

MANITOBA HYDRO

2012/13 & 2013/14 ELECTRIC GENERAL RATE APPLICATION

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Manitoba Hydro Undertaking #73

Manitoba Hydro to provide an example of a payback period for one (1) type of customer and one (1) type of industry.

Response:

Commercial Refrigeration Equipment: Electronically Commutated Motors (ECMs) for evaporator fans located in display cases or walk-in boxes. An evaporator fan motor has an expected life of approximately 16 years.

Upgrading to an ECM for evaporator fans costs approximately \$200 per motor at the point of motor replacement. Upgrading to an ECM will save the customer 774 kW.h or \$38.70 annually, equating to a 5.2 year payback for the customer. Based upon industry consultations and given that the benefits are primarily energy related, Manitoba Hydro determined that an incentive of \$100 per motor, representing approximately 50% of the incremental cost, bringing the customer payback to 2.6 years would be more acceptable for this market. A commercial customer may be willing to accept a longer payback period for a measure with a longer life and where other benefits are realized in addition to energy savings, such as reduction in water consumption or waste product.