

Clause embodied in Report No. 9 of the Administration Committee, as adopted by the Council of the City of Toronto at its meeting held on September 22, 23, 24 and 25, 2003.

43

Standardization of Temperature Set-Points and Lights-Out Policy in City-Operated Buildings

(City Council on September 22, 23, 24 and 25, 2003, amended this Clause by adding thereto the following:

“It is further recommended that the Commissioner of Corporate Services be requested to submit a report to the Administration Committee, in one year’s time, on the success of the Standardization of Temperature Set-Points and Lights-Out Policy in City-Operated Buildings and any further adjustments that may have to be made to the Policy.”)

The Administration Committee recommends the adoption of the following report (August 18, 2003) from the Commissioner of Corporate Services:

Purpose:

To establish a policy to standardize heating and cooling set-points in City-operated buildings, to establish higher cooling set-points during Smog Alerts and to ensure City-operated buildings turn off non-essential lights after business hours.

Financial Implications and Impact Statement :

There are no financial implications or impacts arising from this report. The implementation of the policy recommendations in this report will produce energy and cost savings.

Recommendations :

It is recommended that:

- (1) City departments responsible for operating City buildings will, where technically feasible:
 - (i) maintain buildings during the cooling season at no lower than 21 degrees Celsius (21° C) during business hours - except during Smog Alerts when the cooling set point should be increased and maintained at 24 degrees Celsius (24° C);
 - (ii) maintain buildings at no higher than 21 degrees Celsius (21° C) during the heating season; building temperature should be reduced by 4-5 degrees Celsius when buildings are unoccupied; and

- (iii) turn off all non-essential equipment when buildings are generally unoccupied; and
- (2) all City-operated buildings turn off non-essential lights when business is completed at the end of the day and during weekends.

Background:

At its regular meeting held on February 4, 5 and 6, 2003, the Council of the City of Toronto adopted, as amended, Clause No. 1 contained in Report No. 2 of The Administration Committee headed "Energy Management Program (EMP) for City Facilities".

Included in the EMP were the following recommendations:

- (1) establishing policies related to indoor temperature set-points for both heating and cooling and when City buildings are generally unoccupied; and
- (2) establishing a "lights out" policy whereby lights are turned off in City buildings after business hours.

The City's Environmental Plan has also set targets of reducing CO₂ emissions in City operations by 20 percent by the year 2005 and to reduce energy consumption in its facilities by 15 percent.

Comments:

Building Temperature Set-points:

Buildings under the management of Facilities and Real Estate (F&RE) are maintained year round at 21 degrees Celsius (21° C). In its Smog Alert Divisional Response Plan, F&RE has committed to increase cooling set-points in corporate buildings by three degrees Celsius (3°C) during a Smog Alert (i.e., from 21° C to 24° C). In order to maximize the reduction in air pollution emissions, it is important to create a policy that will insure that all departments responsible for operating City buildings mirror this commitment.

A corporate-wide policy will assist the City to:

- (i) be identified as an environmental leader in the area of building energy use reduction;
- (ii) meet Council directives to:
 - (a) reduce CO₂ emissions by 20 percent by the year 2005 (Environmental Plan);
 - (b) reduce energy use in City buildings and facilities by 15 percent by 2005 (Environmental Plan);
- (iii) reduce smog (when it is at its thickest and breathing is most difficult);

- (iv) support Public Health's recommendation that states "The modification of smog producing activities by City Divisions, Agencies, Boards and Commissions can help lessen the stress poor air quality has on high risk individuals."; and
- (v) reduce its buildings' energy costs.

It is recognized that the adjustments to heating and cooling set-points may not be possible, for various reasons, in all buildings. In some buildings, for example, it may not be possible to adjust or set temperatures as required due to the type or lack of adequate controls. In those cases best efforts to meet the policy is expected.

The Occupational Health, Safety and Workers Compensation unit of the City's Human Resources Division has advised that it is acceptable for the indoor temperature of office buildings in summer to be in the range of 23 to 26 degrees Celsius and the winter range to be 20 to 24 degrees Celsius.

Lights Out Policy:

The public expects the City to show leadership in areas like turning off lights when the business day is over. Creating a policy whereby all City buildings, where feasible, will turn off lights when business has concluded will:

- (i) identify the City as a leader in energy reduction;
- (ii) reduce energy, improve air quality and reduce emissions;
- (iii) reduce the demand for energy;
- (iv) address the concerns of taxpayers who point to the fact that City buildings' lights are "left on all the time";
- (v) reduce the high incidence of bird deaths downtown in highly lit areas; and
- (vi) allow the City to challenge the commercial sector to do the same.

The general practice in City buildings is to turn lights off after business hours. However, this practice should be enforced by the policy described above to underline its importance and to encourage staff to assist the City in meeting its environmental and energy saving targets.

This report was reviewed by the Interdepartmental Environment Team (TIE) in May 2003 and its suggestions have been incorporated.

Conclusions:

The City has a good track record of improving and promoting energy efficiency practices in its buildings. While the above recommendations are included, in general, in the City's usual operating practices, the policy will encourage consistency and will assist the City to meet its environmental and energy savings targets.

Contacts:

Jodie Parmar, Director
Business and Strategic Innovation
Facilities and Real Estate Division
Corporate Services Department
Tel: (416) 338- 1295
Fax: (416) 392-4828
e-mail: jparmar@toronto.ca

Bruce Bowes, P.Eng, Executive Director
Facilities and Real Estate Division
Corporate Services Department
Tel: (416) 397-4156
Fax: (416) 392-1880
e-mail: bbowes@toronto.ca

Jim Kamstra, Manager
Energy and Waste Management Office
Business and Strategic Innovation
Facilities and Real Estate Division
Corporate Services Department
Tel: (416) 392-8954
Fax: (416) 392-4828
e-mail: jkamstra@toronto.ca