



Appendix A Screening Checklist

Environmental Review Report

East Windsor Generation Facility Expansion Project

Capital Power Corporation

SLR Project No.: 241.030524.00024

July 2024

A.1 Screening Checklist

In accordance with the *Guide to Environmental Assessment Requirements for Electricity Projects* (MECP 2024), the screening criteria below have been applied to the East Windsor Generation Facility Expansion Project (“the Project”). This screening has focused on the potential for negative environmental effects resulting from the Project. To complete this checklist, mitigation or impact management measures have not been considered.

If a response to a question indicates “Yes”, there is potential for negative environmental effects. Where the response indicates “yes”, additional information and analysis is provided in the Environmental Review Report (ERR) to describe those effects, identify mitigation, or impact management measures to prevent or reduce the effects, and assess the significance of any remaining net effects.

Each criterion is based on a question which is prefaced with the phrase: *Will the Project:*

Table A-1: Surface and Ground Water

Criterion	Yes	No	Additional Information
1.1 have negative effects on surface water quality, quantities or flow?		✓	The Project will not interact with water quality, quantities or flow. No surface water features are located on or immediately adjacent to the Project Site, and the nearest feature is the Detroit River, over 135 m north of the Project Site.
1.2 have negative effects on ground water quality, quantity or movement?	✓		Localized excavations and the installation of pile foundations will be required during construction. Both have the potential to be installed at depths that will interact with groundwater, and some construction dewatering may be required. Refer to Section 6.2 of the ERR for further information.
1.3 cause significant sedimentation, soil erosion or shoreline or riverbank erosion on or off-site?		✓	The Project Site is relatively flat and is not located in proximity to unstable lands subject to erosion. The design of the stormwater management system is subject to an ECA (Industrial Sewage Works) and municipal Site Plan Approval. The new system will integrate with the existing EWCC infrastructure, which discharges to the City’s stormwater sewer infrastructure.
1.4 cause potential negative effects on surface or ground water from accidental spills or releases to the environment?	✓		Although not anticipated, the potential for accidental spills or releases to the environment is possible in the event of human error and/or equipment malfunctions during all phases of the Project. Refer to Section 2.6.3 of the ERR for further information.



Table A-2: Land

Criterion	Yes	No	Additional Information
2.1 have negative effects on residential, commercial or institutional land uses within 500 metres of the site?		✓	<p>The Project will not displace, impair, conflict or interfere with residential, commercial or institutional land uses within 500 m.</p> <p>As the proposed project is to be constructed on an existing historically disturbed site, and contained within the site, no other land uses will be displaced or impaired as a result of the Project.</p> <p>The lands immediately adjacent to the Project Site are designated as Business Park and Mixed-Use Node in Schedule D of the City of Windsor Official Plan. This signifies that the land uses within approximately 200 m of the Project Site are compatible uses within this radius, and would also be compatible with uses within 500 m.</p> <p>Since the Project is being developed on lands within the existing EWCC fenceline, no interference to existing land uses or any new proposed development within a 500 m radius is expected to occur.</p>
2.2 be inconsistent with the Provincial Policy Statement (PPS), provincial land use or resource management plans?		✓	<p>The Project is consistent with the Provincial Policy Statement, 2020 and the Proposed Provincial Planning Statement, 2023. No other Provincial Plans are applicable to the East Windsor Planning District in which the Project Site is located.</p>
2.3 be inconsistent with municipal land use policies, plans and zoning bylaws?		✓	<p>The Project Site is designated as Business Park and Mixed-Use Node in Schedule D of the City of Windsor Official Plan, as are adjacent properties. The Project Site is zoned as 'Commercial District' and defined as a 'Public Utility' within the City of Windsor Zoning By-law 8600 that permits Public Utilities within any zone.</p> <p>The Project is consistent with, and conforms to, the City of Windsor Official Plan policies and Zoning By-law 8600 regulations.</p> <p>The Project design has accounted for the policies and guidelines associated with the Ford Powerhouse District and Ford City Community Improvement Plans (CIPs).</p>
2.4 use hazard lands or unstable lands subject to erosion?		✓	<p>The Project Site is not located in proximity to any identified hazard lands or unstable lands subject to erosion.</p>



Criterion	Yes	No	Additional Information
2.5 have potential negative effects related to the remediation of contaminated land?		✓	<p>There are no known contaminated areas on the Capital Power-leased or owned land and no areas undergoing remediation.</p> <p>A Phase I and II ESA (Dillon 2007d) was undertaken prior to construction of the existing EWCC on what is now the EWCC Site. Elevated levels of petroleum hydrocarbon fraction F4 were identified at one borehole location, and elevated metals at a second borehole. Recommendations at the time of the ESA (Dillon 2007d) included further sampling and removal of impacted soil during construction of the EWCC. These borehole locations are within the existing facility footprint, in areas that were excavated to install the existing EWCC facility infrastructure. According to the Federal Contaminated sites inventory, there are no identified suspected, active, or closed contaminated sites within the General Study Area (GSA) (Government of Canada 2023a).</p> <p>The Project is sited on former residential properties that have since been developed as manicured lawn and parking within the existing EWCC fenceline. There are no known contaminated sites within the Project Site.</p> <p>Given the historical and current industrial use of the Project Site and adjacent lands, there is potential for encountering previously undocumented contamination during civil earthwork activities, but no potential for prevention or hinderance of remediation of contaminated land.</p>

Table A-3: Air and Noise

Criterion	Yes	No	Additional Information
3.1 have negative effects on air quality due to emissions of nitrogen dioxide, sulphur dioxide, suspended particulates, or other pollutants?	✓		<p>The Project will include emissions during construction and operation that have the potential to negatively affect air quality.</p> <p>Refer to Section 6.3 of the ERR for further information.</p>
3.2 cause negative effects from the emission of greenhouse gases (CO ₂ , methane)?	✓		<p>The operating Project has the potential to cause negative effects from Greenhouse Gas (GHG) emissions.</p> <p>Refer to Section 6.4 of the ERR for further information.</p>



Criterion	Yes	No	Additional Information
3.3 cause negative effects from the emission of dust or odour?	✓		During construction, localized earthworks and general construction activity have potential to result in dust emissions. Project operation will not result in dust emissions. The Project is not anticipated to emit odours during any phase. Refer to Section 6.3 of the ERR for further information.
3.4 cause negative effects from the emission of noise?	✓		Construction and operation of the Project will generate noise. Refer to Section 6.5 of the ERR for further information.

Table A-4: Natural Environment

Criterion	Yes	No	Additional Information
4.1 cause negative effects on rare, threatened or endangered species of flora or fauna or their habitat?		✓	Site reconnaissance was undertaken to identify potential Species at Risk (SAR) and SAR habitat within and near the Project Site. Species at Risk are defined as Endangered and Threatened under Ontario's Endangered Species Act and Canada's <i>Species at Risk Act</i> . The Project Site contains no natural habitat, therefore the only SAR with the potential to occur are those known to occupy anthropogenic habitats such as structures and some ornamental trees (e.g., Chimney Swift, Barn Swallow, and bat species). No works are proposed on existing structures and large, open spaces for foraging within the Project Site are limited, therefore Chimney Swift and Barn Swallow and their habitats are not anticipated to be affected by the Project. The Project Site was determined to have very limited potential for SAR bats, consisting of a few ornamental trees that may provide marginal habitat for day roosting.
4.2 cause negative effects on protected natural areas such as ANSIs, Environmentally Sensitive Areas or other significant natural areas?		✓	The Project Site and the GSA are in a highly developed and urbanized area. The GSA does not contain wetlands, ANSIs, Environmentally Sensitive Areas, or other significant natural areas. Therefore, there are no potential effects on these resources.
4.3 cause negative effects on wetlands?		✓	



Criterion	Yes	No	Additional Information
4.4 have negative effects on wildlife habitat, populations, corridors or movement?		✓	Due to the urban and industrial nature of the site, the small size of the Project Site, and the lack of native vegetation and wildlife habitat, the Project is not anticipated to result in adverse effects on wildlife (including SAR), fish, migratory birds, or their habitat. The Project will be within a site that is already fully fenced and gated, which would exclude some species of wildlife. As the proposed Project buildings (equipment and storage) will be designed to be consistent with the existing buildings on site and the stack does not include reflective materials. Increased risk of bird strikes is not anticipated. No locally important or valued ecosystems or vegetation have been identified within the GSA, and therefore will not be affected by the Project.
4.5 have negative effects on fish or their habitat, spawning, movement or environmental conditions e.g., water temperature, turbidity, etc.)?		✓	
4.6 have negative effects on migratory birds, including effects on their habitat or staging areas?		✓	
4.7 have negative effects on locally important or valued ecosystems or vegetation?		✓	

Table A-5: Resources

Criterion	Yes	No	Additional Information
5.1 result in inefficient (below 40%) use of a non-renewable resource (efficiency is defined as the ratio of output energy to input energy, where output energy includes electricity produced plus useful heat captured)?	✓		The Project is being designed to provide dependable generation capacity at peak times when Ontario's other generation sources are not capable of meeting demand. In this way the Project will optimize use of non-renewable resources (natural gas), and only operate as necessary (as determined by the IESO). Refer to Sections 1.2 and 2.0 of the ERR for further information.
5.2 have negative effects on the use of Canada Land Inventory Class 1-3, specialty crop or locally significant agricultural lands?		✓	The Project Site and the GSA are in a highly developed and urbanized area. The GSA does not contain agriculture land uses, high potential mineral aggregate areas, petroleum areas, forest resources, or natural areas suitable for game and fisheries as resources. Therefore, there are no potential effects on these resources.
5.3 have negative effects on existing agricultural production?		✓	
5.4 have negative effects on the availability of mineral, aggregate or petroleum resources?		✓	
5.5 have negative effects on the availability of forest resources?		✓	
5.6 have negative effects on game and fishery resources, including negative effects caused by creating access to previously inaccessible areas?		✓	



Table A-6: Socio-economic

Criterion	Yes	No	Additional Information
6.1 have negative effects on neighbourhood, or community character?	✓		<p>There is the potential for the Project to affect the neighbourhood during construction as a result of increased noise, dust, and traffic during construction. During operation, although the Project will not substantively differ from existing adjacent land uses, the presence of the Project has the potential to affect the local community character through changes to existing positive community assets, attributes, or qualities.</p> <p>Refer to Section 6.6 of the ERR for further information.</p>
6.2 have negative effects on local businesses, institutions, or public facilities?	✓		<p>There are no institutions or public facilities within 500 m of the Project Site.</p> <p>There is the potential for the Project to affect businesses near the Project Site because of increased noise, dust, and traffic during construction. A small construction workforce may have a positive contribution to local business activity.</p> <p>There are no anticipated effects during operation as the Project will not substantively differ from existing adjacent land uses.</p> <p>Refer to Section 6.6 of the ERR for further information.</p>
6.3 have negative effects on recreation, cottaging or tourism?	✓		<p>The Project Site is not a cottaging or tourism location. There is the potential for the Project to affect the recreational park near the Project Site because of increased noise, dust, and traffic during construction.</p> <p>There are no anticipated effects during operation as the Project will not substantively differ from existing adjacent land uses.</p> <p>Refer to Section 6.6 of the ERR for further information.</p>



Criterion	Yes	No	Additional Information
6.4 have negative effects related to increases in the demands on community services and infrastructure?		✓	<p>The small and temporary construction workforce will not measurably increase local population that could increase the demands on community services and infrastructure.</p> <p>No new water or sanitary sewage connections from municipal infrastructure are required for the Project.</p> <p>The design of the stormwater management system is subject to an ECA (Industrial Sewage Works) and municipal Site Plan Approval. The new system will integrate with the existing EWCC infrastructure, with criteria used in the design intentionally avoiding an increase in demand on the City's stormwater sewer infrastructure.</p> <p>The Project Site is located within an Intake Protection Zone (IPZ-2) and Event Based Area (EBA). No effects on source water protection features are anticipated; if required, Project activities will be reviewed by the Essex Region Conservation Authority as part of Site Plan Approval.</p>
6.5 have negative effects on the economic base of a municipality or community?		✓	<p>The City of Windsor has a very large and diverse economy. The Project is not large enough to influence the economic base of the municipality or community. Additional electrical power generation capacity in the City of Windsor will provide reliability to both local and provincial electricity customers.</p>
6.6 have negative effects on local employment and labour supply?		✓	<p>No negative effects on local employment and labour supply are anticipated. During construction, the Project is expected to employ 80-90 personnel. This small and temporary workforce will not measurably affect local employment levels of labour supply.</p>
6.7 have negative effects related to traffic?	✓		<p>There is the potential for the Project to have effects related to increased traffic in the community during construction. There are no anticipated effects during operation as the Project staffing and vehicular traffic will not substantively differ from the existing EWCC operational requirements.</p> <p>Refer to Section 6.6 of the ERR for further information.</p>
6.8 cause public concerns related to public health and safety?	✓		<p>In response to anticipated public concerns, a Screening Level Human Health Risk Assessment was undertaken in relation to Project operational emissions.</p>



Criterion	Yes	No	Additional Information
			Refer to Section 6.10 of the ERR for further information.

Table A-7: Heritage and Culture

Criterion	Yes	No	Additional Information
7.1 have negative effects on heritage buildings, structures or sites, archaeological resources, or cultural heritage landscapes?	✓		<p>Cultural Heritage Cultural heritage features are located in proximity to the Project Site and Construction Footprint. The Project has potential to affect these features. Refer to Section 6.7 of the ERR for further information.</p> <p>Archaeological Resources The Project Site and majority of the Construction Footprint have been cleared of archaeological concern by a licensed archaeologist. The existing Matilda Street parking lot (240 Albert Road and 2879 Riverside Drive East) could not be cleared of archaeological concern and would require study for any impacts below the paved surface. However, since the Project will not disturb the paved surface as the parking lot is being used only for temporary parking and storage, a licensed archaeologist has confirmed that there are no archaeological concerns associated with the temporary use of the parking lot.</p>
7.2 have negative effects on scenic or aesthetically pleasing landscapes or views?	✓		<p>The Project Site is located adjacent to Riverside Drive which is designated under the City of Windsor Official Plan as a Civic Way and Scenic Drive and is located within the areas of the Ford Powerhouse District and Ford City Community Improvement Plans. The City of Windsor has policies and guidelines associated with aesthetics for development in these areas.</p> <p>Refer to Section 6.8 of the ERR for further information.</p>



Table A-8: Indigenous

Criterion	Yes	No	Additional Information
8.1 cause negative effects on First Nations or other Indigenous communities?		✓	The Project Site is located on private property within a highly developed and urbanized area where opportunities for Indigenous Peoples to undertake traditional activities do not exist. Given there is no change to land use, ground disturbance will be restricted to an area cleared of archaeological concern by a licenced archaeologist, and all Project components and operational activities will occur within the fence line of the existing facility, negative effects on Indigenous communities are not anticipated. Interests, concerns and questions related to the Project that are expressed by Indigenous communities will be documented as part of the engagement program and considered in Project design and documentation as appropriate and applicable. Capital Power is committed to ongoing engagement with interested Indigenous communities.

Table A-9: Other

Criterion	Yes	No	Additional Information
9.1 result in the creation of waste materials requiring disposal?	✓		During Project construction, waste materials will be generated through equipment and materials packaging and general construction wastes. Maintenance activities during the operations phase will also generate waste. Refer to Section 2.6 of the ERR for further information.
9.2 cause any other negative environmental effects not covered by the criteria outlined above?	Considered as presented below.		
9.2.1 Climate Change Considerations	✓		Consideration of GHG emissions is included in Table A-3. Refer to Section 6.4 of the ERR for further information. A climate change resilience assessment (CCRA) has been completed for the Project. Refer to Section 6.9 of the ERR for further information.



Criterion	Yes	No	Additional Information
9.2.2 Cumulative Effects		✓	<p>The Project is adjacent to an existing facility in an industrial area and is therefore consistent with existing and planned land use, and compatible with any nearby planned future development.</p> <p>The Project is one of a limited number of natural gas-fired generation projects the IESO has contracted to help fuel the energy transition and maintain reliability in the province. The effects assessments for air quality and GHG identified that the Project components will only operate as necessary (as determined by the IESO) to meet energy demands while simultaneously minimizing air, noise and GHG emissions.</p> <p>In terms of cumulative effects with emissions from other proposed undertakings, the specific intent of the Project is to enable other industries, businesses, and consumers to continue with their electrification and decarbonization plans without risking reliability of the provincial grid. The Project located in an area that is highly developed and urbanized with little space available for new development. New major industrial development that could contribute to noise, air quality and traffic impacts are not anticipated in the GSA. As such, cumulative effects are not carried forward for detailed consideration in the ERR. However, the effects assessment for air quality, GHG and noise include combined modelling for the Project with the existing EWCC.</p>

