



sustainable • innovative • award winning

Developer Requirements



CONTACT INFORMATION

Glenn Stainton
Vice-President Operations
Lonsdale Energy Corporation
Phone: 604-983-7305
Email: gstainton@lonsdaleenergy.ca
info@lonsdaleenergy.ca
www.LonsdaleEnergy.ca

Since 2004, the award winning Lonsdale Energy Corporation has been providing customers with dependable, clean, competitively priced energy. By heating our community efficiently, we significantly reduce the demand for electricity and support global and local climate action efforts.

This innovative district energy system produces hot water at a series of mini-plants within the City of North Vancouver and distributes the heat energy through underground pipes to the buildings connected to the system. The miniplant system provides enhanced reliability and fuel flexibility to all the buildings connected to the network.



Before Development

In accordance with Bylaw 7575, as amended periodically, any new building larger than 1,000 square meters is required to connect to the district heating system for heating purposes unless it is determined by the City's Director of Finance that the cost to the City for providing the service would be excessive. In cases where projects are required to connect to the district heating system, please contact LEC for a copy of the detailed design guidelines.

Required Equipment

Buildings served by the system will require an energy meter station and heat exchanger. The station and exchanger are typically located in a space provided in the building's mechanical room. Also required in this space are a telephone line and/or Internet connection for communication with the energy meter. The approximate size that is required for an energy meter station, including the heat exchanger, is 2m x 3m.

Depending on location and size of the building, some buildings may be required to host a mini plant location. Such a requirement is determined during the development phase of a project. Please contact LEC directly to clarify your project.

Heat exchangers, energy meter stations, and piping from the energy distribution to the heat exchangers and meters are provided by LEC. All other equipment in the building is provided by the building owner. A charge may apply in cases where a mechanical room is remotely located.

Performance Requirements

The key performance requirements for buildings connected to LEC include the following:

- Hydronic or hot water heat must be used in the building heating systems
- Both the space heating and domestic hot water systems must be heated by the LEC system
- Domestic hot water is to be heated to a minimum of 140 F under all load conditions
- The system must be designed with a high temperature differential to ensure that all building heating and domestic hot water needs can be met and that high efficiencies are realized
- There is to be a maximum return water temperature of 110 F under all load conditions on the building side of the system
Note: The LEC system is designed to provide 170 F to the customer side of the heat exchanger for heating purposes in the building
- In-building mechanical control systems must be configured to allow the exchange of information between the LEC and in-building system; in-building control systems must be LON communication format-based

