## Feedback Form

## Regional Electricity Planning in the London Area – April 1, 2025

## Feedback Provided by:

Name: Katherine Sparkes

Title: VP, Grid Solutions

Organization: Enwave Energy Corporation

Email:

Date: April 15, 2025

To promote transparency, feedback submitted will be posted on the <u>London Area engagement</u> webpage unless otherwise requested by the sender.

The Independent Electricity System Operator (IESO) is seeking feedback on the scoping assessment report. A copy of the report and a narrated video presentation can be accessed from the <u>engagement</u> <u>web page</u>.

Please submit feedback to engagement@ieso.ca by April 15, 2025.

Торіс	Feedback
What additional information should be considered as part of the Scoping Assessment?	Please clarify if the Nelson TS Station Capacity need identified in Table 1 of the <i>Draft London Area Scoping Assessment Outcome Report</i> (Jan. 2025) has been addressed by the Nelson TS station refurbishment



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	completed in 2022, OR if there continues to be a medium-term need at Nelson TS.
What additional considerations, based on local developments, should be taken into account for the areas identified as requiring further study?	As part of the scoping assessment and demand forecast, Enwave encourages the IESO and TWG to consider the specific type of loads associated with the forecasted growth, where those loads are anticipated to develop (geographically), land-use densities and nearby land uses, in order to identify opportunities (as part of the options assessment) where energy needs for these loads may be served more cost-effectively by non-electricity solutions e.g. district energy, thermal energy storage, heat recovery heat pumps to transfer "waste heat" from one land use, building or system (e.g. municipal waste water) to another land use or vice versa. The base case or reference forecast for recent IRRP demand forecasts have generally assumed stand-alone in-building electric heat pumps as the predominant future heating solution. Enwave encourages and would welcome the opportunity to work with the IESO and TWG to identify and assess district energy options and related technologies as potential cost-effective, lower electricity-peak demand, lower electricity consumption alternatives to stand-alone in building heat pumps.
What other areas or specific considerations should be examined through regional planning?	Enwave recommends that the IESO and Technical Working Group (TWG) include an assessment of innovative procurement approaches that can recognize and unlock the value of district energy and low carbon thermal energy solutions to reduce and/or meet electricity system needs – including energy, capacity and the potential for transmission and distribution infrastructure deferral. Such procurement approaches could include: 1) Long term capacity contracts for large-scale dispatchable loads - including District Energy systems that commit to electrifying their systems and reducing demand at peak (e.g. through fuel switching) in response to IESO market signals. This same approach could also ensure that new large-scale loads invest in electricity solutions to reduce/meet their own needs, therefore reducing the risk associated with load growth uncertainty in the region and the associated risk to all electricity ratepayers that

Topic	Feedback
	supply/infrastructure is over or under built. 2) Avoided Capacity contracts for renewable/clean combined heat and power (CHP)/thermal storage (e.g. energy from waste or biomass CHP) or heat recovery (e.g. using waste heat from a data centre to heat a nearby building or industrial process). These solutions produce low carbon thermal energy for building/process heating that offsets electricity system capacity that would otherwise need to be established by the IESO if the end uses served by this thermal energy were instead electrified. A long term Avoided Capacity contract would recognize the value of this thermal energy to the electricity system with a capacity payment that reflects the value of this avoided capacity to the electricity grid and shares the cost and benefit of these thermal energy assets between electricity ratepayers and thermal energy customers.

## General Comments/Feedback

Enwave expresses its appreciation to the IESO for the initiation of a comprehensive and inclusive engagement process for the development of the London Area Integrated Regional Resource Plan (IRRP). Enwave's affiliate – London District Energy (LDE) owns and operates the district energy system (DES) that serves London's downtown core. LDE also owns and operates two combined heat and power (CHP) facilities that provide heating and cooling to LDE's district energy customers, and up to ~30 MW of generation under contract to the IESO to support local and provincial reliability needs. LDE is proud to be part of and serve the London Area.

Enwave and LDE welcome the opportunity to work with the IESO and TWG to assess how district energy, thermal energy storage, and local generation can cost-effectively and reliably reduce and meet electricity needs in the London Region. These solutions could help address the London Area's electricity needs in several ways, including reducing generation the IESO would otherwise need to procure and addressing capacity needs identified at specific transformer stations. For example, Enwave and LDE would welcome the opportunity to talk with the IESO and TWG about potential procurement mechanisms that would allow local generation to address near-term capacity constraints at specific Transmission Stations while also providing capacity to meet provincial peaks.

In the narrated presentation accompanying the Scoping Assessment Outcome report, the IESO notes that recent economic pressures have made the pace and magnitude of electricity demand growth uncertain. The IESO indicates that it will develop multiple demand growth scenarios and use these scenarios to identify "no regret" investments that will be needed across all scenarios and will avoid over or underinvesting in new electricity infrastructure. Enwave applauds this no regrets approach and observes that the surest way to avoid over or under building in the face of demand growth uncertainty is to ensure that existing local energy resources are fully leveraged to meet electricity

system needs, and that loads – like dispatchable, electrified District Energy – are incented with appropriate contracting approaches to be responsive to electricity system needs.

For more information about Enwave and LDE, please visit: <u>Global. Reliable. Sustainable - Enwave Energy Corporation</u>