M A N I T O B A	**)**	**Order No. 56/11**
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THE PUBLIC UTILITIES BOARD ACT	**)**	**April 14, 2011**

BEFORE: Graham Lane, C.A., Chairman
Len Evans, LLD, Member
Monica Girouard, C.G.A., Member

CENTRA GAS MANITOBA INC.
FUNDING PARAMETERS – LOWER INCOME
NATURAL GAS FURNACE REPLACEMENT PROGRAM

EXECUTIVE SUMMARY

By this Order, the Board denies Centra Gas Manitoba Inc.'s (Centra or Utility) Application to amend the funding of the Utility's lower-income Furnace Replacement Program (FRP). Centra sought to extend the duration of the required customer contribution for a new high efficiency natural gas furnace of $19 per month from five years to 10 years. The Board expects Centra to meet the additional net FRP costs, associated with the loss of funds due to the end of the federal ecoEnergy Retrofit program, from the Utility's available FRP resources.

Should future furnace upgrades (for lower-income households) rise so dramatically as to risk the exhaustion of the accumulated FRP fund balance, which is still increasing through an allocation of revenue arising from established residential and small commercial consumer rates (and interest on the accumulated balance), the Board expects Manitoba Hydro (MH), the sole shareholder of Centra and the operator of Centra, to file, on Centra's behalf, other alternate funding proposals for the Board's consideration (towards best ensuring an ongoing FRP).

Within this Order, the Board provides observations, suggestions and recommendations to Centra/MH towards achieving a significant increase in the up-take by lower-income consumers of the significant opportunity presented to them in the form of the FRP. Centra/MH is encouraged to file alternate management, marketing and contractor selection approaches that arise out of reconsideration of the program design, as discussed in this Order.

BACKGROUND

The Board understands that currently there are an estimated 230,000 natural gas furnaces in single detached and multi-family residences served by Centra, and of that total almost 69,000 of these furnaces are the older standard efficiency (conventional, or low-efficiency) natural gas furnaces.

A significant percentage of these conventional low-efficiency furnaces are in the residences of lower-income households.

MH's 2009 Residential End Use Survey Report estimated that there were in the order of 22,000 low-efficiency natural gas furnaces in the residences of households qualifying as being lower income (the categorization involves households with a gross annual income less than 125% of Statistic Canada's "Low Income Cut Off"). The Board notes that Centra's most recent Lower Income Energy Efficiency Program (LIEEP) Quarterly Report indicates that there are 17,000 low-efficiency furnaces remaining in lower income owner-occupied households – this is the target group for the FRP. It is important to note that as of January 1, 2010 only high-efficiency furnaces may be sold in Manitoba.

The FRP is a lower income Demand Side Management (DSM) Program designed to assist lower-income homeowners in replacing existing low-efficiency gas furnaces with new high-efficiency gas furnaces. The FRP will not only reduce lower-income homeowners' annual heating bills, but improve overall heating energy efficiency (resulting in lower greenhouse gas, GHG, emissions).

The basic assumptions underlying the program are that, generally, lower-income households cannot afford to purchase high-efficiency furnaces and that their inability to do so results in a range of disadvantages for such households (higher heating bills than necessary due to the low efficiency of conventional furnaces; difficulties related to the inability to pay energy bills often involving delinquency and late fees if not service limitations; health risks associated with turning down thermostats to below safe levels to reduce gas consumption; and, the forced sale of homes due to an inability to afford energy bills).

The concept behind the FRP is to provide financial assistance to low-income owner-occupied households through subsidizing the capital cost of a new high-efficiency gas furnace (that typically cost $5,000 or more) but also for Centra to select the installation contractor, and to assist in financing the new furnace for the customer.

The capital cost associated with replacing conventional furnaces is difficult to cover for most lower-income households, households usually already burdened with significant financial obligations.

By being assisted in meeting the capital cost of a new furnace, the homeowner benefits from significantly subsidized capital costs, reduced ongoing heating costs, and better assurance of continued good health (from a warm comfortable home).

MH and Centra's ratepayers are expected to benefit from lower administrative and collection costs being incurred as the result of lower-income households being assisted, and such avoided costs will be reflected in rates. Society benefits from potential improvements to the overall health of lower-income households (able to maintain a comfortable home through the winter months thereby avoiding health care costs borne by the Province and, ultimately, taxpayers -- a day in the hospital can cost more than some lower-income households annual heating bill). Society also benefits by a reduction in GHG emissions; more disposable income for lower-income households to spend in the community; and, likely, a higher probability that lower-income households will be able to remain in their homes and not be forced to sell.

Conventional natural gas furnaces are very inefficient, generating much higher annual heating costs (with high-efficiency furnaces saving approximately 35% of the typical annual cost of operating a conventional furnace) and producing much higher levels of GHG emissions. Many of these furnaces are aging and will soon require replacement. And, old inefficient furnaces often break at the most inopportune times, such as in the middle of a winter night, when "shopping around" for a "good deal" is not possible. In the absence of foresight, the urgency of the moment requiring the replacement of a furnace more than likely will preclude many lower-income homeowners from taking advantage of the FRP.

Old and inefficient furnaces may also present a greater risk of fire and the release of carbon monoxide. If the homeowners of residences with inefficient furnaces cannot afford to replace a broken furnace, the options faced by these customers include: use of portable electric heaters (creating health and safety issues), the sale of their home, or having to add to their already strained financial obligations by financing the entire cost of a new furnace. None of these options are seen by the Board to be in either customer's or public's best interest.

Under the current FRP design, eligible homeowners pay $19 each month for five years – the payment "works out" to be less, perhaps much less, than the reduction in the heating bill brought about by the new furnace. Centra selects, engages and pays the participating contractor to provide and install new high-efficiency natural gas furnaces in the residence of qualified lower-income households.

Participating contractors are pre-selected by Centra through a competitive proposal call. The reliance on Centra to select, engage, direct and pay a contractor is based on the belief that in the absence of the Utility acting as the "general manager" of the program, lower-income households would be "left on their own" to negotiate and fund needed furnace replacements, a situation many lower-income customers are likely not able to manage.

Centra, with encouragement and an allocation of rate revenue provided by the Board, developed the FRP; selected qualified participating contractors; established furnace installation contract prices with the participating contractors; determined an acceptable contribution payment from eligible homeowners; and has marketed the program to the residential market – the latter largely to-date through community groups and general advertisements.

FRP costs are comprised of payments to contractors and an allocation of MH/Centra's own internal operating costs (furnace subsidy costs, staff costs, marketing and advertising expenses), while program revenues have or had three sources: 1) Centra receives payments of $19/month over a five-year period from qualified homeowners; 2) residential and small commercial natural gas rates include an allocation of revenue requirement to support the program; and, 3) initially, the federal government provided an incentive of $790 per installation of a high - efficiency furnace through the federal ecoEnergy Retrofit - Homes program.

The Board has approved residential and small commercial natural gas rates that reflect in part an annual allocation of $3.8 million of Centra's rate-based revenue to the FRP. As of March 31, 2011, approximately $11.8 million (including interest on year-end balances in the FRP fund) remains available to fund the program. The Board has also indicated a preference for maintaining ongoing annual funding from rates for the program.

As earlier indicated, there are several reasons justifying funding, in part, the FRP through customer rates:

a) Lower-income customers are less likely to avail themselves of MH's existing Power Smart energy efficiency programs, although residential rates fund these programs and those rates result in bills that are paid by all customers, including lower-income households;

b) Provincial legislation and climate change policy goals are designed to reduce GHG emissions and increase energy efficiency. The FRP provides for the replacement of natural gas furnaces with efficiency ratings as low as 60% (or less) with new high efficiency gas furnaces with efficiency ratings of 92% or more;

c) Centra's annual costs include allocated administrative costs related to efforts to collect delinquent accounts and recover the cost of bad debts. Many of the customer debt related "collection" costs pertain to lower-income customers. High-efficiency gas furnaces are expected to reduce natural gas consumption and bills, assisting lower-income households to meet their bills rather than fall into delinquency; and,

d) There is evidence drawn from other jurisdictions that some, if not many, lower-income households, and in an effort to restrain energy costs, reduce their residences thermostats below "healthy levels" (in fall and winter months), contributing to illness, the potential requirement for medical intervention, and higher than necessary public health costs. These costs may be avoidable, at least in part, if thermostats are set at appropriate levels, which is facilitated by bills reduced through the installation of higher efficiency furnaces.

Support for the concept of the FRP can also be found in government policy decisions. The Government of Manitoba recognized and addressed the plight of lower-income households and its energy efficiency goals by establishing the Affordable Energy Fund *(AEF)* under *the Winter Heating Cost Control Act*. This fund was established in 2006 (following a period of high natural gas prices that assisted Manitoba Hydro's net income due to record high short-term and spot

electricity export prices) by allocating a percentage of Manitoba Hydro's 2005/06 gross revenues received from power exports.

The AEF has many stated objectives, including that of assisting lower-income household energy efficiency. While the AEF is, to-date, not a direct funder of the FRP, it is representative of government policy, that being to assist lower-income households with energy efficiency measures.

As previously indicated, in addition to the funding of the FRP through an allocation from rates and contributions from lower-income customers, the Federal government initially also contributed to the FRP, through the ecoEnergy Retrofit - Homes program. Unfortunately, Natural Resources Canada, the federal government department that administered the ecoEnergy Retrofit program, and subsequent to the commencement of Centra's FRP, announced that as of March 31, 2010 no new applications for the ecoEnergy Retrofit program would be accepted. The termination of this program effectively resulted in the loss of $790 per furnace for the FRP, thereby increasing the net cost to Centra for the program.

Through correspondence dated August 12, 2010, the Board issued the following Directive to Centra:

> *Centra is to continue the FRP, including renewed advertising and marketing efforts, and is to use the FRP funding provided by the Board through rates to replace the funding formerly provided by the Federal ecoEnergy program until additional funding is available through the introduction of an approved change to the program's contribution parameters.*

Board Order 55/10 requires Centra to file quarterly LIEEP reports, including updates on the FRP. Centra's latest report (dated February 14, 2011 for the period ending December 31, 2010) summarized FRP implementations to December 31, 2010 as follows:

Program Item	October 1 – December 31, 2010	Cumulative To December 31, 2010
Furnaces installed		
Individual approach	152	1065
Community Approach	0	72
Total Furnaces		1137
Boilers installed		
Individual Approach	0	26
Community Approach	0	1
Total Boilers		27

As of December 31, 2010, Centra had only spent approximately $2 million from the allotted FRP funding and accumulated interest (total funding to the FRP to March 31, 2011 was expected to be approximately $13.7 million).

APPLICATION

On January 7, 2011, Centra applied to the Board to amend the FRP, to extend the duration of monthly customer contributions from five years to 10 years while maintaining the required $19 per month customer contribution. The intent of Centra's application was to recover the funding lost from the ending of the Federal ecoEnergy Retrofit – Homes program from the beneficiaries of the lower income FRP, so that overall program funding would be sufficient to provide for a higher than otherwise number of high-efficiency furnace installations. As indicated, the cancellation of the ecoEnergy Retrofit - Homes program resulted in the loss of $790 per furnace in funding support for the FRP.

To offset the loss in federal funding, Centra proposed to maintain the FRP customer payment of $19 per month, but increase the customer payment term from five years to 10 years. This, if implemented, would effectively double a participant's funding from $1,140 to $2,280 for the upgrade. Centra's position is that customers qualifying for the FRP, and having a high-efficiency furnace installed under the program, would still be better off financially than continuing with their existing low-efficiency furnace, since the savings from reduced energy bills

are expected to more than offset the extra cost associated with extending the number of months of required customer contribution.

The total cost of a high-efficiency furnace installation pursuant to Centra's proposal is as follows:

Customer Contribution	$2,280	($19/month for 120 months)
Centra Contribution	$2,229	(allocation from rate based revenue)
Total Furnace Cost	$4,509	(expected payment to a contractor and an allocation of Centra's administrative and operating costs)

Centra's Application proposed that the FRP be amended in early 2011 to reflect its proposed increase in the duration of expected customer contributions, and that the program be extended to March 31, 2013. The table below summarizes the allocation of costs for the FRP under the following scenarios: 1) when the ecoEnergy grant was available, 2) based on the Board's Directive of August 12, 2010, and, 3) Centra's proposed program (application to the Board of January 7, 2011).

	Previous Program with ecoEnergy grant	**Existing Program as per Board Directive of August 12, 2010**	**Proposed Program per Centra's Application of January 7, 2011 to the Board**
Loan Term (Years)	**5**	**5**	**10**
Customer Monthly Payment	$ 19	$ 19	$ 19
Total Customer Contribution	$1,140	$1,140	$2,280
Centra Contribution	$1,670	$2,460	$1,329
Federal Government Contribution	$ 790	-	-
Centra Marketing and Administration	$ 900	$ 900	$ 900
Total Cost	$4,500	$4,500	$4,509
Percentage Funded by Centra	57%	75%	49%
Possible Number of Annual Installations	**1,479**	**1,131**	**1,705**

Consultations with Lower-Income and Consumer Advocates

Centra reported having held public consultations with its Lower Income Advisory Committee, the consultation regarding the termination of federal funding for the FRP and Centra's proposal to replace that funding.

Ms Gloria Desorcy, representing CAC/MSOS, suggested that a 10-year term would prove too daunting for lower-income consumers, and recommended a shorter term of seven years with the payment required of homeowners to rise to $25/month. Mr. Mario Lopes, of the West Broadway Neighbourhood Association, was agreeable to the proposed 10-year co-payment term but was concerned about placing a lien or caveat on the property towards securing the eventual recovery of any outstanding payments.

Mr. Donald Benham, representing the Social Planning Council and Winnipeg Harvest, was opposed to the extension of homeowner payment duration and suggested that the "lost" federal funding be provided by industrial users that do not create jobs.

Dr. Peter Miller of Resource Conservation of Manitoba and Time to Respect Earth's Ecosystems, recommended a universal cap on energy bills of 6% of income. Dr. Miller was amenable to an extension of the funding term required for participating homeowners, but suggested increased funding for the program be generated from all customer classes (presently only residential and small commercial rates fund the FRP through rates).

BOARD FINDINGS

The Board has reviewed Centra's application, the history and current status of the FRP, and has also taken into consideration the results of the Utility's public consultation efforts.

The FRP offers lower-income customers needed relief from the capital costs of a new high-efficiency gas furnace. Installation of a high-efficiency gas furnace is expected to reduce home heating costs for those who can least afford to pay high heating bills. The provision of affordable

heat in Manitoba's climate is not a luxury but a health necessity; without the FRP, many if not almost all lower-income homeowners will likely be unable to "safely" finance a needed furnace replacement.

The implications of not replacing conventional natural gas furnaces include higher and possibly unaffordable bills for lower-income households, ongoing excessive GHG emissions, and the risk that illness and health-care requirements may develop as lower-income customers attempt to reduce energy bills by reducing thermostat settings during the colder months of the year. (As noted earlier, the cost of a single day in the hospital, for one person let alone an entire household, which is assumed by the Province, can exceed the cost of heating the typical home for a year.)

Many if not most operating conventional natural gas furnaces are now twenty or more years of age, at or past the limit of the expected service life. Until these furnaces are replaced, there is the constant risk of malfunction, with possible health and economic implications for the residents, and the certainty of higher than necessary bills and GHG emissions affecting not only the lower-income households but overall society.

The Board has both expressed support for the FRP and disappointment with FRP participation levels. Despite the reality that the program provides for significant benefits for qualifying applicants, as of December 31, 2010 only 1,137 furnaces had been installed under the program, this despite the approximately three years the FRP has been offered.

As the anticipated bill savings for lower-income households exceed the required contributions of the households, the decision to enrol in the program for qualifying lower-income households has been accurately described as a "no brainer", and that view taken from more than an economic perspective.

The program implementation rate has, to-date, amounted to approximately 380 furnaces per year – well shy of Centra's target of 1,100 furnaces per year. Based on information from MH's 2009 Residential End Use Survey Report, since then updated to the end of 2010, approximately 17,000 existing standard efficiency natural gas furnaces are present in owner-occupied lower-income

households. If the past pace of converting those furnaces to high efficiency furnaces continues it would take 45 years before the program would have served the entire current target residences. Clearly, by that time, all remaining conventional furnaces will have failed and having been required to be replaced.

There is an enormous market segment of lower-income households heated by conventional low-efficiency furnaces that should take advantage of this valuable program. So, the obvious question is: "why haven't many more lower-income householders signed up"?

The Board appreciates the difficulties that Centra reports having experienced with the marketing of the FRP. That said, the Board remains of the view that increased customer interest would develop with greater and more focused "marketing" efforts and, most likely, with a change in program design, particularly with respect to Centra's arrangements with furnace contractors.

The Board suggests that marketing efforts be expanded from the current, more passive information campaigns to ones involving engaging with community groups towards developing more direct in-person marketing approaches, perhaps even through door-to-door campaigns. It seems apparent that more success in program marketing is critical if the upwards of 17,000 qualifying furnaces in the lower-income customer bracket are to be replaced under the program.

In response to the Board's concerns, Mr. Bob Brennan, President and Chief Executive Officer of Manitoba Hydro, advised the Board of MH's and Centra's continued commitment to the FRP, noting the Utility's awareness of the positive impact the program can have for lower-income customers. Mr. Brennan committed the Utility to taking a more aggressive grass-roots approach to marketing the FRP, towards improving participation levels.

While the Board appreciates the increase in marketing efforts proposed by Centra, and looks forward to seeing vastly improved furnace installation numbers, it has concerns that the present approach, left unaltered, will not succeed.

Again, the Board notes that as of December 31, 2010 there have only been 1,137 furnace installations and that the total disbursements since August of 2007 have only been $2 million (leaving an available fund of approximately $11.8 million as of March 31, 2011).

Given the significant funds available for the FRP, the Board was surprised that Centra sought additional funding from lower-income customers to replace the loss of funds from the federal ecoEnergy Retrofit – Homes program. Funding for the FRP is expected to continue to accrue from the continuing modest allocation of rate revenue.

The Board has no current intention to end the annual funding of the program, either at March 31, 2013 (the date Centra proposes to revisit its FRP) or any other specific date.

The Board would have better understood the Utility's proposal if the FRP's fund balance was depleting quickly due to significant furnace replacement penetration rates. To-date, annual target furnace installations have fallen far short of expectations, resulting in continued growth in the accumulated FRP fund rather than depletion.

The Board accepts the view expressed by lower-income advocates that a 10-year customer contribution plan would likely prove daunting (or seem so daunting as to hold such a customer from seeking entry to the plan) for many lower-income customers, and could well lead to an even worse program uptake than has been experienced to-date.

An additional monthly charge above the current $19 per month may, at currently low natural gas prices, exceed the monthly savings from switching to a high efficiency furnace, particularly in the spring and fall, and place an additional burden on already financially challenged lower-income households.

The Board is concerned that lower-income households may already be apprehensive that the savings expected from the replacement of a conventional gas furnace with a high-efficiency furnace will not cover their $19 per month contribution. While the Board and Centra are confident that the $19 per month requirement for five years will be more than recovered by savings from the installation of a high-efficiency furnace, the "uncertainty" of these savings may

be, and have been, enough to dissuade many potential and qualifying customers from seeking enrolment in the program.

Accordingly, the Board will deny Centra's request to extend the customer contribution of $19 per month from five to 10 years. The Board will expect Centra's annual revenue requirements to cover the additional FRP costs associated with the loss of funds from the federal ecoEnergy Retrofit – Homes program. Should participation in the FRP surge dramatically, resulting in a depletion of accumulated and accruing program funding, the Board expects Centra to then-file alternate funding proposals to the Board.

The Board is open to receiving further options towards ensuring the FRP is aggressively and successfully marketed, with the objective of significantly increasing the participation rates for the program.

The Board is aware that Centra allocates its internal marketing and administrative costs related to the FRP, and expects that Centra will hold such allocations to a reasonable level, towards maximizing the benefits of the program for lower-income households. The Board intended the allocation of annual revenue through rates to be put to financing the acquisition and installation of high-efficiency gas furnaces for lower-income households, not to meet Centra's overhead costs.

The Board suspects that contractor profit margins for the FRP, as presently designed, are far less than what the contractor can obtain outside of the program. If this is an accurate assumption, contractors are less likely to actively market the FRP, thereby reducing opportunities for furnace installations in lower-income residences. As the program is currently designed, contractors may assume Centra will undertake the marketing of the FRP resulting in a participating contractor's incremental sales, rather than a contractor adopting the program as a profit centre and therefore a program worthy of actively marketing.

The Board suggests that Centra review its arrangements with furnace installation contractors to ensure contractors are provided with reasonable pricing, this towards gaining contractor

promotion of the FRP. The Board suspects “pricing” is a major issue, and that if contractors were able to make what they would conclude to be a “reasonable return” from actively participating and marketing the FRP, more contractors would become involved and more lower-income households would end up having a high-efficiency furnace installed.

The Board further suggests that Centra consider the possibility, if the Board were to approve such a change, of combining the $19 per month for five years contribution by homeowners with a form of “reverse mortgage”, whereby an additional amount of contribution upon the sale of the house could be derived. This approach may or may not be required if the current program is deemed to be not sufficiently attractive to contractors to generate contractor advertisement and marketing of the FRP, and the price paid to the contractor is increased.

The Board also recognizes the importance of installing these high-efficiency furnaces in accordance with manufacturer’s specifications, so design heating efficiencies can be obtained. This means ensuring the furnace is properly sized for the home, existing duct work is appropriate to accommodate the requirements of the new furnace, and the furnace is installed with the appropriate thermostat and controls to ensure proper operation.

Alternative high efficient furnace technologies, such as modulating furnaces and air management systems, should also be considered where they are warranted due to specific home circumstances. The goal of the FRP is not only to replace less efficient furnaces with high-efficiency furnaces, but also to ensure design heating efficiencies are obtained and overall home comfort is assured.

When homes require additional work to support a new high efficiency furnace, the Board suggests that these considerations and costs be negotiated between the contractor and Centra. In such circumstances, the goal remains the same, the conversion to a high-efficiency furnace, and the Board expects the customer’s monthly contribution may need to increase if extra costs are necessary to ensure a proper installation. (Given the pressures on lower-income household budgets, and the risk that additional costs required to participate may dissuade participation, the reverse mortgage scenario could play a positive role in some circumstances.)

In a previous Order, the Board recommended to MH and the Government, that MH and the Government consider the establishment of a separate agency to manage DSM and lower income programs. This agency could be funded by MH and Centra through an allocation of rate revenues, potentially no higher than current DSM allocations, though the current allocation involves direct MH and Centra operations and costs.

The lack of success in "moving" lower-income households from older low-efficiency furnaces to high efficiency modern furnaces suggests that the FRP may not be a priority initiative of Centra/M H's. The Board understands MH is a very large utility, operating both electricity and natural gas enterprises, and has major capital expenditure development plans in process (for new generation and transmission).

Perhaps it is too much to expect for the Utility to handle all of its ongoing operations, particularly given its plans for a "decade of investment" along with a comprehensive DSM program. Such an 'external' agency, as suggested by the Board, could be a subsidiary of MH, one that might benefit from outside as well as "inside" members of the agency's Board of Directors.

AEF

Very little of the balance of the AEF has been spent, again suggesting a lack of urgency that belies the government's interest in energy efficiency and assistance to lower-income consumers. MH/Centra should engage in discussions with the Province, and consider whether some of the AEF funds should be allocated to the FRP.

It is in the public interest to "move" lower-income households from low-efficiency and outdated gas furnaces to high-efficiency and modern gas furnaces. The benefits for the households and society are expected to be significant, allowing lower-income households to remain in their homes with thermostats set at reasonable and comfortable levels, and with increased disposable income to meet other household needs.

Board decisions may be appealed in accordance with the provisions of Section 58 of *The Public Utilities Board Act*, or reviewed in accordance with Section 36 of the Board's Rules of Practice and Procedure (Rules). The Board's Rules may be viewed on the Board's website at www.pub.gov.mb.ca

IT IS THEREFORE ORDERED THAT:

1. Centra Gas Manitoba Inc.'s Application to amend the Furnace Replacement Program by extending the term of the customer contribution of $19 per month, from five years to 10 years, BE AND IS HEREBY DENIED.

2. For now, Centra Gas Manitoba Inc. is to recover the additional Furnace Replacement Program costs associated with the loss of funds from the federal ecoEnergy Retrofit program from overall Furnace Replacement Program funds.

THE PUBLIC UTILITIES BOARD

"GRAHAM LANE, C.A."
Chairman

"K. SIMONSEN"
Acting Secretary

Certified a true copy of Order No. 56/11 issued by The Public Utilities Board

Acting Secretary