

Appendix D.1 Land Use Planning Memo

Environmental Review Report

East Windsor Generation Facility Expansion

Capital Power Corporation

SLR Project No.: 241.030524.00024

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MEMO

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From:	Oz Kemal / Tamara Tannis
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File:	20150 J – 224 Cadillac Street, Windsor, ON
Subject:	Expansion Project: New 107 MW Simple Cycle Natural Gas Expansion Project Planning Justification Screening Response Memo

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 (Figure 1). 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 used for site access, parking, mowed and landscaped areas, and formerly storage (removed at the City's request).





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¹ The EWCC is located on the land leased from Ford Motor Company of Canada Ltd. EWCC, 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.



Figure 1: Concept Site Plan

Figure 2 below outlines the Project Site in a yellow solid line, the existing EWCC property outlined in a dash line, with the owned lands identified in solid red line. It is noted that the Detroit River is approximately 140 metres to the north of the site.



Figure 2: Study Area

Natural gas-fired generating facilities with nameplate capacities that are greater than 5 MW are classified as Category B projects which are subject to Provincial review under the Environmental Screening Process that involves two assessment stages: 1) Screening; and 2) Environmental Review. Capital Power is voluntarily completing the Environmental Review that assesses the potential environmental impacts of this project and will result in a publicly available Environmental Review Report.

The *Planning Act*, which regulates land use planning, under Part VII General, s. 62.0.1, states the following:

Exempt undertakings

- 62.0.1 (1) An undertaking or class of undertakings within the meaning of the Environmental Assessment Act that relates to energy is not subject to this Act or to section 113 or 114 of the City of Toronto Act, 2006 if,
 - (a) it has been approved under Part II or Part II.1 of the Environmental Assessment Act or is the subject of,
 - (i) an order under section 3.1 or a declaration under section 3.2 of that Act, or
 - (ii) an exempting regulation made under that Act; and
 - (b) a regulation under clause 70 (h) prescribing the undertaking or class of undertakings is in effect. 2006, c. 23, s. 24.

This report has been prepared in support of the Environmental Review Report (ERR) to meet the requirements of the Environmental Screening Process for Electricity Projects (ESP). The questions posed by the Province as they pertain to land use planning include:

- 1) Will the project have negative effects on residential, commercial or institutional land uses within 500 metres of the site?
- 2) Will the project be inconsistent with the Provincial Policy Statement, provincial land use or resource management plans?
- 3) Will the project be inconsistent with municipal land use policies, plans and zoning by-laws?

The following provides responses to these three questions.

RESPONSE TO NUMBER 1:

Will the project have negative effects on residential, commercial or institutional land uses within 500 metres of the site?

The simple cycle natural gas peaking power plant project will not have negative effects on the established residential, commercial and institutional land uses within the Study Area based on the following:

The Ontario Guide to Environmental Assessment Requirement for Electricity Projects, defines Negative Environmental Effects, in part as it pertains to land uses, as follows:

Negative environmental effects may also include the displacement, impairment, conflict or interference with existing land uses, approved land use plans, businesses or economic enterprises, recreational uses or activities, cultural pursuits, social conditions or economic structure.

The following assesses the four factors as they pertain to land use plans, as noted in the definition:

a) <u>Displacement</u>

The Project site represents the addition of a structure within an existing property that contains an existing natural gas plant. The lands within the Study Area are designated as a Business Park and Mixed Use Node in the City of Windsor Official Plan, as are adjacent properties in the immediate area of the

Project Site. The lands within the Study Area are 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.

As the Project is to be constructed on an existing site, and contained within the Project Site, no other land uses will be displaced within the Study Area as a result of the additional structure.

b) Impairment

The residential, commercial and institutional uses within the immediate vicinity of the Project Site, represent established land uses in existence for over two decades. A private, multi-unit retirement residence was recently renovated indicating that landowners have reinvested in an adjacent property indicating that the sensitive use is not impaired by the existing public utility that is within 100 metres' distance. A public local park with a parking lot and two local roads separate this nearest sensitive use to the Project.

Within the Study Area, lands designated as Commercial Corridor are situated to the eastern-most extent of the Study Area. This commercially designated area contains the City's Albert H. Weeks Water Treatment facility. To the south, and within 500 metres, the majority of land uses represent industrial uses that include the previous Ford Motor Co. Engine Plant. Residential uses are also present, and were historically built adjacent to, and within walking distance, of these industrial facilities. These residential uses are buffered by industrial buildings, on lands designated Industrial, that are situated between the residential neighbourhood and the Project.

The Project Site will be visually screened behind an architecturally designed building and landscaping to reduce any visual impacts to area passerby. The Project will not cause impairment to existing or future residential, commercial and institutional uses within the Study Area.

c) Conflict

The lands immediately to the east, west and south of the Project Site are designated similar to the Subject Lands as Business Park and Mixed Use Node in the City of Windsor Official Plan. This signifies that the land uses within 200 metres are compatible uses, as the City of Windsor has permitted this mix of residential, commercial, institutional and industrial land uses within this radius through a comprehensive review of the City's Official Plan. Existing residential uses that are situated greater than 200 metres to the south of the Project Site are located across from the rail corridor and beyond lands that are designated for, and developed with, industrial uses.

The City of Windsor Official Plan, Chapter 2: Glossary defines "gas pipelines and associated facilities" as "Physical Infrastructure." Within Chapter 7: Infrastructure, section 7.3.3.5 requires that any expansion of infrastructure minimizes the negative effects on existing neighbourhoods, adjacent land uses and the natural environment. The Project will minimize any negative effects to adjacent land uses through the use of a noise attenuation wall that also will act as a visual barrier to passersby of the simple cycle natural gas generation facility. Under section 7.3.6 Utilities & Other Infrastructure Policies, the City of Windsor Council, "shall require sufficient setbacks and buffer zones between infrastructure... associated facilities and adjacent land uses in accordance with provincial standards and guidelines." The City, through Zoning By-law 8600, has established these required setbacks and buffer zones between infrastructure uses and adjacent land uses.

The Project Site will not conflict with existing or future residential, commercial or institutional land uses in the Study Area.

d) Interference

As the proposed addition of the simple cycle natural gas peaking power plant is being developed on a parcel of land that is owned by, and adjacent to, an existing power generation facility site, no interference to land uses within the 500 metre radius will occur. Existing and new development, recreation and economic activities of lands within 500 metres are able to proceed as the proposed use will not impede the ability for new uses or development to occur in this area.

The Project Site will not interfere with residential, commercial or institutional land uses within the Study Area.

RESPONSE TO NUMBER 2

Will the project be inconsistent with the Provincial Policy Statement, provincial land use or resource management plans?

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 are located. Development Constraints for development adjacent to the Detroit River, a natural resource, which is found to the north of the Subject Lands and across Riverside Drive East, are not applicable.

Provincial Policy Statement 2020 ("PPS 2020")

The Project is consistent with the Provincial Policy Statement 2020 ("PPS"),

The simple cycle gas power plant is defined as 'Major Facilities" within the PPS 2020, as follows: means facilities which may require separation from sensitive land uses, including but not limited to airports, manufacturing uses, transportation infrastructure and corridors, rail facilities, marine facilities, sewage treatment facilities, waste management systems, oil and gas pipelines, industries, energy generation facilities and transmission systems, and resource extraction activities.

It is important to note that a simple cycle gas peaking power plant is not deemed to be a man-made hazard in the PPS 2020 and therefore the policies of Section 3.0 Protecting Public Health & Safety, sub-section 3.2 Human-Made Hazards are not applicable to the Project. The PPS defines oil, gas and salt hazards as follows:

means any feature of a well or work as defined under the Oil, Gas and Salt Resources Act, or any related disturbance of the ground that has not been rehabilitated.

The addition of the peaking power generation plant to the existing power plant is consistent with, and meets the outcomes envisioned by the Province through the following policies:

- 1.2.6 Land Use Compatibility
- 1.2.6.1 Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and

economic viability of major facilities in accordance with provincial guidelines, standards and procedures.

- 1.2.6.2 Where avoidance is not possible in accordance with policy 1.2.6.1, planning authorities shall protect the long-term viability of existing or planned industrial, manufacturing or other uses that are vulnerable to encroachment by ensuring that the planning and development of proposed adjacent sensitive land uses are only permitted if the following are demonstrated in accordance with provincial guidelines, standards and procedures:
 - a) there is an identified need for the proposed use;
 - *b)* alternative locations for the proposed use have been evaluated and there are no reasonable alternative locations;
 - *c) adverse effects to the proposed sensitive land use are minimized and mitigated; and*
 - *d) potential impacts to industrial, manufacturing or other uses are minimized and mitigated.*
- 1.6.11 *Energy Supply*
- 1.6.11.1 *Planning authorities should provide opportunities for the development of energy supply including electricity generation facilities and transmission and distribution systems, district energy, and renewable energy systems and alternative energy systems, to accommodate current and projected needs.*

The Project Site is consistent with Provincial Policy as the Province aims to protect Major Facilities from encroachment by sensitive uses for the long-term.

Proposed Provincial Planning Statement, 2023 ("PPPS 2023")

The proposed harmonized Provincial Policy Statement with the Growth Plan is under discussion on the Environmental Registry of Ontario ("ERO"). The proposed policies noted above have been transcribed into the proposed statement, but have been re-numbered wherein section 1.2.6 is re-numbered as section 3.5, and with the exception of section 1.2.6.2, which has removed the sub-sections as follows:

3.5.2 Where avoidance is not possible in accordance with policy 3.5.1, planning authorities shall protect the long-term viability of existing or planned industrial, manufacturing or other major facilities that are vulnerable to encroachment by ensuring that proposed adjacent sensitive land uses are only permitted if potential impacts to industrial, manufacturing or other major facilities are minimized and mitigated in accordance with provincial guidelines, standards and procedures.

Policy 1.6.11 Energy Supply is transcribed and re-numbered as 3.8 in the PPS 2023.

As noted through PPS 2020 assessment, the Project Site is also consistent with the Proposed Provincial Planning Statement 2023.

RESPONSE TO NUMBER 3

Will the project be inconsistent with municipal land use policies, plans and zoning by-laws?

The simple cycle natural gas peaking power plant is consistent with, and conforms to, the City of Windsor Official Plan policies and Zoning By-law 8600 regulations. The Project Site is located in the East Windsor Planning District and are designated "Business Park" and "Mixed Use Node" in the Official Plan, Schedule D: Land Use (see Figure 3 below). The land use as a power generation facility is defined as "infrastructure" and "physical infrastructure" in the Official Plan, Section 2: Glossary:

INFRASTRUCTURE consists of both the transportation system and physical services.

PHYSICAL INFRASTRUCTURE include sewerage, stormwater management and water works, waste management systems, electric power, communications and oil and gas pipelines and associated facilities.

The Official Plan, section 7.3.2.1, indicates that the definition of Infrastructure as follows: "*For the purpose of this Official Plan, infrastructure include sewerage, stormwater management and water works, waste management systems, electric power, communications, telecommunications, transit corridors, transportation corridors, and oil and gas pipelines and associated facilities.*"

Mixed Use Node is not defined within Section 2, while the terms Mixed Use Corridor and Mixed Use Centres are defined. Mixed Use Centres is defined as follows:

MIXED USE CENTRES are large sites developed according to a comprehensive development plan or nodal developments at the intersections of Controlled Access Highways and/or Arterial Roads.

The nearest Arterial Roads' intersection to the Project Site is by Walker Road and Wyandotte Street East as a distance of approximately 650 metres.



Figure 3: City of Windsor Official Plan, Schedule D: Land Use

Land uses found within the Study Area that represents an approximate 500 metre radius surrounding the Subject Lands include:

- Business Park (light blue)
- Mixed Use Nodes (purple)
- Mixed Use Corridor (coral)
- Industrial (royal blue)

- Residential (yellow)
- Waterfront Port (grey blue)
- Waterfront Residential (moss green)
- Waterfront Recreational (light bright green east of site)

The Official Plan identifies Business Park under the "Employment" policy section, under section 6.4.2 General Policies the policy states that:

6.4.2.4 *Council shall require all development within areas designated as Industrial and Business Park to be subject to site plan control, with the exception of Public Open Space uses.*

The Official Plan also states a similar site plan control policy for new development within the Mixed Use Node under section 6.9.2.6:

6.9.2.6 Council will require all development within areas designated Mixed Use Node to be subject to site plan control.

The Mixed Use Node designation indicates a vision of development as a compact cluster of commercial, office, institutional, open space and residential uses (note that the Project Site is zoned as a Commercial zone in the Zoning By-law 8600). Maximum residential building heights are set at four storeys. These areas are generally within 100 metres of arterial and collector road intersections, however, the Official Plan notes that the size and scale of these Nodes range throughout the City and are defined by the proximity of the non-residential uses to the intersection, such as the existing use of the Project Site. The nearest such intersection is Drouillard Road and Wyandotte Street East southwest of the Project Site and is approximately 90 metres distance as measured from the Project Site's nearest boundary point to the intersection, while the pedestrian distance would be 130 metres. A neighbourhood-scale public park, Cadillac Street Park, is located within this area to the southwest of the Project Site and is unlikely to be developed with the permitted uses of the Mixed Use Node designation. Within the Mixed Use Node policies, section 6.9.2.3.d indicates that new development shall be located where the surrounding development pattern is compatible with Mixed Use Node development.

As the proposed use is defined as 'Infrastructure' in the Official Plan, the following policy applies:

- 7.3.6 Utilities and Other Infrastructure Policies
- 7.3.6.5 Utility providers, including electric power supply companies, communication companies, and telecommunication companies shall be encouraged to consult with the Municipality and the affected residents during the planning of new facilities, where applicable.

As the Project Site is designated both Business Park and Mixed Use Node, the Official Plan permits industrial uses, and may permit hotels/motels, restaurants and health studios (to name a few), within the Business Park designation:

6.4.4.1 Uses permitted in the Business Park land use designation include: (b) selected industrial uses which: (i) do not create nuisances such as noise, dust, vibration or odour; (ii) confine industrial operations within a building and/or structure; and (iii) do not require outside storage. The Project will mitigate any nuisance it may create in accordance with Provincial and Federal regulations. The Project is contained within an 11 m high acoustic barrier designed to mimic the existing historic powerhouse façade materials and does not require outside storage.

The Business Park policies emphasize the desire for enhancement of the development into the "well landscaped setting of the business park" (policy 6.4.4.5.b). In terms of urban design, the following policy is applicable under 8.7 Built Form:

8.7.2.1 Council will ensure that the design of new development: (a) is complementary to adjacent development in terms of its overall massing, orientation, setback and exterior design, particularly character, scale and appearance;

Similarly, in Mixed Use Area designations, as noted in Chapter 8 Urban Design, decorative treatment of sidewalks, lighting fixtures to reinforce pedestrian orientation, and seating along roads are promoted and encouraged.

The Project will ensure that the structure is complementary to the existing major facilities in the area.

ZONING BY-LAW 8600

The Project is consistent with, and conforms to, the regulations of Zoning By-law 8600.

Within Zoning By-law 8600, the Subject Lands are zoned Commercial District 4 (CD4.5). The power generation facility is defined as a "Public Utility" in Section 3: Definitions:

PUBLIC UTILITY means Hydro One or any corporation that distributes or provides any one or more of the following services or commodities to the public: cable television, electricity, internet, natural gas, telegraph, telephone, water, wireless telephone (cell phone).

Section 17.5 Commercial District 4.5 (CD4.5) identifies the following applicable regulations for the Project Site:

- 17.5.1 Permitted Uses *Public Utility Pumping Station Sewage Treatment Plant Sewage Any use accessory to the preceding uses*17.5.5 Provisions
 - .4 Building Height maximum 20.0 m

Section 17.5 provides no further regulations in regards to yard setbacks or lot coverage.

Zoning By-law 8600 also contains Section 5 – General Provisions, 5.8 City of Windsor, Public Authority & Public Utilities – Permitted Uses, wherein regulations pertaining to Public Utility are also provided.

5.8.5 PUBLIC UTILITY *A lot may be used for any use of a public utility provided that:*

- *I.* All buildings comply with the least restrictive provisions of the zoning district in which they are located;
- 3. Any structure, not including a building, may be erected for the purposes of the distribution of a service or commodity provided by a public utility, without restriction as to height, except in any residential district where the maximum height of the structure shall be 20.0 m; and
- 5. In any development reserve district or residential district, an outdoor storage yard is prohibited. In all other zoning districts, an outdoor storage yard is permitted.

CONCLUSION

In regards to the Project land use within the City of Windsor, the Project will:

- Not have a negative effect on existing or future residential, commercial or institutional land uses within 500 metres of the Project Site;
- Be consistent with the Provincial Policy Statement, 2020 and the draft Proposed Provincial Planning Statement; and
- Be consistent with the City of Windsor's Official Plan land use policies and Zoning By-law 8600 regulations.

Thank you.

MHBC

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