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<th>Date:</th>
<th>February 26, 2008</th>
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<tr>
<td>To:</td>
<td>City Council</td>
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<td>From:</td>
<td>Acting Chief Planner and Executive Director, City Planning Division</td>
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<td>Wards:</td>
<td>All</td>
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<td>Reference Number:</td>
<td>cc080012</td>
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SUMMARY

At its meeting of February 13, 2008, Planning and Growth Management Committee received correspondence from Enbridge Gas Distribution, recommending that the proposed zoning by-law to permit renewable energy devices and cogeneration devices be modified to include some of Enbridge’s proposed revisions.

The purpose of this report is to respond to the Enbridge proposals.
RECOMMENDATIONS

The City Planning Division recommends that:

1. The proposed zoning by-law amendment to permit renewable energy devices and cogeneration devices not be revised as proposed by Enbridge Gas Distribution.

2. That Council enact the proposed zoning by-law amendment to permit renewable energy devices and cogeneration devices as drafted.

Financial Impact
The recommendations of this report will have no financial impact beyond what has already been approved in the current year’s budget.

DECISION HISTORY

At its meeting of February 13, 2008 Planning and Growth Management held a public meeting under the Planning Act, to deal with the passage of a proposed zoning by-law to permit on all lands within the City of Toronto energy production and distribution using renewable energy devices and cogeneration devices.

At that meeting the Planning and Growth Management Committee passed the following motion number 2:

The Planning and Growth Management Committee:

2. referred the communication dated February 8, 2008 from Ben Hamilton of Enbridge Gas Distribution to the Acting Chief Planner and Executive Director, City Planning, for review and report to City Council on March 3, 2008.


ISSUE BACKGROUND

Enbridge Gas Distribution is attempting to use the proposed by-law to expand the range of permissions to include devices and uses that fall outside the scope of the work done for the preparation of the current proposed renewable energy and cogeneration zoning by-law.
The three modifications being sought by Enbridge Gas Distribution are:

1. Modify the cogeneration definition to include chilled water
2. Add a definition and permission for ‘Non-combustion Technology’
3. Specifically state in the by-law the location permission for cogeneration devices.

**COMMENTS**

**Enbridge Proposals**

1. **Cogeneration Definition to Include Chilled Water**

   Enbridge proposed that the definition of cogeneration should be expanded to include chilled water as a production of cogeneration technology. The proposed by-law definition uses the term ‘thermal energy’ and since thermal applies to both hot and cold temperatures a revision to the proposed by-law is not necessary. The request to use chilled water is also problematic since water may not be the conductive medium used to transport the thermal energy.

2. **‘Non-combustion Technologies’**

   Enbridge proposes that the by-law include permission for non-combustion technologies. These technologies would include but not be limited to: fuel cells, waste energy expander generators and heat recovery generators.

   The types of technologies listed by Enbridge reflect activities that overlap into other areas of land use. For example, heat recovery could be included in cogeneration and fuel cells might simply be a manufacturing activity similar to the making of a battery.

   Enbridge’s proposed change to include this type of technology is outside of the focus of the report and the proposed by-law. In addition, the scope of non-combustion technology is quite broad, and it would be difficult to prepare a by-law that would adequately encompass all forms of non-combustion technology while establishing appropriate zoning regulations to ensure that necessary health and safety matters are addressed.

3. **Location of Cogeneration Devices**

   The staff report indicates that in non-residential areas the cogeneration devices may be located outside of a building. Enbridge wishes to see that statement included in the by-law. Staff’s position is that the wording addition is not required. Since the by-law is silent on the matter, it does not create a restriction on whether the device can be located inside or outside of a building.
CONCLUSIONS

The concerns raised by Enbridge Gas Distribution involving ‘Cogeneration Energy’ and its associated devices are addressed by the bylaw as drafted. The concerns with respect to ‘non-combustion technologies’ requires further study in order to fully understand the nature and scope of their impacts at a City wide scale.

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SIGNATURE

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Gary Wright
Acting Chief Planner and Executive Director
City Planning Division

ATTACHMENTS

1. Correspondence from Enbridge Gas Distribution

[P:\2008\Cluster B\PLN/cc080012]
Attachment 1:

Email Correspondence from Enbridge Gas Distribution

>>> Ben Hamilton <Ben.Hamilton@enbridge.com> 08 February 2008 15:12 >>>

Dear Coun. Kelly,

On behalf of Enbridge Gas Distribution, I wanted to provide the following recommendations to strengthen the proposed Green Energy by-law. This by-law would be the first of its kind in Ontario, and would form a key part of the City's leadership on environmental issues.

In regards to Section 1, there are a variety of cogeneration technologies that produce both electricity and chilled water, but not thermal energy. These electricity/chilled water applications produce the same kind of high-efficiency outcomes as the more typical electricity/heat technologies. Some technologies also produce all three - Electricity, heat and chilled water. As such, we would recommend a slight revision as follows:

Sec. 1

3. "cogeneration energy" means the simultaneous production of electricity and either thermal energy and/or chilled water from the same process.

The by-law should also include a definition of "non-combustion technology" to stand alongside renewable and cogeneration. This would open the doors to a number of environmentally-friendly technologies that would support the City's and the Ontario Power Authority's objectives on emission reductions. We would recommend wording as follows, with the appropriate changes later in the text to include it alongside renewable and cogeneration:

Sec. 1

(4) "Non-combustion technologies" are technologies that produce energy without the combustion of fuel, which includes, but is not limited to, fuel cells, waste energy expander generators and heat generators that recover energy from a thermal process to generate electricity.

Page 7 of the staff report states "In addition, in residential areas the cogeneration devices must be located inside a principal building on the site. In non-residential areas the cogeneration device may be located outside the building subject to all other applicable zoning requirements." Enbridge strongly agrees with this position, and would recommend that it be included in Section 2 of the by-law itself.

Please let us know if you have any questions or if we can provide any clarifications. We wish you every success in passing this important by-law on February 13.

Sincerely,

Ben Hamilton
Manager, Municipal Relations
Enbridge Gas Distribution Inc

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