



Appendix D.4 Ecological Field Program Report

Environmental Review Report

East Windsor Generation Facility Expansion

Capital Power Corporation

SLR Project No.: 241.030524.00024

July 2024



Ecological Field Program Report

East Windsor Generation Facility Expansion Project

Capital Power Corporation

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Revision: 1

Revision Record

Revision	Date	Revision Description
0	April 11, 2024	Draft report issued for external review
1	July 2024	Report issued for public review



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1.0 Introduction

1.1 Project Overview

Capital Power Corporation (Capital Power), through its affiliate East Windsor (Expansion) L.P., is proposing the East Windsor Generation Facility Expansion (the Project) in the City of Windsor, Ontario. The Project is responsive to the Independent Electricity System Operator's (IESO's) call for additional natural gas generation capacity and will provide up to approximately 107 megawatts (MW) of additional gross generation capacity to the Windsor-Essex area and provincial electricity grid. The proposed Project is being designed to provide dependable capacity at peak times when Ontario's other generation sources are not capable of meeting demand.

The Project consists of the construction and operation of a new simple cycle natural gas generation facility located adjacent to the existing East Windsor Cogeneration Centre (EWCC)¹. The Project will make use of some existing infrastructure, including tying into the existing EWCC high-voltage interconnection line to avoid the need for a new connection to the provincial electricity grid. Ancillary project components include an equipment building, storage building, stormwater management system and site servicing. Additional areas for temporary staging and laydown will be required during the construction phase.

The Project will be located within the existing EWCC fenceline, primarily on lands owned by Capital Power. These lands represent a series of parcels, municipally known as 228 to 276 Cadillac Street (hereby referred to as the Project Site). These parcels, along with others on the west side of Cadillac Street, were formerly residential properties that were acquired, and residences removed, as part of the original development of the EWCC. The Project Site is approximately 0.61 hectares (1.49 acres) in size and is currently used for site access, parking, mowed and landscaped areas, and formerly storage (removed at the City's request) (**Figure 1-1**).

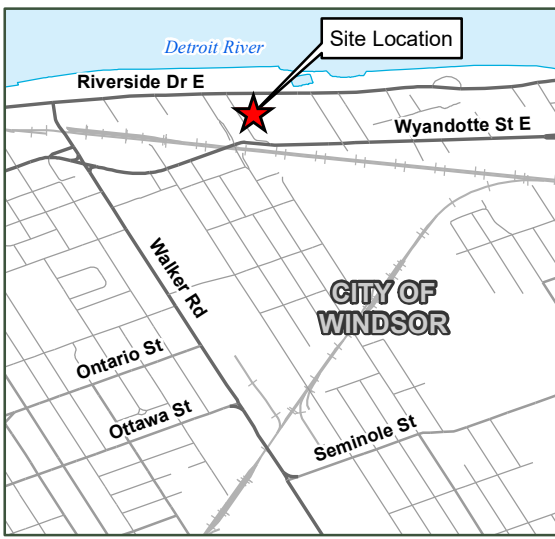
¹ The EWCC is located on the land leased from Ford Motor Company of Canada Ltd. In addition to generating electricity, the facility used to provide steam to the neighbouring Ford Motor company for their Ford Windsor engine plant. Since the closure of the engine plant in 2018, Ford has terminated the Steam Supply Agreement with EWCC, and EWCC now operates in simple cycle mode as a peaking plant.





- LEGEND:**
- Capital Power Lands - Owned
 - Capital Power Lands - Leased
 - Project Site
 - Parcel Fabric (City of Windsor)
 - Railway

NOTES:
 PARCEL FABRIC, CITY OF WINDSOR OPEN DATA CATALOGUE,
 ACCESSED NOVEMBER, 2022.
 IMAGERY: COUNTY OF ESSEX, 2023



SCALE 1:2,750
 PAGE SIZE 11 x 17
 NAD 1983 UTM Zone 17N
 THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY
 AND SHOULD NOT BE USED FOR NAVIGATION

EAST WINDSOR GENERATION
 FACILITY EXPANSION

ECOLOGICAL FIELD PROGRAM REPORT

PROJECT LOCATION



FIGURE NO:
1-1

1.2 Objective

This Ecological Field Program Report was completed to inform the environmental and regulatory permitting and approval process. This report considers the potential effects of the Project on the existing vegetation communities, wildlife habitat, and Species at Risk (SAR)² within and near the Project Site and existing EWCC.

2.0 Project and Site Context

2.1 Project Site Context

The Project Site is located adjacent to the EWCC, on a series of parcels municipally known as 228 to 276 Cadillac Street. The Project will be located within the existing EWCC fenceline, primarily on lands owned by Capital Power, with limited vegetation and habitat potential. The EWCC is located on the Ford Powerhouse property, on land leased from the Ford Motor Company of Canada Ltd. The current EWCC facility fenceline encompasses the Project Site lands, which are currently used for site access, parking, landscaped areas, and formerly storage (removed at the City's request).

3.0 Methods

SLR completed an ecological site reconnaissance on June 5, 2022 by SLR ecologist, Jeremy Bensette, to assess the presence of vegetation communities, potential wildlife habitat, and SAR within and near the Project Site and existing EWCC. Since the EWCC Site is an existing industrial property with limited vegetation and habitat potential, vegetation community mapping and targeted SAR surveys were not completed. Evidence of wildlife presence was recorded from incidental direct sightings, and indirectly from such indicators as calls, nests, tracks, scat, browse, and burrows.

4.0 Existing Conditions and Potential Effects

The existing EWCC is located at 224 Cadillac Street, south of Riverside Drive in the eastern portion of downtown Windsor, Ontario. The property occurs in proximity to the Detroit River (located approximately 135 m north of the Project Site). Vegetation within the Project Site and existing EWCC fenceline consists of manicured lawn around the north, west, and south edges of the Project Site and existing EWCC, and several ornamental trees and shrubs, mostly planted along the boulevards of Riverside Drive East and Wyandotte Street East (**Figure 4-1**). Planted tree and shrub species include Blue Spruce (*Picea pungens*), Little-leaf Linden (*Tilia cordata*), Norway Maple (*Acer platanoides*), Honey Locust (*Gleditsia triacanthos*), Horse Chestnut (*Aesculus hippocastanum*), White Mulberry (*Morus alba*), and Common Lilac (*Syringa vulgaris*).

² Species at Risk are defined as Endangered and Threatened under Ontario's *Endangered Species Act* and Canada's *Species at Risk Act*.



Figure 4-1: Manicured Lawn and Ornamental Trees surrounding the EWCC Site



This limited vegetation does not provide habitat to sustain wildlife populations, and fencing encompassing the Project Site and existing EWCC Site limits the access of wildlife, other than birds. However, common urban species including Raccoon (*Procyon lotor*), Eastern Gray Squirrel (*Sciurus carolinensis*), Striped Skunk (*Mephitis mephitis*), and Virginia Opossum (*Didelphis virginiana*) may occur within the Project Site and existing EWCC. Limited trees and shrubs on-site also likely provide some habitat for birds, although not likely to be preferential habitat given the urban downtown location. As the Project Site does not contain any watercourses or waterbodies, no habitat for fish is present.

As the Project Site contains no natural habitat, the only SAR with the potential to occur within the Project Site are those known to occupy anthropogenic habitats such as structures and some ornamental trees. SAR with potential to occur at the Project Site are Chimney Swift (*Chaetura pelagica*), Barn Swallow (*Hirundo rustica*), and SAR bats including Little Brown Myotis (*Myotis lucifugus*), Eastern Small-footed Myotis (*Myotis leibii*), Northern Myotis (*Myotis septentrionalis*), and Tri-colored Bat (*Perimyotis subflavus*). Chimney Swift was observed foraging overhead within the Project Site during the site reconnaissance. Chimney Swift is designated as Threatened under the Ontario *Endangered Species Act, 2007* (ESA) and federal *Species at Risk Act, 2002* (SARA). Chimney Swift is commonly observed in urban areas as it roosts and nests in the chimneys of anthropogenic structures. There are no unused and uncapped chimneys within the Project Site with potential to provide habitat for Chimney Swift, although these features likely exist in the surrounding area. Barn Swallow may occur within the Project Site as it also nests in anthropogenic structures, though it was not observed during the site reconnaissance. Barn Swallow was recently redesignated from Threatened to Special Concern under the ESA and is listed as Threatened under the SARA. Since no works are proposed on existing structures and large, open spaces for foraging within the Project Site are limited, Chimney Swift and Barn Swallow and their habitats are not anticipated to be affected by the Project. Cleared areas within the Project Site may also provide habitat for Common Nighthawk (*Chordeiles minor*), particularly once construction is underway and gravel fill may be exposed. However, this habitat would be considered marginal considering the urban surroundings, potential for predation by urban species, and frequent human disturbance within the Project Site so nesting by Common Nighthawk is unlikely. As such, Common Nighthawk and its habitat is not anticipated to be affected by the Project. SAR bats have the potential to roost in trees and anthropogenic structures within the Project Site.



Very limited habitat potential for SAR bats is present within the Project Site. Potential habitat consists of a few ornamental trees that may provide marginal habitat for day roosting. Ornamental tree removal will occur between October 1 and March 31 to avoid the active window for bats and breeding bird season. If tree removal must occur outside this window, a wildlife sweep will be conducted to confirm the absence of nesting or roosting wildlife. With the implementation of mitigation measures, potentially occurring SAR bats are not anticipated to be affected by the Project.

5.0 Summary of Findings

Due to the urban industrial nature of the Project Site and the lack of native vegetation and wildlife habitat and fencing encompassing the Project Site and existing EWCC Site, the proposed expansion project is not anticipated to result in any adverse effects on vegetation, fish, or wildlife (including SAR) or their habitats.

A permit is not required to remove a tree from private property on a residential lot in the City of Windsor. However, commercial, industrial, and high-density residential lots may fall under the City's Site Plan Control and may have restrictions on tree removal. A permit may be required in this instance or to remove City-owned trees. All required permits would be obtained prior to the removal of any trees from the EWCC footprint.

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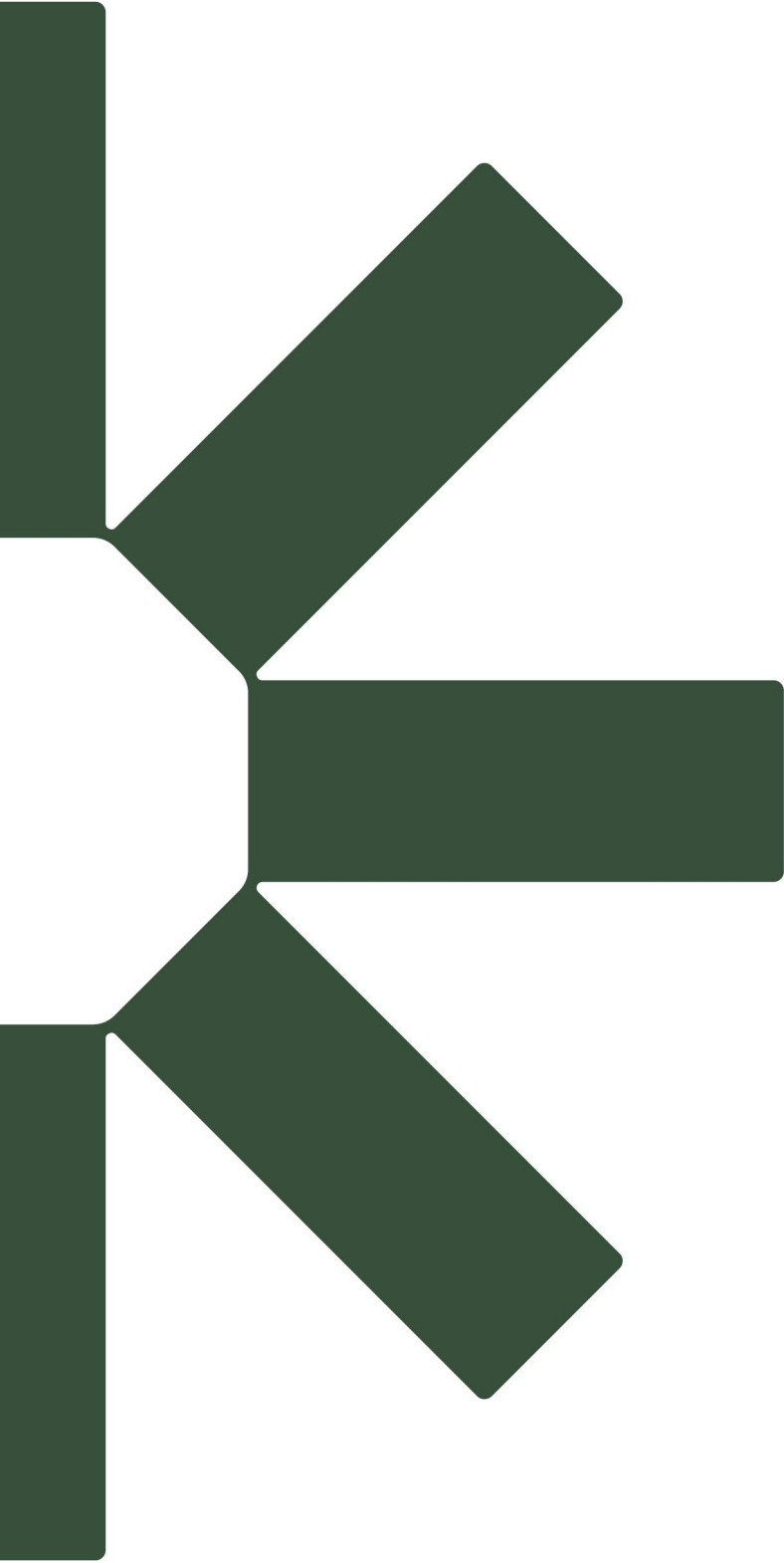
6.0 References

Endangered Species Act, S.O. 2007, c.6. Accessed online:

<https://www.ontario.ca/laws/statute/07e06>. Last accessed: January 2024.

Species at Risk Act, S.C. 2002, c. 29. Accessed online: <https://laws.justice.gc.ca/eng/acts/s-15.3/>. Last Accessed: January 2024.





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