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**Item No. 18.1**  
**Halifax Regional Council**  
**October 1, 2024**

**TO:** Mayor Savage Members of Halifax Regional Council  
**FROM:** Cathie O'Toole, CAO  
**DATE:** September 26, 2024  
**SUBJECT:** Halifax Water - Cogswell District Energy System – Non-Mandatory Zone

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**RECOMMENDATION**

It is recommended that that Halifax Regional Council:

1. Authorize the Halifax Regional Water Commission to operate the Cogswell District Energy System within the “non-mandatory” connection zone as depicted in Figure 2 of the Halifax Water report dated August 28, 2024, in addition to the existing mandatory connection zone.
2. Request the Mayor to write a letter to the Province of Nova Scotia requesting legislative amendments to the Halifax Regional Municipality Charter and Halifax Regional Water Commission Act, to:
  - a. expand the boundary of the Cogswell District Energy System to include the “non-mandatory” connection zone depicted in Figure 2 of the Halifax Water report dated August 28, 2024;
  - b. authorize the municipality to pass by-laws with respect to both the mandatory and nonmandatory connection zones; and
  - c. extend the application of Halifax Water’s statutory limitations of liability to the provision of incidental business, including district energy services.

**BACKGROUND**

The Cogswell District Energy System (DES) is currently under construction. Upon completion it will transfer waste energy to and from the sewage treatment system to the distribution piping system to be used to heat and cool nearby residential and commercial buildings.

Halifax Water has obtained approval from both the UARB and Regional Council to operate the Cogswell DES within the Cogswell District Energy Boundary. Within this boundary, connection is mandatory (in accordance with By-Law D-500). In order to serve customers outside this boundary, Halifax Water requires further approvals from Regional Council and the UARB.

## **DISCUSSION**

At the September 26, 2024 Halifax Water Board General Meeting the Board considered a report on, Cogswell District Energy System – Non-Mandatory Zone (Attachment 1) and passed the recommended action. This report and recommendation is presented for Regional Council’s consideration.

## **FINANCIAL IMPLICATIONS**

Financial implications are outlined in the attached staff report dated August 28, 2024.

## **RISK CONSIDERATION**

Risk consideration is outlined in the attached staff report dated August 28, 2024.

## **COMMUNITY ENGAGEMENT**

The proposed District Energy System was part of the overall Cogswell Redevelopment public consultation process. The concept of the Cogswell District Energy System was discussed during the HalifACT 2050 stakeholder engagement sessions.

## **ENVIRONMENTAL IMPLICATIONS**

Environmental implications specific to the Cogswell DES have been addressed in previous reports to Council. In general, district energy systems offer consumers energy at a price and carbon emission intensity less than conventional fuels. As with any on-site energy system, district energy offers consumers both energy security and resiliency from climate impacts. Expanding the connection zone for the Cogswell DES will further the benefits of this clean, renewable thermal energy consumption in the area.

## **ALTERNATIVES**

Regional Council could choose not to approve Halifax Water’s request to facilitate voluntary connections to the Cogswell District Energy System and/or not to request the proposed legislative amendments.

This is not recommended for the reasons outlined in the Halifax Board Report dated August 28, 2024.

## **LEGISLATIVE AUTHORITY**

***Halifax Regional Municipality Charter, SNS 2008, c 39:***

3(jb) “Cogswell District Energy Boundary” means the area delineated in the map in Schedule D to this Act;

...

3(va) “district energy system” means a system designed to supply heating or cooling by continuously circulating, to more than one building, through a system of interconnected pipes, steam or water that is heated or cooled using thermal energy recovered from wastewater;

...

188 (1) The Council may make by-laws, for municipal purposes, respecting ...

(la) subject to the regulation of the Board, the establishment and operation of a district energy system within the Cogswell District Energy Boundary;

(lb) the authorization of the General Manager of the Halifax Regional Water Commission to exercise the powers and authorities of the General Manager set out in Sections 9 and 10 of the Halifax Regional Water Commission Act in respect of the district energy system;

(lc) the authorization of the Council to require, where the Council considers it necessary or advisable, that a building or other structure, built within the Cogswell District Energy Boundary after the coming into force of the by-law, be connected to the district energy system;

***Halifax Regional Water Commission Act, SNS 2007, c. 55:***

7 (1) Subject to the supervision and regulation of the Board pursuant to the Public Utilities Act, the Commission may  
acquire, own or operate

- (i) water systems, facilities and utilities,
- (ii) wastewater systems, facilities and utilities, and
- (iii) stormwater systems, facilities and utilities,

for the purpose of providing water, wastewater and stormwater services to customers located within the Regional Municipality;

...

(c) subject to the approval and direction of the Council, engage in business activities incidental to any of the operations of the Commission referred to in clause (a) or (b), including the generation of heat or electricity in whole or in part from by-products of any of those operations;

**ATTACHMENTS**

Attachment 1 – Halifax Water Report, dated August 28, 2024 - Cogswell District Energy System – Non-Mandatory Zone

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Report Prepared by:   Iain MacLean, Municipal Clerk

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**TO:** Colleen Rollings, P.Eng., PMP., Chair and Members of the Halifax Regional Water

**SUBMITTED BY:**



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\_\_\_\_\_, Director of Engineering & Capital Infrastructure

**APPROVED:**



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Kenda MacKenzie, P.Eng., Acting CEO & General Manager

**DATE:** August 28, 2024

**SUBJECT:** Cogswell District Energy System – Non-Mandatory Zone

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**ORIGIN**

1. Halifax Regional Municipality (HRM) Cogswell Redevelopment project initiation.
2. Halifax Water Board Report, Item 7, June 30, 2016
3. Halifax Water Board Report, Item 6-I, June 21, 2018
4. Halifax Water Board Report, Item 9-I, January 19, 2019
5. Halifax Water Board Report, Item 6-I, March 28, 2019
6. Halifax Water Board Report, Item 1, August 28, 2019
7. Halifax Water Board Report, Item 5C, January 30, 2020
8. Halifax Water Board Report, Item 5.2, March 24, 2022

**RECOMMENDATION**

It is recommended that the Halifax Water Board direct the A/General Manager to request that Halifax Regional Council:

1. Authorize the Halifax Regional Water Commission to operate the Cogswell District Energy System within the “non-mandatory” connection zone as depicted in Figure 2 of this report, in addition to the existing mandatory connection zone.
2. Direct the Mayor to write a letter to the Province of Nova Scotia requesting legislative amendments to the *Halifax Regional Municipality Charter* and *Halifax Regional Water Commission Act*, to:

- a. expand the boundary of the Cogswell District Energy System to include the “non-mandatory” connection zone depicted in Figure 2 of this report;
- b. authorize the municipality to pass by-laws with respect to both the mandatory and non-mandatory connection zones; and
- c. extend the application of Halifax Water’s statutory limitations of liability to the provision of incidental business, including district energy services.

**BACKGROUND**

The Cogswell District Energy System (DES) is currently under construction. Upon completion it will transfer waste energy to and from the sewage treatment system to the distribution piping system to be used to heat and cool nearby residential and commercial buildings. This DES will have a lower energy and utility cost and significantly lower greenhouse gas emissions than the other common heating sources including electric baseboard, air source heat pumps, gas, and oil heating.

The “Cogswell District Energy Boundary” is an area delineated by the map, attached as Schedule D to the HRM Charter (Figure 1). The HRM Charter allows the municipality to pass certain by-laws with respect to the DES within the Cogswell District Energy Boundary, including the authority to require mandatory connections. On August 18, 2020, HRM adopted [By-law D-500](#) which requires all new buildings constructed within the Cogswell District Energy Boundary to be connected to the DES.

In a letter to the HRM CAO on August 22, 2023, Halifax Water stated that property owners outside the Cogswell District Energy Boundary have expressed interest in future voluntary connections. In this letter Halifax Water proposed creating a second distinct boundary in which connection to the DES would be optional (Figure 2) and requested support and assistance from HRM in expanding this boundary.



Figure 1, left: Cogswell District Energy Boundary per s. 3(jb) of HRM Charter.

Figure 2, right: Existing mandatory Boundary (red); Proposed Non-mandatory Boundary (blue).

On August 6, 2024, HRM announced the Downtown Gateway Comprehensive Plan. The Downtown Gateway area (Figure 3) is approximately 5.87 hectares of underutilized municipally owned lands located within the Halifax's North End, and generally bounded by Cogswell Street, Rainnie Drive, and Gottingen Street (including the Halifax Regional Police HQ property). The Downtown Gateway is included in the request to expand the Cogswell DES Boundary and includes potential customers that have previously expressed interest in connecting to the DES. The Downtown Gateway Plan, along with Halifax Water's request to expand the Cogswell District Energy Boundary, represents a unique generational opportunity to further expand and connect future developments to the DES.



Figure 3: Downtown Gateway Conceptual Master Plan

### **DISCUSSION**

Subject to the supervision and regulation of the Utility & Review Board, Halifax Water is authorized pursuant to subsection 7(1)(a) of the *Halifax Regional Water Commission Act*, to own or operate water, wastewater and stormwater systems and facilities for customers within HRM. Subsection 7(1)(c) provides that that Halifax Water may also, subject to the approval and direction of Regional Council, engage in incidental business activities, including the generation of heat or electricity in whole or in part from by-products of any of those operations.

Halifax Water has obtained approval from both the UARB and Regional Council to operate the Cogswell DES within the Cogswell District Energy Boundary. Within this boundary, connection is mandatory (in accordance with By-Law D-500). In order to serve customers outside this boundary, Halifax Water requires

further approvals from Regional Council and the UARB. In addition to obtaining these approvals, there are certain shortcomings in the existing legislative framework that should be addressed.

In 2017, through [Bill 82](#), the Province of Nova Scotia made amendments to the *Halifax Regional Municipality Charter* granting Regional Council the authority to pass certain by-laws with respect to the DES within the “Cogswell District Energy Boundary”. As described in the explanatory note for Bill 82, the primary purpose of the Charter amendments was to provide “authority for Halifax Regional Municipality to require that any future development in the Cogswell Redevelopment Area be connected to a district energy system to be established for that area.” Council’s jurisdiction is limited to the “Cogswell District Energy Boundary”, as that area is defined in the *HRM Charter*. Council cannot, therefore, currently amend By-Law D-500 to apply beyond the existing boundary.

On [August 18, 2020](#), HRM adopted the [District Energy By-Law \(D-500\)](#). The primary functions of By-law D-500 are to:

- Mandate the connection to DES within the Cogswell District Energy Boundary; and
- Grant the General Manager of Halifax Water the “powers of the engineer” within the Cogswell District Energy Boundary.

Section 9 and 10 of the *Halifax Regional Water Commission Act* authorizes the General Manager of Halifax Water to exercise the powers, privileges and immunities of the Municipal Engineer under the HRM Charter (including the power to enter a property for the purpose of inspection or enforcement), but only with respect to “water, watershed protection, wastewater and stormwater services, systems and facilities that are within the subject-matter and territorial jurisdiction of the Commission.” Section 9 and 10 of the *Halifax Regional Water Commission Act* makes no reference to “incidental business activities” such as a district energy system. Subsequent to the passing of Bill 82, clause 188(1)(b) of the *HRM Charter* now allows HRM to pass by-laws authorizing the General Manager of the Halifax Regional Water Commission to exercise the powers and authorities of the General Manager set out in Sections 9 and 10 of the *Halifax Regional Water Commission Act* in respect of the district energy system -- but again, HRM’s jurisdiction is limited to the Cogswell District Energy Boundary as it is currently defined. Without a further legislative amendment, the General Manager of Halifax Water would not expressly have the powers of the Municipal Engineer with respect to the DES within the voluntary connection zone.

Additionally, it is unclear whether the limitations of liability in the *Halifax Regional Water Commission Act*, as currently drafted, would be applicable to Halifax Water’s district energy activities. Both HRM and Halifax Water benefit from certain limitations of liability in their respective statutes. For example, sections 26 through 32 of the *Halifax Regional Water Commission Act* exempts Halifax Water in certain circumstances from liability regarding negligence, breakage or interruption, nuisance, failure to provide or maintain a service, overflows and inspections. Several of these provisions, however, state that they pertain only to water, wastewater and stormwater services.

### **BUDGET IMPLICATIONS**

The scope of work for HRM’s contract with Dexter Construction for the Cogswell project (Tender #21-003) includes the installation of DES infrastructure for Halifax Water. Halifax Water is paying for the cost of the DES infrastructure within the mandatory Cogswell District Energy Boundary; however, HRM is currently floating the cost of that portion of the DES infrastructure that extends outside of the mandatory boundary (approximately \$710,000). The UARB determined that it was premature for the cost of that portion of the DES infrastructure to be borne by mandatory connection ratepayers. Halifax Water will reimburse HRM for these costs if, when, and to the extent that it receives regulatory approval to do so. Halifax Water requires legislative amendments and HRM’s approval to expand its operations to the non-mandatory zone in order to make a new application to the UARB.

The District Energy Utilities' financial model has been updated to confirm the non-mandatory zone expansion is financially prudent. Including non-mandatory buildings currently planning connection that front DES mains further improves the project's financial position.

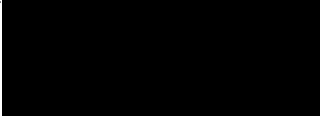

**RISK**

In November 2021, Halifax Water and the Province executed a funding contribution agreement under the Investing in Canada Infrastructure Program (ICIP), Green Infrastructure, Climate Change Mitigation. This agreement included an estimated contribution by the Province of Nova Scotia and Canada of \$10,263,267, or 73.33% of the total expected project cost. This agreement requires that the project be completed by the current target date of March 31, 2027, and includes commitments to connect the DES to the six new buildings identified within the mandatory connection boundary, the start of operation of the DES, and was based on achieving or exceeding the project's GHG emission reduction targets. Failure to achieve these milestones may result in a partial or complete loss of funding, significantly impacting the project's financial position. Expansion of the Cogswell District Energy Boundary will help to improve project economics and will help to strengthen the project's already positive financial position.

It is possible that some of the issues identified in this report can be addressed through the Rules & Regulations that will eventually be approved by the UARB or through customer agreements with property owners in the non-mandatory area. It would be preferable, however, to obtain clarification through the legislative amendments referenced above, particularly as it relates to Halifax Water's limitations of liability.

**ATTACHMENTS**

1. Halifax Water Letter to HRM CAO, August 23, 2023

Report Prepared by:	 James Chisholm, P. Eng., Project Engineer - District Energy
Financial Reviewed by	 Louis de Montbrun, CPA, CA Director, Corporate Services/CFO



August 22, 2023

Ms. Cathie O'Toole  
Chief Administrative Officer  
Halifax Regional Municipality  
PO Box 1749  
Halifax, NS, B3J 3A5

**Re: Cogswell District Energy System  
Expansion of the Cogswell District Energy Boundary**

Dear Ms. O'Toole,

This letter is to request the support and assistance from HALIFAX in expanding the current boundary for the Cogswell District Energy System.

Following the recent Nova Scotia Utility and Review Board Decision (M10525) to approve the Cogswell DES, Halifax Water is further developing plans for the DES within the boundary as depicted in Appendix D of the *Halifax Regional Municipality Charter (DES Boundary)*. This appendix is attached for ease of reference.

Halifax Water has had numerous inquiries regarding possible connection of mixed-use commercial/residential developments located outside the current DES Boundary.

Halifax Water is requesting support and assistance from HALIFAX in expanding the DES Boundary as noted in the attached Proposed Expanded DES Boundary. We propose two distinct service areas for the Cogswell DES:

1. The current DES boundary (shaded in red), which includes mandatory connection as per By-Law D-500;
2. The secondary DES boundary (shaded in blue), which would not mandate connection.

Expanding the boundary to include the secondary location presents a unique opportunity that will allow Halifax Water to optimize the economic, social, and environmental benefits to the local community, while also further demonstrating both Halifax Water's and HALIFAX's commitment to HalifACT 2050 and addressing climate change in HRM and in Nova Scotia.

Halifax Water will work with HALIFAX staff in whatever manner determined appropriate in order to effect the suggested changes to the DES Boundary. We look forward to hearing from you and to collaborating on this important initiative.

Yours truly,

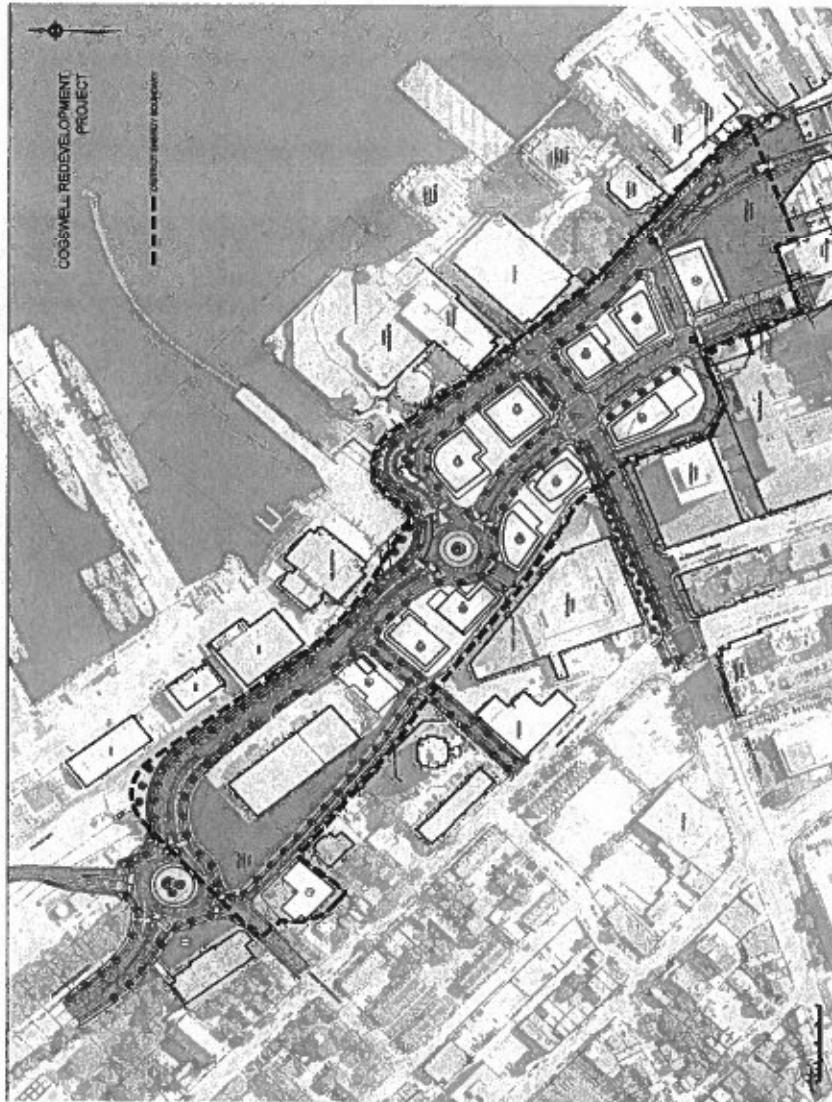


Tareq Al-Zabet, Ph.D., CRSP, P.Geo  
Chief Executive Officer and General Manager, Halifax Water

Attachments:

1. HRM Charter Chapter 39 of the Acts of 2008 - Schedule D
2. Proposed Expanded DES Boundary

SCHEDULE D



2018, c. 9, s. 6.

APRIL 12, 2023

