

## NEW CONSTRUCTION PROGRAM ENERGY STUDY PROPOSAL REQUIREMENTS

**IMPORTANT:** The Energy Study proposal forms part of the application and must be submitted at the same time as the application. The proposal should be submitted on a separate page (or multiple pages as required), and should include all supporting documentation.

The following items must be included in a proposal to conduct an energy study (the requirements for the study itself are set out in the following section):

1. Qualifications of the firms involved and the key personnel in performing energy analysis and energy efficient design in the areas under consideration. Attach corporate profiles and/or staff resumes as appropriate.
2. Copy of schematic design or design development documents and drawings where available.
3. List the baseline building systems including a brief description of each. Indicate whether the fuel source for space and service water heating is from gas or electricity.
4. List the proposed building systems including a brief description of each. Indicate whether the fuel source for space and service water heating is from gas or electricity.
5. List the energy conservation measures to be evaluated including the associated baseline, and any issues or specific components to be reviewed. Baseline shall be in accordance with current good design practice, current BC Building Code, or other applicable codes, standards and guidelines (i.e. City of Vancouver Energy utilization By-Law).
6. Discuss the study methodology (including software package). Acceptable software for whole building analysis includes:
  - DOE2.1e (EnergyPro, VisualDOE, EE4 version 1.7)
  - DOE2.2 (eQuest, PowerDOE)
  - Energy Plus (DesignBuilder, Bentley Hevacomp Simulator V8i)
  - IES Virtual Environment
  - Bentley, Tas Simulator V8i
  - ESP-r
  - TRNSYS
  - Trane Trace 700 (Version 6.1 and higher)
  - Carrier E20-II HAP

Acceptable software for lighting (only) analysis includes the following and their up-dated release:

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| • AGI 32/ 1.1         | • AUTOLUX 6.2         |
| • GENESYS II          | • LIGHT 3.0           |
| • LIGHT STAR 3.20     | • LITE PRO 1.0        |
| • LIGHT WORKS PRO 4.5 | • LUMEN MICRO 7.5     |
| • LUXICON 2.2.8       | • MICRO-SITE-LITE 2.2 |
| • SIMPLY INDOOR 2.0   | • SIMPLE 3.20         |
| • VISUAL BASIC 2.0    | • VISUAL PRO 2.0      |
7. Total cost of the energy study (include a fee schedule, quantity surveyor fee, listing participants, all tasks along with hours and hourly rate).
  8. Participation in other initiatives e.g. LEED, etc.
  9. Other Contributions or potential contributions to the cost of the energy study.
  10. Request for energy study funding. NOTE: New Construction ("NC") study funding request is limited up to 50% of total energy study cost. Energy study funding request will be paid upon BC Hydro's approval of the Energy Study Report and start of construction.