.e., loss of wetlands required for breeding) and direct mortality to individuals that may be present during construction. The Proponent should determine appropriate mitigations to prevent these potential impacts.</p>	<p>The Proponent should provide details on the studies they will conduct to confirm the presence of Western Tiger Salamander in the Project area, the potential for the species to be on site during construction and operation, and detail appropriate mitigation measures for any potential impacts.</p> <p>If Northern Leopard Frog are present in the PDA, the Proponent should provide detailed mitigations for any anticipated impacts to Northern Leopard Frog.</p>

ECCC-T1-07	Migratory birds and species at risk and their habitat	<p>Individual mortality, destruction of nests, eggs or young or destruction of any other structure necessary for the reproduction and survival of migratory birds, including species at risk, could occur during all Project phases.</p> <p>Construction of the Project and associated infrastructure will contribute to large-scale land clearing activities, which leads to the destruction, disturbance and fragmentation of habitat (e.g., foraging, nesting), habitat avoidance, sensory disturbance, and the inadvertent disturbance and destruction of individuals, nest and eggs of migratory birds and species at risk.</p> <p>There is a higher risk that these effects would be more severe for migratory birds that are also species at risk and species where habitat is sensitive to disturbance (e.g., wetlands) or where there is already a high degree of cumulative effects to habitat or individuals (e.g., grasslands). Destruction and/or disturbance of habitat can have increased impacts on species at risk individuals, residence and their critical habitat, which can lead to changes in prey and predator dynamics, loss of food resources, loss of breeding areas, changes in migration or movement, and increased risk of mortality. For example, certain migratory birds (e.g., Bank swallows, Common Nighthawk) may nest in large piles of gravel or soil left unattended/unvegetated during the most critical period of breeding season.</p>	<p>The <i>Migratory Birds Convention Act, 1994</i> (MBCA) and the <i>Migratory Bird Regulations, 2022</i> (MBR 2022) protect migratory birds and prohibit the disturbance or destruction of migratory bird nests when they contain a viable egg or a migratory bird themselves (young or adult). Schedule 1 of MBR 2022 provides year-round nest protection for 18 species. There is potential for Schedule 1 species, including pileated woodpecker, black-crowned night heron and great blue heron to nest in the general Project area. The legislation and regulations apply to all lands and waters in Canada, regardless of ownership.</p> <p>Planning can help Proponents comply with the law and manage the risk of detrimental effects to migratory birds. Assessing risk is a first step for developing appropriate prevention and mitigation measures that help maintain sustainable populations of migratory birds. Depending on the location, the time of year, and the presence of nests that are protected year-round, some activities can pose a risk to migratory birds.</p> <p>With respect to disturbance or harm to nesting birds, the principal risk factors are location and time of year. The main sensitive period to consider is the breeding season. ECCC publishes a web site (see links below) to aid in the planning of activities to reduce the risk of detrimental effects to migratory birds, and their nest and eggs in accordance with the purpose of the MBCA.</p> <p>More information on the MBR 2022 can be found on the ECCC web site.</p> <p>Links: https://www.canada.ca/en/environment-climate-change/services/migratory-game-bird-hunting/status-update-modernization-regulations.html https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html</p>	It is the Proponent's responsibility to be aware of its obligations stemming from the MBCA and its regulations.
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ECCC-T1-08	Migratory birds and species at risk and their habitat	<p>Road improvements, including the installation of turning lanes on PTH 16, may increase road traffic volumes and are likely to result in an increase in wildlife and migratory bird injury, mortality, and the introduction of invasive species. Additionally, the construction of on-site access roads will result in direct habitat loss and traffic in an area where there was previously no traffic.</p> <p>Although adverse direct effects to migratory birds and their nests are typically managed through appropriate scheduling of activities outside of the breeding season, collisions with vehicles and associated infrastructure can result in direct mortality of wildlife and migratory birds. Effects will be most acute during the operation phase as this is when the most pronounced and sustained increase in vehicle volume is expected.</p>	<p>During land clearing activities for road improvements, adverse direct effects to migratory birds and their nests are typically managed through appropriate scheduling of activities outside of the breeding season.</p> <p>The Proponent should provide details on monitoring that will be conducted for construction and operation of the access road, so important habitat features for sensitive species, including species at risk, can be avoided. The Proponent should detail mitigations for the impacts to road construction and traffic on migratory birds.</p>	The Proponent should provide details on monitoring that will be conducted for construction and operation of the access road and outline mitigations for the impacts to migratory birds from road construction and increased traffic.
ECCC-T1-09	Wildlife, Migratory birds and species at risk and their habitat	The construction, operation and decommissioning of stormwater ponds for the Project may have direct or indirect impacts to migratory birds and other wildlife through changes in geomorphological processes (e.g., sedimentation processes, water quality and quantity). Additionally, birds that land on and/or frequent stormwater ponds and amphibians who breed in stormwater ponds have the potential to come into contact with water that contains sediments or other potentially toxic pollutants collected during runoff which can result in on and offsite mortality.	<p>During construction, operation, maintenance and decommissioning, there is the potential for harmful substances to enter or be spilled into the receiving environment that may negatively affect birds, wildlife and their habitat. Depending on the nature of the release (e.g., toxicity, volume release, exposure pathways), effects to wildlife could be acute, chronic or both and can include effects such as bioaccumulation of contaminants or mortality.</p> <p>Given their potential occurrence in the Project area, Northern Leopard Frog and Western Tiger Salamander may inhabit the stormwater pond. The Proponent should detail the likelihood of these SAR using the stormwater pond as well as potential impacts from changes to water quality and quantity. If water quality is expected to exceed guidelines for amphibians, mitigations such as exclusionary fencing could be used to deter amphibians from using the pond.</p>	<p>The Proponent should detail the surveys that will be conducted to assess the presence of SAR amphibians using the stormwater pond.</p> <p>If amphibians are using the stormwater pond, the Proponent should continually assess water and soil quality in the stormwater pond.</p>
ECCC-T1-10	Migratory birds and species at risk and their habitat	Migratory birds and species at risk could be affected by sensory disturbances during the construction, operation, and decommissioning of the Project. Some examples of potential sources of sensory disturbance include noise from various Project activities, lights, vibrations from excavation and blasting work and the operation of machinery, as well as the presence of workers. The amount, duration, frequency, and timing of noise are important to understand potential effects. Sensory disturbance may make adjacent habitats unsuitable	<p>Lighting required for the construction, operation and decommissioning of the Project should be controlled, including the direction, timing and intensity of light, to avoid adverse effects on migratory birds, including species at risk.</p> <p>Installation of downward-directed lighting and limiting lighting to areas where it is required for</p>	The Proponent should describe sources of sensory disturbances (including noise, lights) and mitigations.

		<p>for use by wildlife and cause avoidance effects in many species.</p> <p>Noise, vibrations and light from construction and operation activities may result in habitat disturbance which can lead to avoidance of use. Attraction to lights at night or in poor visibility conditions during the day may cause birds to collide with lit structures or their vertical support structures, resulting in injury or death. In other instances, birds can get disoriented while circling a light source, and may deplete their energy reserves and either die of exhaustion or drop to the ground where they are at risk from predation.</p>	<p>safety can be effective mitigations to reduce impacts to migratory birds.</p>	
ECCC-T1-11	Migratory birds and species at risk and their habitat	<p>Linear features of the Project (i.e., transmission line, pipeline infrastructure) can cause loss, fragmentation, and alteration of habitat, and can negatively impact the reproduction, migration and wintering of affected species. There is the potential for removal of habitat important for nesting, foraging, staging, and overwintering.</p> <p>Linear disturbances may also have other negative effects on wildlife, such as increasing predator abundance, distribution and hunting efficiency, creating habitat fragmentation or reducing habitat connectivity within the landscape.</p> <p>The Project is also within the central flyway and has numerous Important Bird Areas (IBAs) in the vicinity (Kutawagan Lake, Last Mountain Lake, Quill Lakes, Lake Lenore). Given the proximity to multiple IBAs, migrating waterfowl, shorebirds and other birds that use these areas may pass near or through the Project area.</p> <p>Collisions with transmission lines may pose a mortality risk to migrating birds, including species at risk.</p>	<p>The Proponent should provide further detail relating to bird migration paths through the Project area, the Proponent's intention to conduct operational monitoring, and mitigation measures proposed to reduce the impacts on migratory birds from collisions with transmission lines.</p>	n/a

Please insert additional rows as necessary.

Table 2. Clarifications or additional information the Proponent could include in the Detailed Project Description or in the response to Summary of Issues

Comment ID	Relevant section of the Initial Project Description	Description of Issue, Concern or Uncertainty	Clarification or additional information	Plain language summary for inclusion in Summary of Issues
<p>Please identify comments by organization and comment number.</p> <p>e.g.: IAAC-01</p>	<p>If the comment is related to a specific section of the Initial Project Description, please provide a reference.</p> <p>You may also choose to copy the relevant text here.</p>	<p>Provide a description of the issue, concern or uncertainty the Proponent could address in their detailed Project description that would give confidence that the issue will be addressed and managed, or which could aid in tailoring the Guidelines</p>	<p>Provide recommended clarification or additional information to be included in the Detailed Project Description to address the issue, concern or uncertainty, for example</p> <ul style="list-style-type: none"> • Clarifications to Project description (e.g. components, activities, locations or alternatives); • Project design changes that could avoid effects; • Evidence that could be presented to demonstrate there is no effect pathway or that effects will be negligible; • Evidence that standard mitigations will address potential effects; • Commitments the Proponent could make to respond to the issue, including the implementation of federal operational policies or guidance documents. 	<p>For issues to be included in the Summary of Issues, provide a concise, plain language synopsis of the issue and of the question or direction for the Proponent.</p>
<p>ECCC-T2-01</p>	<p>Section 19.5 Accidents and malfunction.</p>	<p>With the objective of gaining public trust and confidence, as well as to reduce the negative environmental impact following an accident/malfunction event, the Proponent is encouraged to engage with the potentially affected communities by bringing awareness to the emergency response measures that will be initiated following an incident and to clarify roles and responsibilities of any stakeholders that may be impacted by a potential environmental emergency.</p> <p>There is a potential for adverse environmental and human-health effects resulting from accidents and malfunctions that are possible from the Project. Optimized prevention, preparedness and response measures and systems are necessary components of any Project proposal that poses a risk of spills of hazardous substances to water and uncontrolled releases of explosive gases to the atmosphere. The affected communities and Project personnel should feel adequately prepared to respond and take appropriate measures in a timely manner in order to significantly reduce the environmental impact associated to an accidental release.</p>	<p>In the Detailed Project Description, the Proponent should:</p> <ul style="list-style-type: none"> • Describe Community Awareness plans for surrounding communities that would likely be impacted by the consequences of a significant emergency incident. • Describe Emergency Communications Plans that would provide emergency instructions to surrounding communities. Procedures should include a combination of urgent immediate actions, such as public notification of safety issues, shelter-in-place and evacuation directions, as well 	<p>The Proponent should describe their Community Awareness and Emergency Communications plans so that they provide more relevant information in the DPD for the surrounding communities.</p>

			<p>as longer term actions such as general website and hotlines, incident status updates, etc.</p> <ul style="list-style-type: none"> Describe existing emergency preparedness and response systems and existing arrangements and/or coordination with qualified response organizations in the spatial boundaries associated with the Project including exercise and training plans for spill emergency response. 	
ECCC-T2-02	Section 19.5 Accidents and malfunction	The Proponent identified the plausible accident scenarios specific to this Project in section 19.5 of the IPD. However, the Proponent did not include natural gas leaks or pipeline rupture as potential incidents that could cause significant adverse effects to the environment. ECCC recommends the Proponent include a risk assessment of a natural gas leak to ensure that all plausible accidental scenarios are evaluated.	The Proponent should include a natural gas release in their risk assessment of accidents and malfunctions.	The Proponent should demonstrate how they have evaluated all environmental risks related to their Project and how they plan to mitigate spills or releases of hazardous or deleterious substances that may result from unplanned accidents and malfunctions.
ECCC-T2-03	Section 24.2.1 Liquid Discharges / Water Quality	The Project includes an evaporation pond for process wastewater and mitigations are identified to prevent the release (seepage, overflow) of pond contents to the environment. Per the IPD, a high-density polyethylene or clay liner will be installed to ensure wastewater collected does not infiltrate native soil. The Proponent will be responsible for maintaining the liner and monitoring the pond for leakage as part of their operating procedures. The IPD states that the pond will be sized to receive the expected process wastewater volumes and annual expected rainfall. The design depth also accounts for a 100-year rainfall event and salt storage. However, the Proponent may want to consider contingency options to manage the potential for excess volume and overtopping.	The Proponent should identify contingency options to manage potential excess volumes should the evaporation pond reach capacity.	n/a
ECCC-T2-04	Section 23 & 24, Table 23-3, Table 24-9	Emissions associated with the decommissioning of the Project are discussed in Table 23-3, which refers to Table 24-9 for more information. However, Table 24-9 is a table of emissions during the operations phase.	The Detailed Project Description (DPD) should include the breakdown of emissions by the sources for the decommissioning phase. Table 24-9 may need to be clarified to be relevant to	The Proponent should clarify the references to decommissioning emissions in the DPD.

	Greenhouse Gas Emission Assessment		decommissioning emissions as stated on Table 23-3.	
ECCC-T2-05	Section 23.3.1 Carbon Capture	The IPD states that carbon capture utilization and storage (CCUS) is being investigated as a mitigation measure for GHG emissions, however no relevant details are provided. Without concrete plans for this mitigation measure, ECCC cannot comment on the effectiveness of this proposed mitigation measure, as it exists in concept only.	It is recommended that the DPD includes information on how CCUS or other GHG mitigation measures are being considered and their implications in the context of the Project's GHG emissions.	The Proponent should provide further information in the DPD on carbon capture or other mitigation measures being considered to reduce the Project's GHG emissions, including discussions on technical and economic feasibility of any such measures.
ECCC-T2-06	IPD - throughout First and second paragraphs of page 24.15, others	The units used for GHG emissions are inconsistent throughout the IPD, especially between CO ₂ and CO _{2e} . The description of GHG emissions should be consistent and descriptive to minimize assumptions. For example, Table 24-12 and Table 23-1 on page 23.2 mentioned tonnes of Total GHG Emissions instead of tonnes CO _{2e} or CO ₂ . Further, Table 24-13 on page 24.17 presents headers of "Quantity" and "Factors". It was unclear if 'Quantity' referred to the number of units of the specific equipment. 'Factors' is provided without a description, just a reference to the NIR as the source of the factors	It is recommended that the units for GHG emissions are clarified in the DPD.	The Proponent should clarify units for GHG emissions and use them consistently in the DPD.
ECCC-T2-07	Section 23.0 Greenhouse Gas Emissions Assessment	There are no estimates of the fuel consumption for the Project, including natural gas. The amount of natural gas used by the Project is an important consideration in assessing the potential upstream GHG emissions of the Project and whether the natural gas used by the Project will be incremental to the Project's effects on the environment.	It is recommended to include the estimated fuel consumption, including natural gas, for the different capacity scenarios.	The Proponent should include the consumption estimates for different capacity scenarios in the DPD.
ECCC-T2-08	Section 6.0 Strategic Assessments GHGs / Carbon Sinks	The Proponent states that 9.4 ha of wetland area is included in the 64.9 ha of Project Development Area (PDA). However, there are no estimates of the GHG implications of this disturbance, which can result in emissions of GHGs associated with land-use changes.	It is recommended that the DPD includes the GHG implications of the PDA and estimate the Project's emissions from land use change according to the SACC and the supplementary Technical Guide.	The Proponent should include GHG implications of the PDA that are not included in the Project emissions estimates, including emissions from land-use change in the DPD.
ECCC-T2-09	Section 24.5.5 Venting and Fugitive	Fugitive emissions are estimated using the Canada National Inventory Report (NIR) without sufficient information to verify them.	It is recommended that the DPD include the details behind the fugitive estimates including the methodology underlying the calculations, according to the referenced	The Proponent should include the methodology and supporting information for the calculation of

	Emissions Generated		NIR's Equation A3.2-14, to estimate the fugitive emissions.	fugitive emissions in the DPD.
ECCC-T2-10	Section 23.0 Greenhouse Gas Emissions Assessment	The Project will initially start in simple cycle mode (Page 23.4) and ECCC understands that the simple cycle mode will result in a higher emissions intensity than when the system is operating in combined cycle mode (from 338 to 383 kg CO ₂ / MWh for combined cycle to 510 to 548 kg CO ₂ / MWh for simple cycle, pg.24.15). There is insufficient detail provided in relation to the use of simple cycle mode for ECCC to adequately comment on the impact this will have on GHG emissions. For instance, it is unclear how often the simple cycle will be employed and what implications running the simple cycle will have on fuel use and associated GHG emissions.	It is recommended to include more details on the simple cycle generation such as how often it is needed and its GHG implications for the Project.	The Proponent should include information on scenarios needing simple cycle generation fuel requirements, how often this operation will be required, and the GHG implications.
ECCC-T2-11	Section 23.0 Greenhouse Gas Emissions Assessment	The Proponent indicated that the Project would be in operation until 'around 2049' followed by a short period of decommissioning (until around 2052). The Proponent did not make a commitment to be net-zero by 2050 for any activity that goes beyond 2050. However, the Proponent made a commitment that the Project will be compliant with the proposed Clean Electricity Regulations. If the Project is designated for Impact Assessment, the SACC will apply. Among other information requirements, the SACC describes the circumstances in which a credible plan to achieve net-zero emissions by 2050 will be required, including for those Projects that have a lifetime beyond 2050.	If the Project is designated, the Proponent should proactively consider how to prepare a net-zero plan for any activities beyond 2050.	The Proponent should proactively consider how to prepare a net-zero plan for any activities beyond 2050 if the Project is subject to an IAA impact assessment.
ECCC-T2-12	Appendix C (TransGas Limited Saskatoon East Expansion Project) Section 5.3 Wildlife and Wildlife Habitat	In section 5.3 Wildlife and Wildlife Habitat of the section of Appendix C, TransGas Limited Saskatoon East Expansion Project, the IPD states: "Clearing activities scheduled to occur within suitable habitat during the migratory birds primary nesting period (i.e., Zone B4; April 14 to August 29) (ECCC 2018) will include migratory bird nest sweeps prior to construction activities to determine the presence of active nests. If an active migratory bird nest is detected, an appropriate setback (to be determined in consultation with regulatory agencies such as ECCC and ENV) will be established around the nest and construction activities will not be permitted in that area until nesting activities are completed." ECCC does not recommend the use of nest searches or pre-clearing surveys for active bird nests during the breeding season as a mitigation measure, given the difficulty associated with finding nests reliably and the high likelihood of disturbing nesting birds while undertaking searches.	ECCC recommends that clearing and grubbing activities not be conducted during the breeding bird season. The Proponent should provide details on how vegetation clearing will be conducted and clarify the timing window that will be used for vegetation removal to minimize risk to migratory birds and species at risk.	The Proponent should provide details on how vegetation clearing will be conducted including the timing window that will be used.
ECCC-T2-13	Section 14.2.5.2.2 Field Surveys	Baird's sparrow (listed as <i>Special Concern</i> under SARA) and Sprague's pipit (listed as <i>Threatened</i> under SARA) were both observed in the Project area during baseline studies. Both species are likely to experience adverse impacts, such as loss of habitat, sensory	The Proponent should provide details on surveys that will be conducted to better understand where these species are nesting in proximity to planned construction and operational activities.	The Proponent should provide details on surveys that will be conducted for Baird's sparrow and Sprague's pipit to

	Wildlife and Wildlife Habitat	<p>disturbance or loss of nests during the construction and operational phases of the Project.</p> <p>As these species are grassland nesters, whose nests are on the ground or low in the vegetation, there is a risk of nest destruction from construction equipment or personnel on site. As there is a risk of mortality and/or nest destruction for grassland nesting birds during construction and operational activities, monitoring and mitigations should be used to reduce impacts.</p>	The Proponent should present species-specific mitigations related to grassland nesting birds, given the risk of nest destruction during construction and operational activities. Mitigations such as mowing prior to the breeding bird season and keeping vegetation short to deter nesting can be an effective mitigation strategy for birds that nest in grassland vegetation.	determine nesting locations, prior to construction or operational activities that could lead to mortality or nest destruction. The Proponent should also present species-specific mitigations for grassland nesting birds.
ECCC-T2-14	<p>Appendix G Supplemental Wildlife and Vegetation Information</p> <p>G.1 HABISask Project Screening Reports.</p>	<p>The Project area occurs within the known Whooping Crane migration corridor and the data presented in the IPD from HABISask shows that Whooping Crane (listed as <i>Endangered</i> under SARA) have been observed near the town of Lanigan, in proximity to the Project.</p> <p>The location of the Project is inside an important flight path for Whooping Crane, which leads towards a major stopover area north of the village of Viscount. Results from a study that used satellite data to identify Whooping Crane stopover site use intensity classifies the Project Area (NW 36-33-24 W2) as a 'low intensity' stopover site, however an area of land starting approximately 5 km west of the Project area (32-33-24-W2) (3 km west of transmission line) is ranked as "extended use core intensity" (Pearse et al. 2015).</p> <p>Transmission line collisions are a main cause of mortality for Whooping Crane, and as this site is near a major stopover area, cranes may be flying at low altitude, increasing the risk of a transmission line collision.</p> <p>Reference: Pearse, A.T., D.A. Brandt, W.C. Harrell, K.L. Metzger, D.M. Baasch and T.J. Hefley. 2015, Whooping crane stopover site use intensity within the Great Plains: U.S. Geological Survey Open-File Report 2015-1166, 12 p., http://dx.doi.org/10.3133/ofr20151166</p>	The Proponent should provide further information on the potential impacts to Whooping Crane, including their use of the area for stopovers or as part of their flight path. Species-specific mitigations for Whooping Crane should be presented. The Proponent should consider mitigations inside the Whooping Crane corridor, such as burying transmission lines or marking them for increased visibility.	The Proponent should provide further information on the potential impacts to Whooping Crane during their migration and identify mitigation measures to prevent impacts (such as having buried lines or marking lines for visibility).
ECCC-T2-15	<p>Section 14.2.4</p> <p>Vegetation and wetlands</p>	<p>The activities linked to the construction, operation, and decommissioning of the Project could have negative effects on wetlands and their ecological functions.</p> <p>Carrying out the Project, particularly the activities related to construction, is likely to alter the existing hydrological regimes essential for maintaining wetlands and thus affect the quality or availability of habitat for migratory birds and other wildlife.</p> <p>The destruction and modification of wetlands is likely to cause negative effects on or harm migratory birds and species at risk, such as Western</p>	The Proponent should provide additional information on anticipated impacts to wetlands in the PDA and Local Assessment Area (LAA) including: <ul style="list-style-type: none"> The amount of direct wetland loss and wetland alteration/impacts to wetland function, including types of wetland (i.e. wetland class), If the impacted wetlands are considered ecologically, economically and socially important to the region. 	To better understand potential impacts to migratory birds and SAR, the Proponent should provide additional information on wetlands including potential for direct and indirect impacts, types of wetlands that may be impacted, the regional importance of potentially impacted

		<p>Tiger Salamander and Northern Leopard Frog that use these areas for breeding and migration, as well as for foraging or resting areas.</p> <p>In addition, activities such as including vehicle traffic, could introduce and create dispersal pathways for invasive species. The spread of invasive species, (e.g., purple loosestrife (<i>Lythrum salicaria</i>)) may pose a threat to wetlands.</p> <p>Section 14.2.4.2.1, Table 14.7 states that 9.4 ha of wetland occur within the PDA, while 26 ha of wetlands occur within the Local Assessment Area (LAA). However, the amount and type of wetlands that will be lost and/or altered is not provided.</p> <p>The Proponent may be required to provide a wetland compensation plan to offset the loss. Consistent with the Operational Framework For Use of Conservation Allowances a minimum ratio of 2:1 should be the starting point when determining the amount to be offset.</p> <p>Links: Operational Framework for Use of Conservation Allowances http://publications.gc.ca/site/eng/9.696852/publication.html</p>	<ul style="list-style-type: none"> • If the wetlands are in an area that has experienced severe wetland loss, and if so, how that will be considered in relation to cumulative impacts, and • A map overlay of wetland areas in respect to location of Project components and known and/or potential routing options. 	<p>wetlands and regional cumulative impacts due to wetland loss.</p>
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