

**Ministry of Agriculture,  
Food and Rural Affairs**

**Ministère de l'Agriculture,  
de l'Alimentation et  
des Affaires rurales**



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## **Food Safety and Environmental Policy Branch**

June 30, 2009

Kirsten Walli  
Board Secretary  
Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street, Suite 2700  
Toronto, Ontario M4P 1E4

Dear Ms. Walli:

Thank you for the opportunity to comment on the proposed amendments to the Distribution System Code (DSC) File #**EB-2009-0077** related to the connection of renewable energy generation facilities to electricity distribution systems.

In keeping with the government's policy priority to encourage renewable energy generation projects, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) strongly supports the connection of renewable energy generation facilities to the electrical grid. Many of these projects not only generate renewable electricity, but also, in the case of biogas systems in particular, have the following co-benefits: additional reductions in greenhouse gas emissions (e.g., methane destruction); reduced pathogen risks from manure; reduced odour emissions from manure that can affect rural areas; improved use of organic byproducts for energy and fertilizer replacement; stimulation of rural economic development; waste diversion from landfill; and increased agri-food sector competitiveness.

Given OMAFRA's particular interest in and expertise with biogas systems:

**OMAFRA supports the proposed revised approach to assigning cost responsibility between a distributor and a generator in relation to renewable generator connections to distribution systems.**

../2



OMAFRA notes that the Board has divided this revised approach into three components:

- **“Connection assets”**: These are defined in the Board’s proposal as “that portion of the distribution system used to connect a customer to the existing main distribution system, and consist of assets between the point of connection on a distributor’s main distribution system and the ownership demarcation point with the customer.” The Board proposes that the costs for connection assets be paid by the generator.
  - **OMAFRA concurs with this proposal.**
- **“Expansion”**: This is defined in the Board proposal as “an addition to a distribution system in response to a request for additional customer connections that otherwise could not be made; for example, by increasing the length of the distribution system.” An upgrade to a three-phase line from single-phase or a higher-voltage line conversion are examples cited in the Board proposal. The Board proposes that costs for an “expansion” up to a cap of \$90,000 per megawatt (MW) be covered by the distributor, with the remaining costs covered by the generator.

OMAFRA is concerned that the cap at its present dollar amount does not support smaller systems that have a high operating capacity, such as biogas systems. The following examples explain our concerns:

Example 1:

A 300-kW farm-based biogas system needs to upgrade one kilometre of line to three-phase line costing \$175,000. This farm would need to pay \$175,000 – 27,000 [ $90,000 \times 0.30$ ] = \$148,000 of the cost. Operating 8,000 hours per year, this system produces 2,400 MWh of reliable, dispatchable, renewable electricity per year.

Example 2:

A 1-MW wind energy system needs to upgrade one kilometre of line to three-phase costing \$175,000. The wind energy system would need to pay \$175,000 – 90,000 = \$85,000 of the cost. This system operates at a capacity factor of only about 30% and produces 2,500 MWh of intermittent renewable electricity per year.

In both instances, a similar amount of electricity is generated, yet the owner of the biogas system – the one which operates on a more uniform, predictable basis – would be required to pay \$63,000 more.

- **OMAFRA recommends that the cap should be based on average anticipated annual production of electricity from a given renewable energy technology rather than on the peak capacity of that technology.**

OMAFRA is also concerned that the cap as currently proposed by the Board does not adequately support development of some of the smaller renewable energy generation systems. These smaller systems can have many co-benefits, as noted at the beginning of this letter in the case of biogas systems. A line improvement (such as upgrade to three-phase) costs approximately the same whether a large or small renewable energy generation system is utilizing it. Therefore:

- **OMAFRA recommends a higher cap for smaller rural renewable energy generation systems.**
  
- **“Renewable Enabling Improvement”**: This proposal addresses distribution system investments that are made to enhance the ability of the system to accommodate increased levels of renewable energy generation. None of these costs would be incurred by the renewable energy generator; all would be paid for by the distributor. The Board notes that this would include items such as transfer trip and modification to electrical protection equipment (e.g., reclosing switches). All these costs would be paid by the distributor.
  - **OMAFRA is very pleased with this proposal, since it addresses concerns about the costs of improvements to older rural electricity systems.**

OMAFRA is very encouraged by these proposed amendments to the Distribution System Code. If approved, they will help facilitate the widespread adoption of new renewable energy systems on farms, at food processors and in rural communities.

Sincerely,



Peter Meerveld  
Director, Food Safety and Environmental Policy Branch