

MANITOBA) Order No. 134 /10
)
THE PUBLIC UTILITIES BOARD ACT) December 22, 2010

BEFORE: Graham Lane, C.A., Chairman
Robert Mayer, Q.C., Vice-Chair
Dr. Kathi Avery Kinew, Member

DIESEL GENERATED ELECTRICITY RATES – EFFECTIVE JANUARY 1, 2011:

**FOR THE COMMUNITIES OF BARREN LANDS FIRST NATION AND BROCHET;
NORTHLANDS DENESULINE FIRST NATION (LAC BROCHET); SAYISI DENE
FIRST NATION (TADOULE LAKE); AND SHAMATTAWA FIRST NATION
(SHAMATTAWA)**

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1. Executive Summary

Following an extended public hearing of Manitoba Hydro's (MH) Application for revised electricity rates for four First Nations communities not connected to MH's Provincial electrical grid (and provided electricity by way of remote diesel generation), the Public Utilities Board (Board) varies MH's Application and:

- a) Sets and directs a revised rate schedule and rates for the communities and government, to take effect as of January 1, 2011;
- b) provides directions with respect to the accumulated deficit that has arisen with respect to electrical service to the communities; and
- c) recommends actions be taken towards connecting the communities to the Provincial electricity grid and upgrading the housing stock and other buildings of the communities.

The Board concludes that the establishment of just and reasonable rates is best represented by grid rates for all Residential and non-government General Service consumption, with no restriction as to heating electrically, and initiates a transition by way of an initial reduction in the rate charged Residential and non-government General Service accounts for the consumption of electricity in excess of 2,000 kWh per month.

The initial reduction in the cost of electricity for the residents and non-government General Service accounts is also expected to bring about a reduction, albeit most likely modest, in the cost of groceries, other goods and services in the communities (without reducing the price signal sent by the overall rate to be charged to senior government funded accounts, which Government Rate needs be factored into the 'business case' as all parties, including governments, work towards providing grid service to the communities).

2. Introduction and Background

Not all Manitobans have access to unrestricted service levels of electricity.

There are four First Nation communities (Barren Lands, Northlands Denesuline, Sayisi Dene and Shamattawa) and one adjacent Métis community, Brochet, that are not connected to Manitoba Hydro's (MH) extensive, almost Province wide, electricity transmission grid.

Rather, these communities are provided restricted amounts of electricity from local diesel generators located in the Northern Manitoba communities. This restriction results in housing that is heated mainly by diesel-fuelled furnaces, at a high economic, environmental and health cost.

Collectively, these communities, with their approximately 2,120 residents (census data, 2001), comprise what is referred to as the 'Diesel Zone'.

Residential

Each of the communities has diesel fuel fired generators that generate electricity, and, for reasons of economics and "efficiency" (the term "efficiency" is used in a relative way, and ignores factors such environment, social and health), the approximately 560 residential accounts in the Diesel Zone are restricted to 60 Amperes of service, which, MH maintains, is sufficient to operate all residential electrical appliances, except for space heating (the rest of the Province is connected to the grid and Residential customers have access to 200 Amperes service).

Increased rates apply once a diesel Residential or General Service customer account's consumption rises above 2000 kWh/month. The service restriction applied to the Diesel Zone is, and does serve as, a deterrent from using electricity for space heat – although some customers violate that service restriction and use electric space heaters (at a very high cost)..

The Residential class of customers are, pursuant to policy, charged at the same rate as Residential customers served from MH's central transmission grid for the first 2,000 kWh consumed per month. For the approximately 10% of residential customers consuming in excess of that 2,000 kWh per month limit, a higher and so-called 'Full Cost' Rate is currently charged for 'excess' consumption.

The Full Cost Rate is a rate fixed by mathematical calculation of all diesel operating costs divided by total electricity consumed in the Diesel Zone.

In MH's application, the Utility proposed a Full Cost rate of 59 cents per kWh.

General Service

The General Service class (GS) of customer includes all non-residential accounts in the Diesel Zone other than government accounts. The GS class is comprised of approximately 113 customers, and includes First Nation non-residential accounts that are not fully funded by the Federal Government through Indian and Northern Affairs Canada (INAC).

General Service customers also have access to grid rates for the first 2,000 kWh consumed per month. However, consumption that is in excess of the 2,000 kWh per month limitation is currently charged at the 'Full Cost Rate.'

Government

Currently, customers in the Government rate class include all Federal and Provincial Departments and agencies as well as First Nations Education Accounts (the latter are funded by INAC to 100% of a funding formula derived and employed by INAC).

Government and First Nations Education Accounts (again, the latter funded by INAC) are subject to the Full Cost Rate on every kWh. In addition, these customers pay a 'Surcharge', or 'Premium' designed to recover a portion of MH's Diesel Zone annual revenue shortfall.

The revenue shortfall is associated with the heavily subsidized first 2,000 kWh per month of consumption (i.e. the first 2,000 kWh of monthly consumption charged at grid equivalent rates rather than the Full Cost Rate) charged to Residential and non-government General Service customers. (Monthly consumption in excess of 2,000 kWh for residential and non-government General Service accounts is currently billed at the Full Cost Rate.)

3. Rate Overview

Recent practice has been to exclude capital expenditure related 'fixed' costs (i.e. interest and depreciation expense related to capital expenditures) from MH's annual Revenue Requirement for the Diesel Zone.

MH's Revenue Requirement for the Diesel Zone is assumed to be the amount of money required annually to meet the deemed full cost incurred by MH in providing electricity to the Diesel Zone.

The exclusion of fixed costs from the annual Revenue Requirement is because of a 2004 Tentative Settlement Agreement among MH, INAC, and Manitoba Keewatinowi Ininew Okimowin (MKO), the latter representing the four First Nations communities of the Diesel Zone.

This Tentative Settlement Agreement (an agreement urged by the Board from the time of Orders 17/04 and 46/04) purports to permit a rate design that seeks to recover MH's annual variable costs in providing electricity to the Diesel Zone through rates (those costs are primarily represented by fuel costs and the maintenance of MH's facilities in the communities).

The Tentative Settlement Agreement provides for proposed new capital expenditures (excluding 'emergency' and 'small' capital expenditures) for the Diesel Zone to be first discussed among MH and the First Nations. According to the Tentative Settlement Agreement, these prior MH-FNs discussions would be targeted towards reaching a consensus that would then be employed by the First Nations to secure a stated percentage of the required funding from INAC -- prior to MH proceeding with any new major capital expenses.

The remainder of the funding required to fully meet new capital expenditures would, pursuant to the Tentative Settlement Agreement, be provided by the Province of Manitoba and MH.

The Full Cost Rate for Residential and General Service customers for monthly electricity consumption over the prescribed limit of 2,000 kWh, and for all Government consumption, was (then) billed at 79¢ per kWh. By comparison, Residential Grid customers now pay approximately 6.5¢/kWh.

Minutes of Settlement were negotiated in 2004 (as the precursor to the Tentative Settlement Agreement). In the Minutes, only variable costs and not capital costs (the latter being the annual interest and depreciation expense associated with capital expenditures) were to be included in the rates, post 2004.

The immediate impact of the Minutes of Settlement was a 2004 Rate Application by MH to the Board that sought the removal of capital expenditures and fixed costs (i.e. annual interest and depreciation related to those capital expenditures) from impacting both the annual Revenue Requirement and the Full Cost Rate. Consumer rates were to reflect only annual operating and variable costs. The result, in 2004, by way of an interim rate decision of the Board, was that the Full Cost Rate fell from 79¢ to 36¢ per kWh.

The Board and all parties were aware that the cost of serving the Diesel Zone had been far greater than the revenues recovered through the rates applied to Diesel Zone consumption. The intent of seeking a Settlement Agreement was clear, that a “repeat” of the “massive” accumulated deficit that accrued before 2004 was to be avoided post-2004, by keeping Diesel Zone rates current so that future annual rate revenues would meet MH’s variable operating costs.

A “massive” accumulated deficit arose to 2004, through both cost increases related to rising diesel fuel and other operating costs, and, also, the incurring of capital expenditures reflected in annual interest and depreciation costs. However, since 2004 (and the Minutes of Settlement and the Tentative Settlement Agreement), MH has not brought forward rate applications seeking to keep Diesel Zone rates current with Diesel Zone costs. As a result, a post-2004 accumulated deficit of \$7.05 million dollars accumulated to March 31, 2010; and further deficit accumulation continues to develop to this day.

Prior to the current Application, the Board last approved revised Diesel Zone Full Cost rates and Government Rates (including the Surcharge) effective as of January 1, 2007, three years ago in Order 176/06.

It should be noted that the Board’s Rate Orders revising MH’s grid rates since 2007 have had but a modest impact in generating additional revenues from the Diesel Zone. And, while the general rate increases ordered by the Board since Order 176/06 has increased Diesel Zone Residential rates and revenue, there has been no adjustment of either the Full Cost Rate (which applies to monthly consumption in excess of 2,000 kWh) or of Government rates (including the Surcharge) since January 1, 2007. Instead, there has been an ever-increasing accumulated deficit related to Diesel Zone service.

In part due to the lapse in time since MH’s last Diesel Zone rate Application (filed in late 2006), the Board convened a one day hearing on November 16, 2009. That hearing considered the appropriateness of, and possible revisions to, then-current rates charged by MH to customers (including governments) in the Diesel Zone – rates that did not approach the levels required to recover MH’s annual costs for providing electricity service to the Diesel Zone.

At that one day hearing, while no Party recommended rate adjustments, MH indicated its Board of Directors would review Diesel Zone rates at a then-scheduled January 21, 2010 Board of Directors meeting.

By Order 1/10, the Board agreed to allow MH to await the decisions (and the reasons for those decisions) of MH's Board of Directors, while also concluding:

“... as matters now stand, by any measure, the rates in the Diesel Zone appear to require immediate corrective attention.”

MH's delay in the filing of this current Application has been attributed to ongoing discussions between representatives of MH, INAC, and the four First Nations communities, towards achieving the signing of the Tentative Settlement Agreement.

MH's present Application for revised rates in the Diesel Zone is being considered separately from MH's General Rate Application for 2010/11 and 2011/12, which is now before the Board (the hearing is scheduled to commence January 5, 2011). The effects anticipated to occur with the implementation of this Order will be considered in that hearing.

**4. Manitoba Hydro's Requested Changes to Rates: and
Manitoba Hydro's Requested Changes to Rate Setting Methodology:**

In its current 2010 Diesel Zone Rate Application, MH proposes a number of changes to a) Diesel Zone rate-setting; b) the derivation of the annual Diesel Zone Revenue Requirement; and, c) Diesel Zone rates:

- i) MH proposes to implement a "Tail Block" rate for Residential and General Service customers, to apply to monthly consumption in excess of 2,000 kWh (being a lesser rate than the calculated "Full Cost Rate" that is based on MH's calculated annual Revenue Requirement for the Diesel Zone);
- ii) MH proposes that the "new" Tail Block rate be 45¢ per kWh, compared to the 2007 "Full Cost" rate of 41.27¢ per kWh; and
- iii) MH's proposed Tail Block rate for Residential and General Service consumption (in excess of 2,000 kWh) would represent an increase of 8%, or approximately 2.9 % per year since the current rate was implemented in 2007, but it would fall "far short" of MH's proposed revised Full Cost Rate of 59 ¢ per kWh.

MH also proposed a revised annual Revenue Requirement for the Diesel Zone, one calculated based on MH's 2009/10 Prospective Diesel Cost of Service Study.

As indicated earlier, the Tentative Settlement Agreement (involving MH, INAC, and MKO for the four First Nations) contemplates the funding of capital expenditure and related annual fixed costs through customer contributions, rather than rates.

The annual costs represented in MH's proposed revised Full Cost Rate, to comply with the Tentative Settlement Agreement, would exclude interest and depreciation related to capital expenditures. This was based on the assumption that capital costs post-2004 would be directly met by contributions by the Parties. However, due to delays encountered in having post-2004 capital expenditures reviewed and funded by the First Nations and INAC, MH proposed to include interest and depreciation on unrecovered capital expenditures of \$4.4 million incurred since April 1, 2004.

The annual interest and depreciation expense amounts related to those capital expenditures were reflected in MH's rate proposals as an annual amount of \$580,507.00 (which is factored into MH's proposed Full Cost Rate). MH's proposed rates for 2010/11 are represented by MH as being the rates required to recover the prospective (expected or forecast) annual cost to serve the diesel communities, net of subsidies only. Subsidies are embedded in prospective cost of service analyses, and relate to discounts that equate rates for diesel electric service to grid electric service in rural and remote locations.

It is also important to note that there is no inclusion in MH's proposed annual revenue requirement, or rates, for the Diesel Zone for the recovery of past or still increasing accumulated Diesel Zone operating deficits.

A summary of the current and MH proposed rates are as follows:

Rate Class	Current Rates	MH Proposed Rates
Residential and General Service (<2,000 kWh/mo)	Grid rates	Grid rates
Residential and General Service (over 2,000 kWh/month)	41.27¢/kWh	45¢/kWh
Government Rate, including Full Cost Rate and Surcharge (all kWh)	\$1.38/kWh	\$2.19/kWh

Residential and General Service accounts would, pursuant to MH’s current Application, continue to be billed at grid rates for the first 2,000 kWh of monthly consumption, while Residential and General Service consumption above 2,000 kWh would be billed - not at the proposed new Full Cost Rate - at a new Tail Block Rate of 45¢/kWh.

MH proposes that the rate to be applied only to “Government Accounts” be set at \$2.19/kWh (arrived at by the combination of the Full Cost Rate of \$0.59per kWh and the “required” Surcharge of \$1.60/kWh). (Note: the Surcharge represents the rate required to “recover” the otherwise “lost” annual revenues as a result of grid rates being charged on Residential and General Service customers’ monthly consumption up to 2,000 kWh.)

Provincial Government Accounts

MH also proposed to transfer Provincial Government accounts from the Government class to the General Service class. Currently, Province of Manitoba accounts are classified as being within the Government class, and are billed at

the overall rate charged to Government class accounts, which includes the Surcharge.

MH's reason for its proposed transfer of Provincial Government accounts to the General Service class was reported to be to segregate amounts funded by the Federal Government into one rate class and to recognize that "... the Federal Government has a higher responsibility than does the Provincial Government."

Pursuant to MH's Application, if approved by this Board, the Government Rate would apply only to Federal Government accounts, and to First Nation Education Accounts that are funded to (INAC determines its level of funding) 100% of the INAC formula by the Federal Government.

5. Interveners

Previous Diesel Zone rate adjustments were, as requested by MH, considered by the Board by way of an *ex-parte* process, respecting the confidentiality provisions surrounding the Tentative Settlement Agreement. The Board decided that for this MH Application, a public hearing would be held, and the Board granted Intervener status to:

- i) Consumers' Association of Canada (Manitoba) Inc. and Manitoba Society of Seniors (CAC/MSOS);
- ii) Indian and Northern Affairs Canada (INAC); and
- iii) Manitoba Keewatinowi Ininew Okimowin (MKO), representing the four northern First Nations using diesel to generate electricity.

The Board appreciates the contributions of the Interveners, which assisted the Board in gaining a better understanding of both the evidence and the issues

surrounding the rate questions, and, as well, in assisting the Board in its deliberations through submissions.

Specifically, and in addition to the helpful assistance of MKO and CAC/MSOS at this hearing, the Board appreciates and values the intervention of INAC, both through its counsel and through its witnesses, specifically:

Mr. Fred Mills – Currently a Special Project Officer with INAC but also, a senior representative of INAC who has held a variety of leadership positions within INAC, such that he acquired the skills and knowledge to understand the linkages between INAC programs and the ability to analyze the impacts of changes in one program on other programs. Mr. Mills was also reported to be the INAC lead in the Minutes of Settlement being signed in July of 2004.

Mr. Mills noted that INAC is not a customer of MH in the Diesel Zone, but provides funding to the First Nations under a funding formula established by INAC that takes into account diesel electricity rates.

Mr. Mills testified that INAC's funding is not a 'blank cheque', but rather is made within the budgetary constraints set by the Federal Government. According to Mr. Mills, INAC funding assistance is always related to a program in either the 'core budget', or in 'targeted funding' that defines the funding available. The "core" budget reportedly funds major programs (including education, social, and the operation and maintenance expenses of capital facilities). Also included in the core budget is a lump sum amount for Indian Government Support Services, which are monies provided to First Nations, by INAC, to allow for the operation of their government, including the hiring of a Band Administrator.

For rate setting, Mr. Mills indicated that the regional INAC office has to prioritize its requests of the federal government for funding. In order to facilitate INAC budgeting and funding requests, Mr. Mills said it would be preferable for the Board to render rate decisions as early as September in a calendar year (with rates to become effective the following April), to allow sufficient time for INAC's budgetary process.

Such lead time would, according to Mr. Mills, allow INAC to incorporate the rate increases into the funding formula and into its annual request to INAC headquarters in Ottawa for core budget funds. Mr. Mills advised that there can be no certainty that "Ottawa" will respond favourably, or even that funding provided in the current year will be continued or increased in a subsequent year.

According to INAC, electricity costs for the four communities represent approximately 52% of INAC's annual operating and maintenance budget funding to the four First Nations located in the remote northern communities, which are provided electricity through diesel generation. If MH's Application is approved as filed, INAC's annual funding for diesel electricity would need to increase by approximately \$900,000.00, to a new annual total of \$3.3 million.

Mr. Mills indicated that a decision by the Board to increase rates would lead to a regional INAC budgetary issue by increasing funding pressures to source the \$900,000.00 required. According to Mr. Mills, without sufficient notice and lead time, INAC's covering of a "funding shortfall" may require adjustments within its current program funding approach and core budgets for the four First Nations in the Diesel Zone.

In short, with any rate increase approved by this Board, there is no assurance that federal funding (from the Government of Canada to INAC to the First Nations to MH) in the Diesel Zone will be increased to cover increased costs. Mr Mills recalled years when overall funding to INAC from Canada did not increase, and he speculated that, with reported difficulties with current federal deficit budgets forecast, there could be a freeze, or even a reduction in Federal Government funding to INAC that would affect First Nations.

Should there be a funding freeze or reduction, Mr. Mills explained that any additional monies required to fund electricity rate increases directed by this Board would “probably” have to be taken from INAC’s Capital Facilities Maintenance Program for the four First Nations in the Diesel Zone (a program that involves funding to build major First Nation capital assets, such as schools, water and sewer systems, and for Band-based capital expenditure allocation).

Mr. Dale Hildebrand – is the president of Desiderata Energy Consulting Inc. and was engaged by INAC to provide recommendations to the Board as to specific matters to consider within the context of rates for the Diesel Zone.

The six recommendations of Mr. Hildebrand are:

- 1.) The \$580,507.00 of annual depreciation and interest on post-2004 capital expenditures not be included in the annual revenue requirement; rather, major capital costs should be collected from customers as per the Tentative Settlement Agreement.

- 2.) The expected Revenue Shortfall (between the forecast revenue requirement and the forecast rate revenue at grid rates) be allocated between customers based on the ratios in the Tentative Settlement Agreement for capital allocations, and should not be based on a forecast of government accounts' energy usage, as proposed by MH.
- 3.) MH should expediently implement a comprehensive diesel energy management program (demand side management – DSM) within each of the four diesel communities, towards reducing consumption (and bills).
- 4.) A comprehensive review of the 2004 forecast of the allocation of Net Export Revenues to the diesel rate class be undertaken and filed with the Board, as there are issues with the proposed recovery of pre-2004 accumulated deficit.
- 5.) The diesel rates should be designed with progressive energy charges, (i.e. higher pricing), to strongly encourage the implementation of energy management programs (i.e. DSM). He recommended that the equivalent to grid rates charged in the Diesel Zone should be “doubled” over the next four years, to send a strong price signal to promote conservation.
- 6.) The Board require MH to file (in future applications) comprehensive rate applications (including electronic spreadsheets), for ease of use and to bring about an expected reduction of costs incurred by the various consultants.

Presenters

The Board also heard presentations from Dr. Pam Orr and Dr. Linda Larcombe, researchers from the University of Manitoba. Dr. Orr and Dr. Larcombe undertook housing assessments in First Nations communities, including two of the remote diesel communities (Tadoule Lake and Lac Brochet).

Both provided perspectives on housing conditions in First Nation Communities, including the Diesel Zone. They spoke to the link between housing and other social determinants of health on First Nations communities. Their research identified specific housing and living conditions that influence disease transmission, including tuberculosis and respiratory illness. These conditions include overcrowding, inadequate ventilation, and the effects of mould on the household residents.

MKO also organized presentations from the Chiefs and other leaders and citizens of the four First Nations of the Diesel Zone.

From Northlands Denesuline (Lac Brochet) First Nation, Chief Joe Dantouze and Councillor Adam Nalge presented regarding the impact of diesel rates, and their desire to work with Manitoba Hydro, INAC and others to ensure that their First Nations will be attached to the grid instead of being reliant on electricity generated through diesel fuel.

All the leaders spoke of the vast ancestral and traditional territory inhabited and traversed by the Dene for more than 6000 years, and how provincial and territorial boundaries have carved up the Dene nation, without regard for their people.

Chief Roy Bighetty, from Barren Lands First Nation (Brochet), indicated that the issues facing all four Diesel Zone First Nations are similar, and that there is a common goal of working co-operatively with MH and the governments (Canada and Manitoba) towards resolving those issues to improve conditions in their communities.

Sayisi Dene First Chief JimThorassie from Tadoule Lake attended together with Councillor Stewart Yassi, former Chief Ila Bussidor, and Mr. Tony Powderhorn. They provided explanations as to housing conditions and health issues, many relating to the use of diesel fuel and sub-standard levels of available electricity. Ms. Bussidor spoke of the history and tenacity of her people, and questioned why the Dene people should live in poverty and illness, when they are the original peoples of this land.

While Chief Jeffrey Napoakesik of Shamattawa First Nation was unable to attend, Mr. Michael Anderson, representing MKO, spoke with the Chief's permission and tabled copies of written correspondence with government officials over several years, and as recently as 2010, discussing methods to build a transmission line to his First Nation to connect with the grid, to eliminate the use of diesel fired generators, and to remove the 60 Ampere limitation on electricity for residential consumers.

A common theme presented was a willingness of the First Nations to work co-operatively with the senior levels of governments and MH to resolve electricity-related issues. Building a transmission line to connect with the electrical grid was seen as being a major step towards resolving many other issues – most of which are longstanding and remain unresolved.

6. Board Findings

Introduction

Through the process leading up to this Order, the Board supplemented and expanded its understanding of the underlying circumstances that contributed to and resulted in four northern communities being “left off” the grid, and the conditions “on the ground” in those communities as a result.

Being “left off the grid”, and being accessible by winter road only for limited periods during the coldest months, affects the communities in a number of important ways. Firstly, the communities rely on diesel generated electricity, with a restricted level of electric service provided by diesel generation, and the prohibition of the use of electricity to heat their homes (obliging reliance on furnaces burning diesel and/or wood).

Next, the people face a rate-setting methodology that has all consumption above 2,000 kWh per month bearing a cost many times more than that of the cost experienced by all MH customers on the grid; and, the impact of that higher cost for consumption above 2,000 kWh in turn raises the costs of groceries and other services in the communities.

Finally, there are environmental risks that would be avoidable with grid-supplied electricity service.

The Board’s understanding of the conditions of the housing stock in the four First Nations communities was also greatly enhanced through the hearing. Although the presentations of the University of Manitoba researchers and those of the Chiefs and other members of the four First Nations are not evidence, as the Presenters were neither sworn nor were subject to cross-examination, the Board

and all Parties gained valuable insight into the living conditions in the Diesel Zone communities.

The Board accepts that the four communities in the Diesel Zone are distinguished from communities on the grid in several unfortunate aspects: abject poverty; very high levels of unemployment; very high levels of reliance on social assistance; very poor housing stock – a large proportion of the houses requiring major repairs and more than a majority in some state of disrepair (mould, mushrooms growing in crawl spaces, cases of plywood rather than glass “serving” as windows); reliance on out-dated and inefficient furnaces burning diesel and/or wood; poor air circulation in homes; a higher than average number of persons in each house; extremely high cost of groceries and other necessities; very young average age of community members – sixteen years in one case; myriad and serious health conditions – tuberculosis, diabetes, etc., attributable in part to poor nutrition (due in part to the high cost of groceries and low average incomes), the condition of the housing and over-crowding within the houses; inadequate educational resources and outcomes; and, less than adequate health care services.

The Board understands that, unfortunately, similar conditions exist in some other remote First Nation communities that are connected to the grid.

The Board notes that, with respect to deficiencies in the education systems in place in First Nation communities, INAC Minister John Duncan recently publicly announced an “emerging consensus for reform”, and that “... an expert panel will have until the middle of next year to come up with a plan for on-reserve education that is standards-based, accountable and both culturally and regionally appropriate ...”.

During the hearing, the Board queried the representatives of the First Nations as to the low average age of their communities; the response was direct and troubling. They reported that their elders are “dying off” and, with respect to younger members of the communities, suicide remains a constant concern. There are neither doctors nor dentists resident in the communities.

While the nursing stations were reported to be “doing their best”, sending people by air ambulance (“medi-vac”), usually to Winnipeg, the conditions of the housing, the limited prospects for the youth, and the high costs of all goods and services, all have a price that goes well beyond economics.

With the conditions that the Board accepts as described by the Presenters, and not disputed by any Party to the proceeding, the four Diesel Zone communities represent the “third world” in Canada, and specifically in Manitoba, in an environment where the temperature in winter can fall to -55 Celsius.

The First Nations are where they are because the ancestors of the present members were there as early as six thousand years ago, hunting, trapping and fishing and living a nomadic life within the larger traditional territory, including the geographic area of the present four communities. Their presence predates the arrival of Europeans and the “settlement” of western Canada, and their right to continue their lifestyle in the area is protected by treaties.

Past external interference with the location of First Nation communities and ways of life have not “ended” happily, too often bringing significant misery to the members of First Nations. An example in Manitoba is the failed attempt of the federal government to relocate the Sayise Dene people to Churchill, where they lived in reportedly terrible conditions, with many people losing their lives, before the others gradually returned to build a new settlement at Tadoule Lake. And,

Canadians are increasingly aware of the intergenerational impact of the residential school debacle.

While diesel-generated electricity and the high cost of the service are not the sole or primary cause of the First Nations communities' current distress, it is a major contributor. The restriction to 60 Amperes service and the prohibition of residential space heat by electricity, mean that these are the only communities in Manitoba that cannot heat by way of electricity. The high cost associated with diesel generation, and the requirement for high cost diesel fuel to heat homes (paid for by the occupiers of the homes), affects every aspect of community life.

The First Nations and these four communities are absolutely reliant on INAC and INAC's willingness to meet the seemingly ever-increasing trend of higher and higher diesel fuel and maintenance costs. The First Nations have no assurance that INAC would meet higher electricity rates, and costs, set by this Board; or, that if INAC does so, the people must accept that the extra money for electricity could well be "taken" from other funds allocated by INAC for other necessities in the First Nations communities.

INAC stated clearly in this proceeding that one of the "places" the Federal Department will look to (if electricity rates go up) is its capital allocation to the First Nations – in short, when electricity costs go up, less housing renewal or school construction may take place.

While many "view" this Board as an economic regulator of monopoly utilities, in fact, its mandate is considerably wider. The legislation providing this Board with its mandate allows (some would say directs) this Board to consider other factors as well as the strictly economic ones. This Board, in its rulings related to matters

as disparate as natural gas and automobile premiums, considers social and environmental factors (as well as economic ones) in its decisions.

The Board has taken into account not only economic considerations, but also social and environmental issues and realities in reaching its determinations with respect to Diesel Zone rates. This Board must, and does, take its responsibility to set just and reasonable rates very seriously.

In arriving at its decisions with respect to Diesel Zone rates, and also in making the recommendations that are contained in this Order, the Board looks beyond merely the numbers, costs, relative costs, formulae, and past practices, and seeks to provide the measure of “justice” that needs to exist if there is to be the ‘just and reasonable’ electricity rates the Board is mandated to establish for the four First Nations and the communities of the Diesel Zone.

In this Order, this Board varies MH’s Application and takes the first steps towards reducing the “incredibly high” cost of electricity in the four communities in the Diesel Zone.

In taking this first modest step, the Board recognizes that lower rates for Residential and General Service monthly consumption in excess of 2,000 kWh will not “solve the problem” (which extends to the prohibition of the use of electricity to heat homes and the impact the current service paradigm has in totality on the First Nations and the communities of the Diesel Zone).

The Board’s strong preference is that all Manitoba communities be connected to the grid, and that all residential, institutional, commercial, industrial and governmental customers of MH “pay’ grid rates.

While this is not possible at this time for the Diesel Zone, this Order hopefully represents the first step towards bringing about a new and more promising future for the four First Nations and the communities.

The “cost” of providing grid service to the four communities would (and will), be very high in a capital cost sense, but there are factors not directly linked to the electricity system that need to be taken into account – environmental conditions and risks, social costs, health costs (“medi-vac” included) and, the cost of providing grid-like service (no limitation of heating by electricity), by expanded diesel generation or other means. All these other costs continue to rise, while the majority of the cost of taking the grid to these communities involves largely fixed costs, which would be amortized over sixty years.

i/ Tail Block Rate:

While the Full Cost Rate of one kWh of diesel generated electricity has now been calculated by MH to be 59¢, MH proposes that a Tail Block concept be introduced and applied.

Under MH’s proposal, Residential and General Service consumption in excess of 2,000 kWh per month would be billed at 45¢ per kWh.

If approved, there would be \$29,013.00 less in annual revenue expected to be derived by MH from Residential class rates (assuming the Full Cost Rate on excess consumption is not charged, and based on the Full Cost Rate being 59¢). As well, a further \$293,489.00 loss of annual revenue would occur from the General Service class (from what would be realized if the Full Cost Rate of \$0.59 was applied to the excess consumption).

Rather than factor in the anticipated \$322,502.00 of unrecovered revenue into the Government Surcharge, MH proposed that a "Tail Block rate subsidy" be absorbed by MH's Grid customers.

The Board will approve the concept and a Tail Block rate for Residential and General Service non-government customers.

CAC/MSOS expressed reservations with respect to MH's proposal. The Board notes and understands the CAC/MSOS reluctance to support MH's proposed Tail Block, as a subsidy would be required from MH's Grid customers. However, the subsidy is likely to be less than the \$322,502 estimated by MH, because the Board will not approve the transfer of Province of Manitoba accounts out of Government accounts to the General Service class.

The Board accepts the concept of a lower than Full Cost Rate Tail Block rate, recognizing the likely impact on residential customers of the even higher electricity rates that would arise if a new Full Cost Rate of 59¢ per kWh was to be applied on monthly consumption in excess of 2,000 kWh.

If the Full Cost Rate were to be applied on such consumption, the Board has little doubt that the cost of goods and services (let alone electricity) would increase sharply for Diesel Zone residential customers.

Prices for goods and services in the Diesel Zone are already much higher than are experienced elsewhere in Manitoba, and holding down the rate on monthly consumption in excess of 2,000 kWh is expected to directly or indirectly benefit consumers in the Diesel Zone, by constraining price increases that may otherwise be required.

As even the existing Full Cost Rate of 41.27¢ per kWh is a contributor to the high price of groceries and other items in the Diesel Zone communities, simply limiting the increase to 45¢ would still push such prices upwards, although clearly by not as much as without a Tail Block that is lower than the Full Cost Rate.

In directing that the Tail Block rate for residential and General Service accounts will be \$0.35/kWh, the Board views this as a first step towards bringing down the cost of electricity for the residents and non-government customers of the four communities. The Board recognizes that it is invoking its discretionary exercise of judgement, based on the Board's determination of what represents just and reasonable rates in the context of economic, social and environmental factors.

On one hand, MH attempts to recover a greater percentage of those costs from the non-First Nations parties responsible for such costs (whether based on a legal, moral, ethical or policy based responsibility). On the other hand, both MH and the Board recognize that the Full Cost Rate of \$0.59/kWh is so high that negative consequences to the residents in the Diesel Zone would be brought about with its imposition (by way of increased prices of groceries, other goods and services or, quite possibly, through reduced funding by INAC of non-electricity based existing programs, which could be cut to facilitate INAC meeting its higher cost responsibility without increasing its overall fund transfers to the First Nations).

As to the prospects of initiatives designed to reduce electricity consumption in the Diesel Zone, the Board does not believe that major cost and usage decreases would result. All Parties appeared to accept that demand for electricity, at least for residential accounts, was inelastic in nature.

In fact, the Board is convinced that, electricity consumption, if fully priced at grid rates, would “soar”, as it did in other northern communities after being connected to the grid. Present barriers to prevent that rise in use are the limitations on First Nations houses being heated by electricity, high Tail Block and very high Full Cost rates.

ii/ Interest and Depreciation on specific unrecovered capital costs of \$4.4 million incurred since April 1, 2004:

The Minutes of Settlement from 2004 speak of a process of consultation between MH and the First Nations, and imply funding commitments by First Nations prior to MH incurring any major capital expenditures.

How and/or why those processes broke down was the subject of pre-filed written evidence, rebuttal evidence and oral testimony in this hearing. As noted by the Board in Order 1/10 (at page 9):

“There is enough blame to be shouldered by all Parties, but the Board recognizes the interests of the residents in the Diesel Zone, and of Manitoba Hydro are not advanced by the pointing of fingers and accusations of fault. What will be constructive is a demonstrated desire, backed up by tangible results, of all parties to improve what the Board finds to be an unacceptable situation.”

The Board was encouraged by the written submission of MH, the oral testimony by Mr. Mills, and submissions by MKO, leading the Board to conclude that considerable progress as to proper consultation has been made of late, including during the last three days of the hearing, which followed the earlier hearing component held two months earlier.

The evidence suggests that “at long last” the Tentative Settlement Agreement will no longer be ‘tentative’, but rather will be fully executed by the Parties. MH is to provide a copy of the fully-executed non-confidential Settlement Agreement to the Board and the Parties in this hearing.

With consensus on the Settlement Agreement, the “road is paved” for all Parties (Manitoba Hydro, MKO, the four First Nations, and INAC) to move forward, and to tangibly demonstrate the results of the Settlement Agreement by settling the funding differences that resulted in an impasse since 2004.

Since March 31, 2004, MH reports that additional capital (\$8.5 million) has been expended or is forecast to be incurred to the end of MH’s 2009/10 fiscal year (March 31). How much further capital expenditures have been incurred since April 1, 2010 was not reported at the hearing. With the exception of a \$1.2 million contribution for a new generating set in Tadoule Lake, none of the capital costs since March 31, 2004 through to March 31, 2010 are currently being recovered through capital contributions, either through rates or through the Tentative Settlement Agreement.

As the amount and timing of INAC’s funding of incurred capital cost is still uncertain to MH, the determination of rates proposed by MH includes a provision for the recovery of \$220,842.00 of interest and \$357,655.00 of depreciation expense on only \$4.4 million of the expended capital since 2004. MH maintains this amount is net of the funding provisions in the Agreement where government (Canada and Manitoba) is responsible for 79% of incurred capital costs.

With the expectation that the parties have removed the impasse, the Board will deny MH’s request to include annual interest and depreciation expense (totalling \$580,507.00) in the Diesel Zone Revenue Requirement.

In the event that the Board's optimism proves unwarranted, MH may bring forward for the Board's quick consideration a proposal to return (in part) to the inclusion of interest and depreciation in the Diesel Zone Revenue Requirement and rates. The Board is prepared to adjudicate whether capital expenditures were 'used, useful and prudently acquired', and what proportions of approved capital expenses should be recovered from which customers or customer classes.

iii/ Transfer of Provincial Government Accounts from the Government Class to the General Service Class

MH's proposal to transfer Provincial Government Accounts out of the Government class and into the General Service class would, if approved, have a threefold (and even a fourfold) impact:

a)	A Government Rate Variance	\$31,471.00
b)	Unrecovered Provincial Government Revenue Requirement	\$135,959.00
c)	Subsidy to Provincial Government in lieu of Provincial Surcharge Revenue	<u>\$621,461.00</u>
	Total	<u>\$788,891.00</u>

In addition to these calculated financial impacts, there is also (likely unintentional on MH's part) a further impact through the INAC "multipliers" imbedded in INAC's funding formula, which affect the INAC level of funding for diesel electricity. (MH considered the impact to be immaterial, at .003¢ per kWh, a position not disputed by INAC.)

To save the Federal Government and INAC from any financial impact arising from MH's proposed treatment of the Provincial Government accounts, the resulting revenue shortfall from Provincial Government Accounts (\$788,891.00) would (as requested by MH), fall to Grid ratepayers to cover these costs.

MH has not convinced the Board that the Provincial Government accounts should be transferred out of the Government rate class and into the General Service Rate class, thus increasing the costs charged to MH's Grid Connected ratepayers.

MH's justification to reduce (by 83%) the annual revenues expected from Provincial Government accounts was that it would provide the same level of subsidy to Provincial services as MH does to General Service accounts in the Diesel Zone. The Board remains unconvinced of the reasons for, and appropriateness of, MH's proposal.

Underlying the \$8 million of annual operating costs (excluding capital or fixed costs) to serve the approximate 2,120 residents of the Diesel Zone is a sense of responsibility and obligation (whether it be legal, moral, ethical, policy, treaty or otherwise) that exists among MH, the Federal Government and the Provincial Government to provide 'on Reserve' members (not only as members of First Nations, but also as Manitobans and Canadians) basic services, which are comparable to those provided to other Canadians living in similar locations.

The Federal Government, Provincial Government and MH have accepted certain levels of financial responsibility for the First Nations, Manitobans, Canadians and MH customers residing in the Diesel Zone. The Federal Government and Provincial Government have been contributing to meet their financial obligations

(with the noted exception of funding capital costs by both levels of governments since 2004) through a Government Rate that includes a Surcharge to fund the revenue shortfall arising from Residential and General Service customers paying grid equivalent rates for the first 2,000 kWh per month.

Again, no compelling evidence was provided to justify the transferring of the Provincial Government financial responsibilities to MH's Grid ratepayers.

While the Board will deny MH's request to transfer Provincial Government accounts to the General Service class, it will remain open to MH to provide further and better evidence to support its now denied proposal at a subsequent proceeding, should the Utility make the same or any similar request.

iv/ Post-2004 Accumulated Operating Cost Deficit in the Diesel Zone

The calculated post-2004 accumulated deficit is \$7.0 million to the end of March 2010. This accumulated operating cost deficit is calculated to arise from two components:

- a) The full cost Revenue Requirement, net of the Revenue Cost Coverage (RCC) subsidy and also net of class revenues; and
- b) The Full Cost Rate variance.

The sum of these two components, less the surcharge revenues to be charged to the Government customers, is the annual deficit.

Based on MH's Application and its calculation of the \$8 million cost of service to the Diesel Zone for 2010, only \$4.8 million (or 60%) of the Revenue Requirement would be recovered from current existing rates, leaving an annual subsidy of \$3.2

million to be added to the growing accumulated deficit. The rate increases sought by MH would not recover the new annual subsidy, but would reduce the annual deficit to \$2.1 million (from \$3.2 million).

Included in the annual deficit is the Revenue to Cost Coverage Ratio Subsidy of 18% provided to the Residential class and the 11% provided to the General Service class. By defining the Residential class revenue requirement at 82% of total Full Cost (100% less the Revenue to Cost Coverage Ratio Subsidy of 18%), and General Service class revenues at 89% of total Full Cost (100% less the Revenue to Cost Coverage Ratio Subsidy of 11%), MH seeks to recognize that a similar 'under-recovery' of revenue relative to costs should exist as it does with grid customers living in rural and/or other remote parts of the Province.

What MH does not do in its current Application is to update the RCC subsidy based on the Uniform Rates that now exist in Manitoba to reflect current RCC levels of Residential and General Service customers. The impact of MH's policy approach is to reduce the Government subsidy by a total of \$1.07 million (comprised of \$841,827.00 of relief related to Residential customers and \$228,216.00 of relief related to General Service customers).

MH proposes that the \$1.07 million RCC subsidy (together with the Provincial Government Subsidies, as set out above) should be funded by MH's Grid customers.

In prior Applications, MH included, in the Revenue Requirement for the Diesel Zone, 20% of the accumulated deficit. In Order 1/10 (at page 13) the Board questioned whether MH's practice of only including 20% of the accumulated deficit in new rates was sufficient, in light of MH not filing regular annual rate

reviews for the Diesel Zone – a practice that has contributed significantly to the development of a large accumulated deficit.

In this Application, MH advanced a new position - that being no more 'backwards looking'; i.e., MH is not seeking that Government rates include any amount on account of prior operating deficits.

Accepting this proposal will transfer a significant financial cost to grid customers, a transfer that has largely taken place in the audited accounts of Manitoba Hydro but one that has only been carried on a notional basis for rate setting purposes.

The Board will accept MH's new approach, recognizing that the Government accounts will be the major beneficiary of not including any percentage of prior deficits in the Revenue Requirement for the Diesel Zone.

The prior deficits will fall to MH's Grid customers, who share financial responsibility with the two senior levels of government for the high costs of serving fellow Manitobans in remote areas of the Province not connected to the grid.

In adopting this view, the Board senses a new spirit of cooperation in addressing Diesel Zone electricity costs among MH, INAC, MKO and the four First Nations. This is evidenced by progress to finalize the Tentative Settlement Agreement, the post-2004 capital cost consultations, and expected funding commitments.

By not including prior accumulated operating deficits in the Diesel Zone Revenue Requirement (and even with the removal of the requested interest and depreciation expenses), there is greater flexibility for MH, INAC, and the First

Nations to resolve all outstanding issues related to costs in the Diesel Zone. As well, there will be less pressure on the Full Cost Rate in the future.

v/ Rates will Remain Interim

Since 2004, Board-approved rates for the Diesel Zone (excluding Grid General Rate Application Rate Adjustments) have been interim, and not final. This has been the case at the request of MH - to allow the Tentative Settlement Agreement to become a final Settlement Agreement.

The Board is advised that should the Settlement Agreement not be consummated, monies that have already be paid to MH through First Nations (from INAC), in purported compliance with the Tentative Settlement Agreement, are subject to be refunded. (i.e. \$3.2 million of pre-2004 Surcharge on First Nations' Government Accounts, and \$19.9 million – plus interest – for pre-2004 undepreciated capital costs.)

In addition to MH's request to keep rates interim at this time, INAC also takes that position, as it needs to ensure that the import of the Tentative Settlement Agreement, when finalized into a fully executed Settlement Agreement, has been met in all respects for the Diesel Zone costs.

INAC advised that it expects all matters that may preclude rates from being finalized now will be addressed and/or accommodated by INAC's fiscal year end of March 31, 2011.

The Board will agree with INAC and MH, and will thus keep rates interim, at least until as of March 31, 2011.

By that date, MH is to have filed an Application with the Board, supported by the written consents of MKO, INAC and the four First Nations and CAC/MSOS, to

finalize all interim Diesel Zone rates since 2004 – including those approved on an interim basis by Orders 17/04; 46/04; 159/04 and 176/06.

vi/ Pre-2004 Accumulated Deficit of \$16.9 Million

Back in 2004, and as an apparent concession to the Government accounts that would otherwise have responsibility for payment, the Tentative Settlement Agreement provided payment of the \$16.9 million of the then-accumulated deficit, plus interest, over 10-years, from an allocation of Net Export Revenues, calculated using the same methodology as the Net Export Revenue Credit for grid connected customer classes.

Since 2004, and in 2006 and 2007, the Board conducted a comprehensive review of MH's Cost of Service and directed changes in the methodology – including the creation of an Export Customer class and a determination of costs to be allocated to the Export class.

The result of the Board's directed changes in methodology reduced the Net Export Credit available to be applied to the Diesel Zone, such that it is now expected that only approximately 25% of the pre-2004 accumulated deficit (plus interest) will be retired by 2014.

While the Board understands the impact of the post-2007 Cost of Service Study methodology on the Tentative Settlement Agreement, that impact would have been unknown to MH, INAC, MKO and the four First Nations in 2004. As a result, the Grid Customers, who have already been assigned responsibility for the full amount of the \$16.9 million, will not “see” significant net export credits go to the Diesel Zone to notionally reduce the Grid customers' contribution to the Settlement.

Rather than look backwards, and perhaps put the finalization of the Settlement Agreement in jeopardy, the Board is prepared to accept that after 2014 there will be no further Net Export Credit applied to the pre-2004 accumulated deficit.

In essence, the remaining notional balance will be “written off”, just as it has already been fully expensed in MH’s audited and published financial accounts.

vii/ Allocation of Revenue Shortfall

MH has calculated and applied the Surcharge consistent with past practices. (That is – the Residential and General Service class Revenue Requirement minus class rate revenue results in the quantification of the \$5.0 million of ‘Revenue Shortfall’ in this Application.) MH proposed dividing that shortfall among government accounts on the basis of energy usage.

Mr. Hildebrand recommended, as an alternative allocation methodology, the use of the same ratios as those used for capital contributions shared in the Tentative Settlement Agreement (i.e. INAC 69%; Other Federal Government 6%; Provincial 4%; MH 21%).

MH contends the ratio of capital contributions and the ratio of Surcharge responsibility have different underlying purposes. Whereas the Surcharge arises from only Residential and General Service accounts, the Capital Contributions are for all users – Government as well as affiliated Residential and General Service accounts.

Notwithstanding the recommendation and cogent rationale advanced by Mr. Hildebrand, and the intuitive position of MH, the actual sharing of the Revenue

Shortfall appears, in this Application, to be favourable to INAC. Of the \$5 million of Revenue Shortfall, only 59% - or \$2.96 million – is being sought through the Federal Government payment of the Surcharge.

The Board will not disturb the current methodology (which has resulted in the favourable financial benefit to INAC).

viii/ Energy Management and Diesel Rate Design

The Board has long been interested in Energy Management (also known as Demand Side Management - DSM) for the Diesel Zone. While MH has brought forward many of the challenges it faces in implementing DSM in the Diesel Zone, the Board has not yet seen any significant tangible results.

That conclusion is shared by INAC's witness (Mr. Hildebrand) who recommended that MH expediently implement a comprehensive diesel energy management program in each of the four communities.

However, it is noted that in 2008 MH instituted a First Nations Power Smart Program leveraging funds available through the Affordable Energy Fund, and intends to take an aggressive approach to achieve energy savings on First Nations in the Diesel Zone.

It was suggested in the Presentations by representatives of the First Nations that MH's DSM program took sixteen (16) years to reach the Diesel Zone with tangible action – albeit in the form of the upgrade of only ten (10) residences – and that only occurring in 2010. Due to these delays in MH action, and a corresponding lack of action by INAC, those communities have not been able to reap any energy savings rewards.

It was noted by INAC that Canada does not intend to 'claw back' any energy savings that may arise as a result of DSM, but rather those savings will be available under the INAC funding formula for the community to utilize on other projects. The Board is encouraged by the pledge, and will await tangible evidence of the results.

From the evidence it appears that since 2008, Lac Brochet has retrofitted 10 homes and Shamattawa has taken advantage of the commercial lighting Power Smart program. From the evidence, it appears all Parties (MH, INAC, MKO and CAC/MSOS) seek greater uptake of DSM programs by the First Nations.

Outside of the First Nations Power Smart Program (i.e. residential envelope improvements), MH (by way of its written submission) sees limited additional opportunities for energy savings in the Diesel Zone.

Because energy savings financially benefit INAC and the First Nations directly, and because, ultimately, it is the communities' decisions to act on the opportunities presented, the Board sees a role for MH, INAC, MKO and the First Nations in consumer education programming and implementing DSM measures.

The Parties are encouraged to work cooperatively to pursue energy savings opportunities (success will most likely require the significant upgrading of housing in the four communities), and to document the successes as well as the failures. As well, the Board encourages INAC to follow-through on its pledge to not "claw back" any savings that may be realized.

Included in Mr. Hildebrand's recommendations to seek energy savings, was a recommendation to send a price signal to consumers to conserve energy through

the concept of doubling the grid equivalent rates over a four year period. While, in theory, this concept may have some merit, it is not so for the Diesel Zone.

The ability to send price signals is dependent on the circumstances, such as the extent to which the individual customer is financially responsible for the energy bill. With Income Assistance (including a portion for electricity costs) being funded by INAC to the First Nations governments (to support approximately 85% of the residents in the Diesel Zone), rather than Income Assistance being directly paid to the individuals consuming the electricity and responsible for the bill payment, it is likely that any price signal would be distorted – if received at all by those individual residents.

Doubling energy rates for Residential customers would also negatively impact those who do pay their own electricity bill – as well as likely increasing the cost of basic amenities (including food). It also runs counter intuitive to the reduction in the Full Cost rate by introduction of a Tail Block rate for those same customers.

To credit Mr. Hildebrand's candour, he acknowledged that his recommendation was an attempt "to do something" to reduce energy costs, rather than "doing nothing". The Board finds that such a recommendation is fraught with problems, and it will not be implemented.

The Board believes it is preferable for all Parties to strive co-operatively to enhance consumer education, leading to tangible energy savings opportunities being accepted by the leaders and residents in the Diesel Zone communities.

Finally, with respect to the potential for reductions in electricity consumption in the four communities, the Board notes that while assuming that upgraded residences and other buildings with adequate building envelopes and reasonably

efficient furnaces could reduce consumption per building, nevertheless if the restrictions on residential heating by electricity were removed and/or grid service was provided, it is likely that overall consumption of electricity would increase by three-fold or more.

Heating, using diesel as the energy source, is not only very expensive, it also leads to environmental issues and risks and, as well, may be a contributor to the reported poor health status of the residents. If the restriction on heating by electricity was removed, and that electricity was delivered by the grid (and not through increased diesel generation), it is highly likely that the residents of the communities would choose electric heat as quickly as possible, which would not only be cheaper but would also eliminate environmental concerns related to diesel, and might contribute to improvements to the health of the residents in the communities.

ix/ Electronic Filing and Electronic Spreadsheets

In its Findings, the Board has considered and addressed all of Mr. Hildebrand's recommendations, save for the recommendation that MH provide a comprehensive electronic application – including electronic spreadsheets.

The Board is moving towards more electronic filing capabilities – subject to budgetary restrictions. While this Diesel Zone Application was not posted electronically by MH or the Board, it is recognized that to do so would facilitate access to MH's materials by the Board and Interveners.

The specific recommendation for electronic spreadsheets has merit, and MH should advise the Board and all Parties as to its ability to comply with such a

requirement together with advice as to any attendant incremental costs that would be anticipated.

That information on incremental costs needs to be weighed against the potential savings that INAC, CAC/MSOS and MKO can identify if they had access to electronic (rather than paper) spreadsheets in an Application such as this one.

8. Board Recommendations:
Removal of Electricity Service Limitations in the Diesel Zone by way of Connection to the Grid; and, Upgrade of First Nations' Housing Stock:

Land lines:

Historically, it has been recognized by all levels of Government that electricity would need to be included amongst the basic services provided to remote and Northern communities in Manitoba, just as they are to all other Manitobans and Canadians.

According to Manitoba Hydro's report, *Recommendations for Reducing or Eliminating the use of Diesel Fuel to Supply Power in Off-Grid Communities* (hereinafter referred to as the "MH Report"):

HISTORY

“Manitoba Hydro’s relationship with the diesel communities can be traced back to the late 1950’s and early 1960’s when the Government of Canada (Canada) approached Manitoba Hydro and requested that Manitoba Hydro assist them in providing electricity to First Nations in Northern Manitoba. Manitoba Hydro and Canada entered into agreements whereby Manitoba Hydro was obligated to provide service (construct, operate, maintain and in some cases take over diesel stations) and Canada was obliged to pay a substantial portion of the costs. During the 1970’s Manitoba Hydro was contracted to provide electricity to 27 of these communities. Subsequently all but four have been connected to the grid. As per Manitoba Hydro’s policy the grid connections were substantially paid for by the customer – in most of these cases – Canada

Originally customers in the off-grid communities were restricted to 15 Amp service in order to control the cost of diesel service. In the early 1990’s, facilities in the remaining four communities not served by grid connection were upgraded to support 60 Amp services. 60 Amp service does not permit the use of electricity for space heat.

COMMUNITIES

The four remaining off-grid communities are located in remote areas in Northern Manitoba as shown in Figure 1. These communities are accessible by air year round and winter roads for about six to eight weeks each winter.

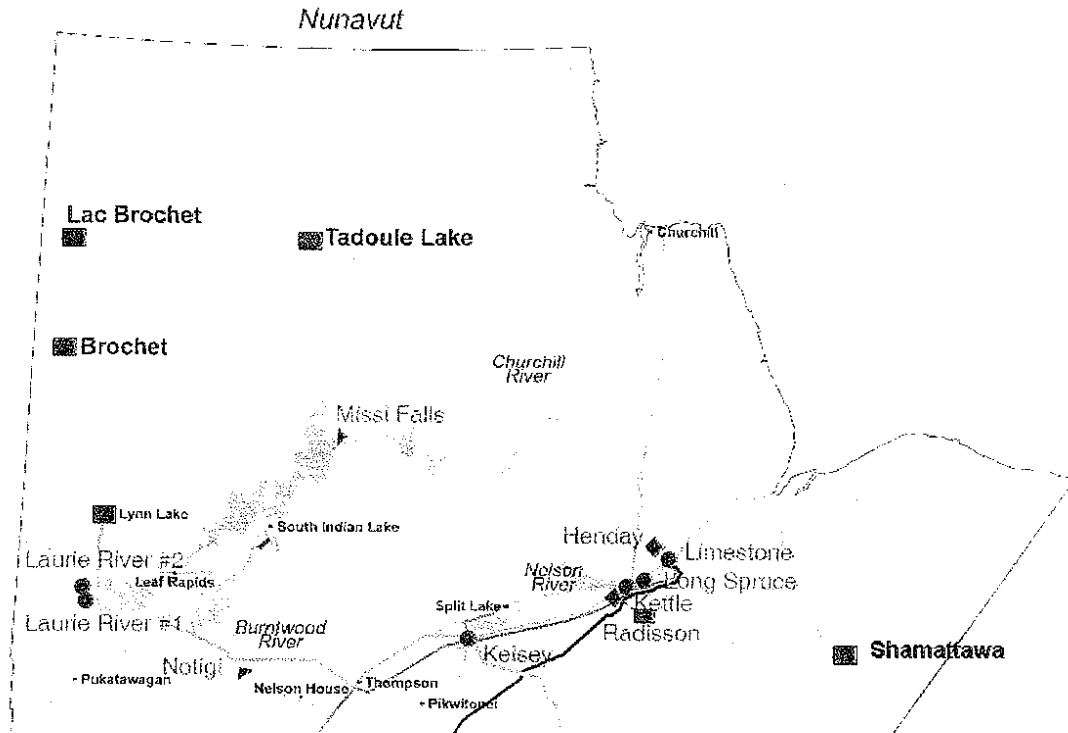


Figure 1: Location of Off-Grid Communities

Diesel generated electricity service, with limited Amperage to homes, has been recognized by senior levels of government as a sub-standard service, and government has also recognized that access to grid supplied electricity would provide communities with the opportunity for enhanced standards of living.

To achieve that end, and when strict “business case” models failed to financially justify the construction of land lines to remote communities, the senior levels of government made the decision to proceed with transmission land lines to remote communities, and prioritized funding to make such land lines a reality.

For reasons unknown to the Board, that reality did not extend to the communities of Brochet, Lac Brochet, Tadoule Lake and Shamattawa. By removing these four communities from the strict “dollars and cents” business case consideration provided for the nine other communities (then relying on diesel-generated electricity) that were provided grid service, the Board surmises that both governments determined that the required subsidization (to hook up all of the communities then relying on diesel generation) would be reduced by leaving out what is now the remaining four communities with diesel-generated electricity.

That said, the Board doubts that the governments intended to forever trap the four remaining Diesel Zone communities in a downward spiral of never getting connection to the grid. The economics of those four communities (in support of a ‘business case’) would never have been better than when the last of the nine other communities were connected to the grid. Now, along with diesel-generated electricity and with the cost of land lines much higher (due to inflation and other factors), the business case is worse than it would have been at the time the other nine communities were connected.

Every time this Board examines the adequacy of the rates in the Diesel Zone, inevitably the inadequacy of diesel electric service is confronted. The Board has encouraged MH to seek alternative sources of electricity, but no alternatives have yet to pass the financial “business case” test.

With hindsight, the decision not to extend the North Central Project land lines to the four communities in the Diesel Zone can be debated as to whether it should have been.

In MH's "Report", MH concludes:

The only option that eliminates the requirement for continued operation of the diesel generation station is the 66kV line option. This option provides for 200A service in all communities and from the initial discussions with the communities this is their preferred supply option. The capital cost of providing a 66kV line to all four communities is in the order of \$225 million and with an accelerated schedule could be installed over three winter construction seasons. To be in service by the end of 2012, a project to connect the communities to the Manitoba grid would have to be initiated in the summer of 2009.

For purposes of the Board's Recommendations in this Order, the Board will accept MH's conclusion that the 66kV line option is the preferred solution. While other options to eliminate the service restrictions were examined, it appears that the land line was the only option that eliminated the requirement for continued operation of the diesel generated stations. That said, for the purposes of this Order, the Board will not discuss further those other options.

Recognizing the Board's express jurisdiction does not extend to approval of capital projects for MH, and recognizing that only forward thinking will provide clarity to the situation, the Board recommends that MH, together with the senior levels of government (including Industry Canada and INAC) re-evaluate the decision that withheld the extension of land line electricity service to the four communities in the Diesel Zone.

While the capital costs of land lines are acknowledged to be formidable – so too are the ongoing capital and operating costs of diesel generation. And, as well, there are considerations beyond those of a strictly financial "business case".

The Report MH filed in these proceedings was the same Report submitted to the Manitoba Legislative Assembly by the Minister Responsible for Manitoba Hydro, which was in response to the directive in *The Climate Change and Emissions Reduction Act* (Climate Act) of Manitoba.

The purpose of the Climate Act is to address climate change, to encourage and assist Manitobans in reducing emissions, and to promote sustainable economic development and security.

Sub-section 17 (1) of the Climate Act mandates the Report to contain recommendations for reducing or eliminating the use of petroleum based diesel fuel in the Diesel Zone by 2012.

In these proceedings, the capital costs of land lines to all four communities were again provided – with the most current estimate being \$225 million. MKO submits that that price may be reduced through a public tendering type process. In any case, as transmission lines are amortized over 60 years, and allowing for financing costs and depreciation, the annual costs become better focused.

Against the annual amortized costs of a land line, the direct and indirect financial costs in the Diesel Zone can be compared.

As indicated above, on the basis of a strict economic feasibility test, it is acknowledged that the current level of electricity consumption in the four communities of the Diesel Zone requires significant financial contributions by the senior levels of government to pass the ‘test’.

Significant contributions from Government were required to make land lines a reality for the twenty-three of the twenty-seven remote diesel communities that

were connected to MH's transmission grid in the 1970/80/90 period. And those contributions, calculated in the terms of 2010 dollars, were quite significant.

Recognizing that governments never intended the four remaining non-grid communities to be perpetual victims of geography, this Board recommends the following factors be considered and quantified in the development of a 'new business case' in respect of providing unrestricted electricity service to the communities of Barren Lands First Nation (Brochet); Northlands Denesuline First Nation (Lac Brochet); Sayisi Dene First Nation (Tadoule Lake); and Shamattawa First Nation (Shamattawa):

a) Up-front (initial) Capital Costs

Capital costs of diesel generation was likely a primary input to the cost-based business model that was last used to evaluate the viability and level of subsidy required to construct land lines to the four communities in the Diesel Zone; these costs will (only) increase.

If the goal of providing equivalent-to-grid service (from diesel generators) is even a near-term objective, lifting the service restrictions to permit 200 Amp service from diesel generators would likely require significant upgrades to the generating equipment in the communities, and these upgrades would come at significant cost.

MH projects load growth for the four communities to be in the range between 2% and 4% annually, assuming no change in supply of electricity. However, should the restrictions be lifted and a 200 Amp supply be implemented in these communities, it is expected (by MH and the Board), based on the consumption experience of the last communities connected to the grid, that there would be an

initial significant increase in load as residential customers converted from fuel oil/diesel to electric heating.

This assumption is consistent with the experience that MH reports with respect to the last communities connected to the grid, where their consumption of 15 Amp service increased four to five times when connected to the grid. It is assumed that the connection of the four “Diesel Zone” communities to the grid would result in significant increases in electricity consumption.

As the Board has seen throughout MH’s Diesel Rate Applications, the capital costs associated with upgrading the generating equipment capacity runs into the tens of millions of dollars. MKO’s Mr. Anderson reported that when Shamattawa obtained its new diesel generating station, the capital cost was in the range of \$16 to \$18 million, comprising the largest percentage of the \$28.8 million of undepreciated capital costs that were incurred and existed at March 31, 2004 (the subject of the Tentative Settlement Agreement).

Of this \$28.8 million, the four diesel communities (through INAC funding) assumed responsibility for 69% (\$19.9 million plus interest). A further 10% (\$2.9 million) was paid by other Provincial and Federal Government customers, with the balance of 21% being paid by grid customers.

b) Ongoing Capital Costs

In addition to the capital costs one would instinctively associate with replacement and upgrading of diesel generators, there are other capital costs (not readily as apparent) that rightfully need to be factored into any ‘business case’, including the following examples of the \$7.4 million of actual capital expended by MH between 2005 and 2010 in the Diesel Zone:

- i) Brochet: \$3.5 million for soil remediation; fall arrest protection (safety measures); well monitoring; engine failures; miscellaneous small capital expenditures.
 - ii) Lac Brochet: \$.74 million for fall arrest protection; well monitoring; engine failures; miscellaneous small capital expenditures.
 - iii) Shamattawa: \$1.5 million for fall arrest protection; potable water supply; engine failures; power house modifications; miscellaneous small capital expenditures.
 - iv) Tadoule Lake: \$2.4 million for new gen set; fall arrest protection; heat recovery system; well monitoring; engine failure; and miscellaneous small capital expenditures.
- c) Future capital expenditures

In Order 1/10 (on page 6 of 10), the Board noted that MH has forecast the additional expenditures of another \$16.45 million in the years ahead for capital costs with respect to diesel-generated electricity for the four off-grid communities.

- d) Unforeseen capital expenses

By definition, unforeseen capital expenses are not forecast, but history suggests that such costs will be incurred for such items as:

- i) Continued soil remediation at new and existing sites:

The record of this hearing shows that MH has expended \$3.4 million for soil remediation of certain sites contaminated by diesel fuel. By its nature, there will most certainly be additional sites to be remediated in the future – at untold millions of dollars.

ii) Water contamination:

Diesel fuel leaking into the soil and groundwater would be disastrous for communities already struggling to have a sanitary drinking water supply. Currently, there are well monitoring programs and potable water supply capital expenditures being incurred.

iii) Environmental Contamination:

Environmental risk is inherent with the trucking of diesel into these four communities – not only for the purpose of generating electricity but also to heat homes and other buildings -- the millions of litres of diesel fuel that are hauled over winter roads that, by their very nature, are treacherous. An accident in the wilderness would have severe environmental impacts and could prove immeasurably costly to contain and rehabilitate.

e) Operating Costs

The approximately \$8 million of annual operating costs (in 2010) to serve the four communities underscores the reason for the full cost rate in the Diesel Zone (59¢/kWh) being approximately 10 times the rate charged to grid-connected residential customers.

With diesel fuel comprising more than 50% of the operating costs, it may be unrealistic to envision the operating cost declining – a more likely scenario is one of increasing cost for fossil fuels.

It is the relative cost of water (Hydro-generated electricity), compared to the current and future cost of diesel fuel, that needs to be factored into the 'business case' for the possible grid connection of the four communities in the Diesel Zone.

f) Air Transportation of Diesel Fuel

While MH attempts to manage the risk of winter roads being unavailable to transport diesel fuel to the communities, should climate change make winter roads unavailable, the diesel fuel would need to be air-lifted into the four communities. The operating costs associated with diesel fuel in those instances would soar.

g) Health and Social factors in the Business Case

It is unknown to the Board as to what factors were or were not considered the last time a 'business case' was evaluated.

The Board has heard evidence to the effect that Canada has declined to fund a land line into Shamattawa from the proceeds of the Green Energy Fund. While the rationale for Canada's decision was not available to the Board, the Board can infer that the economics of the proposal were not attractive enough to justify the allocation of funds. Perhaps particularly true, in light of the economic downturn and the deficit budgets being carried and projected by governments.

However, from the vantage point of this Board, to only look at energy costs in the viability of land lines, would be a short sighted mistake.

Just as this Board does not accept that the senior levels of government ever intended these four communities to forever be outposts of civilization, lacking in what all other Manitobans and Canadians consider essential services, this Board also believes that the new business case needs to include other factors – including the many factors that resulted in governments prioritizing monies for the 23 former “diesel” communities that were last connected to MH’s grid.

These other factors, as difficult as they may be to accurately quantify, will be well known to governments, and need to be included in the new and comprehensive ‘business case’.

Perhaps because of the unique position of this Board, evidence is heard and read of these other factors being interrelated and providing interactive synergies with grid electricity service.

For example:

i) Health Care

Of INAC’s regional budget of some \$900 million, 2/3rds was attributed to education and social programs (which the Board understands are significant determinants of health).

Quantification of health costs attributed to having limited electricity service can only be conjecture – but with the knowledge that the costs are real.

Without electric heat capability, most homes in these four communities apparently rely on diesel fuel (home heating oil). The home heating and air circulation problems associated with burning diesel fuel in a home furnace brings documented cases of tuberculosis, mould, fungus and other airborne pathogens. The health costs of improperly-heated homes needs to be estimated and added to the 'business case'.

Layering on those health issues and costs are the costs from other health issues and respiratory illnesses arising from the 24/7 'diesel exhaust' (NO_x; SO_x; CO; CO₂; fine particulate matter and UHC associated with diesel generation being breathed by all men, women, and children in the community) That diesel exhaust emanates not only from home furnaces but also from the electricity generating diesel units themselves.

With infrequent access to medical treatment, illnesses intensify – leading to requirements for medical evacuation, by air, from the communities to the regional health centres – again at significant costs well known to government.

Health conditions can be improved and overall health costs reduced by providing fresh and nutritious foods at reasonable prices to the residents in the Diesel Zone community. With commercial stores paying full cost electricity rates (ten times the rates paid by stores connected to the grid), those costs end up being incorporated into the price of groceries.

With 85% of the residents in the communities depending on Income Assistance, it must be a luxury (beyond the reach of most) to consume fresh milk daily, when priced at \$16 - \$18 per 4 litre jug at the local store. A grid electricity rate for all electricity consumed by commercial stores indirectly contributes to a healthier population.

ii) Education Costs

With poor living conditions being cited as a contributing reason for problems recruiting motivated (and sufficient numbers) of teachers, full electricity service could enhance the opportunities to recruit those teachers.

Likewise, with healthier students, the prospects for success are enhanced – whether success is defined by graduation rates, provincial-wide standardized test scores, students going on to post-secondary education, or gainful employment.

iii) Healthy Houses

Millions of dollars being expended on capital costs for new houses (and retrofitting existing homes) can go further when full service electricity is made available to the occupants.

When existing diesel oil fired furnaces develop problems, become inefficient, or break down, the health of all occupants may be affected. With lack of qualified furnace repair technicians and lack of repair parts, residents resort to dangerous electric space heaters (on extension cords) for heat. The minimal heat given from a space heater contributes to the unhealthy home.

iv) Environmental Costs

Environmental costs, like the other costs summarized above are real costs.

The Province of Manitoba recognizes environmental costs in its Climate Act, where it expressly mandates MH's Report to contain recommendations for

eliminating the use of petroleum-based diesel fuel to supply power to the four communities in that Diesel Zone. *[Section 171 Climate Act]*

In its Report, MH quantifies:

“Approximately 8,000 tonnes of green house gas (GHG) emission are emitted annually as a result of the diesel generation.”

The Report does not appear to quantify the reduced GHG that will also occur by switching from diesel-oil furnaces to electric furnaces should there be connection to the electricity grid. Quantification of home GHG would add thousands of tonnes of GHG savings should land lines be installed.

v) Hope

Perhaps best left unquantified, the leaders of the First Nations in the Diesel Zone see the lifting of limitations on electricity service as a tangible sign of hope that their communities are not being forgotten by society, and that the communities can continue to live in their ancestral territories, and continue to practise their ways of life for generations to follow.

h) Where can the money come from to fund the construction of land lines?

With this most difficult question left to be answered, the Board offers the following suggestions and recommendations:

- i) In 1987 a 138 kV Gillam to Churchill Manitoba land line was energized. It took over three winters to construct the 270 km transmission line at a cost of \$35.6 million.

According to MH's 1988 Annual Report:

“The \$35.6 million project was funded under the terms of the 1984 Canada-Manitoba Subsidiary Agreement on Churchill. Manitoba Hydro’s share of the cost was \$16.3 million.”

- ii) 1982 – The North Central Project (NCP) Agreement was signed by four parties – the Federal Government, Provincial Government, local communities, and MH. The electrification project was to result in nine communities, then-served by diesel generation, being linked to the provincial power grid. The cost was to be shared among the Federal Government, Provincial Government and MH.

By 1995 the funding approvals from the Federal and Provincial Governments were received for the 138kV 360 km transmission line to the communities of Wasagamack, God’s Lake, God’s River, Red Sucker Lake, Garden Hill, Oxford House, St. Theresa Point, Island Lake, and God’s Lake Narrows.

By 1999 the North Central Project was completed for \$154 million, with funding from the Federal and Provincial Governments and MH. The provincial share was funded by MH in exchange for a freeze on water rental rates.

- iii) In prior Diesel Zone Rate Applications, it was expressed that due to the large dollar amount involved and the irregular timing of major capital expenditures in the Diesel Zone, the Federal Government’s budgetary process was challenged. Rather than pay all (or a share) of the capital costs, it was deemed more expedient to include Canada’s share of such costs in the rate structure. To some extent,

that paved the way for the pre-2004 revenue requirement calculation and rate structure proposed by MH and supported by the Board.

The post-2004 understanding, as expressed in the Minutes of Settlement related to the Tentative Settlement Agreement – or at least in the post-2010 signed Settlement Agreement, is that capital related expenses are to be removed from the rate structure and are to become a matter of consultation and consensus among MH, the four First Nations in the Diesel Zone, and INAC. While there is recent optimism for this Settlement Agreement to have success, again, time will tell.

- iv) The Board interprets the above history and Hansard transcripts as confirmation that it was never a question of IF four remaining diesel communities would be connected physically with land lines utilized by all other Manitoba communities, but rather only a question of WHEN the four remaining diesel communities will be connected to the grid.

If the Board is in error in its interpretation, it will be for the governments to explain and justify any contrary decision.

- v) That said, the Board envisions that (just as happened repeatedly with the land lines to Churchill and the other 23 remote diesel communities last connected to the grid), the senior levels of government will be required to fund the greatest percentages of the costs.

The Board fully recognizes the unenviable position of governments in having to prioritize infrastructure funding – whether it be for infrastructure (such as land lines, bridges, office towers, professional sports venues, museums or even fighter aircraft), or the myriad of other competing projects.

Given this realization, the Board recommends that, if necessary, the initial funding for land lines be arranged by and through MH and the Province of Manitoba, with the costs to be amortized over the useful life of the assets.

Recognizing that long-term debt has seldom historically been less costly (the now relatively low cost of 30-year debt compares favourably with the amortization period for transmission lines, which exceeds 30 years), is a factor supporting this approach.

While the Residential and non-government General Service customers of the four communities would, with grid service, have no restriction on consumption levels and pay only grid rates, contributions from the two senior levels of government would (still) be required to meet a significant portion of the difference between the revenue arising from grid rates and the actual overall cost to provide grid service to the four communities.

If MH (through the Province of Manitoba) funds the extension, there will be annual depreciation, finance and operational costs associated with the extension that will assign in large measure to the senior governments.

Their method of sharing those costs would best come through written confirmation, with the shares and calculation of costs falling to the two senior governments to be separately and identifiably established.

Canada's participation in funding the extension of the grid to the four communities would (if Canada does not provide its share of the required funding "up front") be through an allocation based on "full cost rates", and an attendant Government Subsidy.

In considering the approach to funding its fair share, Canada's involvement could involve other departments as well as INAC. There is merit to exploring funding availability (up-front and annual), through other Federal Government agencies, given the wide range of benefits (health, education, environmental, industry) expected to be realized for the four communities through grid service.

The Province of Manitoba, too, has a role to play in funding the grid extension. There has been ongoing recognition for Manitoba to contribute to costs incurred in the Diesel Zone.

All parties need to realize that the grid customers of MH are now currently contributing to the diesel costs, even though there is a strong rationale that 100% of the stand-alone diesel generation costs should be borne by the customers in the Diesel Zone and the senior levels of government responsible for those customers.

As an example, in the current Application MH is seeking approval for grid customers to accept responsibility for over \$2 million of the \$8 million collectible revenue requirement for the 2010 operations of the Diesel Zone.

The Board is prepared to assess any funding proposal, and the contribution which may be reasonably expected from Grid customers' rates – all within the context of what is in the public interest.

The Board also notes that INAC funds the First Nations of the Diesel Zone for various expenses – including capital. The message clearly sent in the presentations by the First Nations Chiefs and Leaders, is that they are prepared to work together with all the other parties to resolve the land line issue. It is time for more than words, from all parties.

Land lines to the four remaining Diesel Zone communities in Manitoba may provide opportunities to our Saskatchewan neighbour, to also connect their non-grid communities to land lines. The people affected are those living within the traditional territories of First Nations (restricted by today's political boundaries).

i) Next Steps

The Board invites MH to assume a position of leadership in eliminating the use of diesel fuel to supply power to off-grid communities.

The September 28, 2007 letter from the Honourable Minister of Science, Technology, Energy and Mines makes it clear that the Provincial Government is supportive of reducing the need for diesel use in the off-grid communities. While this letter was actually related to “mini hydro” in the Cochrane River, the priority was clearly “getting” the community(ies) connected to lower cost and adequate electricity service.

A more recent letter (September 30, 2010) from the Minister Responsible for Manitoba Hydro to the Chief of Shamattawa First Nation confirms that the Provincial Government believes that connecting Shamattawa to the Provincial grid is a worthwhile project, with a strong economic and environmental basis, and that the Province of Manitoba will continue to seek other sources of federal funding (in order to make a land line to Shamattawa a reality).

There is also indication, in the Honourable Minister's September 30, 2010 letter, that the Federal Minister for Transport, Infrastructure and Communities has agreed to assist with investigating other sources of federal funding.

The Board also recommends that (to the extent possible) Mr. Mills of INAC be involved, as his skills and background knowledge appear invaluable to the process envisioned by the Board.

MH is to regularly report to the Board (on at least a quarterly basis) on the progress made, the obstacles encountered, the options being considered, and the role that Canada (including all departments – Industry Canada and INAC) Manitoba, MKO and the four Diesel Zone First Nations and MH are accepting in successfully resolving the issue of land lines to the Diesel Zone communities.

Lastly, MH, with the concurrence of the other Parties, will have access to the Board through processes to quantify reasonable levels of participation

in funding annual amortized costs associated with land line construction to the communities in the Diesel Zone. The Board is also available to provide further clarification and/or adjudication of related issues with the concurrence of the affected Parties.

Upgrade of Housing Stock

The Board recommends that, either through INAC and/or MH, and with the agreement and cooperation of the affected First Nations, each and all of the housing stock in the four communities be reviewed, and a comprehensive inventory of deficiencies be developed towards a goal of upgrading or replacing the housing stock so that DSM measures to reduce electricity consumption and heating bills (from what they would otherwise be, or be expected to be) can be effectively employed.

In undertaking an assessment of the housing stock (and in taking remedial action to upgrade same), the Board suggests that the First Nations should be consulted as to the potential of having community residents involved in the required work.

The demographic evidence placed before the Board included the information that the four communities have very low labour participation rates, very high unemployment rates (amongst those that do want to participate in the labour force), and that household incomes are also very low. Presenters suggested that training of residents, and providing opportunities to work, would provide benefits beyond only economic ones.

Concluding Remarks

The Board's directives and recommendations provide positive support towards the alleviation of what, by all accounts, is acknowledged to be an undesirable situation – one where the only customers of Manitoba Hydro that are expected to function with service limitations of 60 Amps and a prohibition of the use of electricity for heating are the customers (and communities) of the Diesel Zone.

While the Board suggests that the service limitations be removed in conjunction with the Provincial Government's objective of eliminating the use of diesel fuel to supply power to the remaining off-grid communities, the Board is also cognizant of the possibility of senior governments either not being willing or being unable to act on these recommendations.

In such a case, then it falls to Manitoba Hydro to provide a plan to allow Residential and non-government General Service customers in the Diesel Zone communities to use electricity without service limitations, and at Grid equivalent rates.

As MKO regularly reminds the Board, Uniform Rate legislation provided rural and remote grid-connected customers of Manitoba Hydro to be charged 'postage stamp' rates. The annual cost of Uniform Rates was (when initially introduced) approximately \$15 million.

That sum (which has likely increased significantly over time) is borne by all Grid customers, and MKO contends that the two senior levels of government and Grid customers should bear the costs of extending the same level of electricity service to the remaining off-grid communities. That concept has merit and needs to be

investigated, even if alternative sources of unrestricted electricity service are determined not to be available to the communities of the Diesel Zone.

In the event that there is no positive support for removing the service restrictions and eliminating the use of diesel fuel to supply power to the off-grid communities, Manitoba Hydro is to develop a five year fully costed plan to migrate Residential and non-government General Service Diesel Zone customers to grid rates for all consumption, including space heating.

Such a plan is to include cost considerations for capital and operating expenses (i.e. generation, fuel, fuel transportation, storage of fuel, environmental, etc.), and be provided to the Board within one year from the date of this Order.

Finally, the Board recommends that MH bring forward future rate applications for the Diesel Zone on a regular basis, so as to ensure that the overall rates charged provincial and federally funded accounts represent costs incurred in providing electricity service to the Diesel Zone.

Should there be questions seeking clarification, Manitoba Hydro is to so advise the Board in writing.

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.

9. IT IS THEREFORE ORDERED THAT:

1. MH's Application for Revised diesel generated electricity rates BE AND IS HEREBY VARIED AS FOLLOWS:
 - a) MH's Application, to include in the Revenue Requirement \$222,842.00 of interest expense and \$357,655.00 of depreciation expense (on unrecovered capital costs of \$4.4 million since April 1st, 2004), BE AND IS HEREBY DENIED.
 - b) The Full Cost Rate be recalculated to remove interest and depreciation expenses;
 - c) A Tail Block rate of 35 cents/kWh for electricity consumption in excess of 2,000 kWh per month (for Residential and General Service non-government accounts) be established;
 - d) MH's Application to transfer the accounts of the Provincial Government and agencies to the General Service class BE AND IS HEREBY DENIED.

2. MH is to re-file, for Board approval, its proposed rates and all supporting schedules reflecting the decisions of the Board in this Order, to be effective for all electricity consumed in the Diesel Zone on and after January 1, 2011.

3. MH file with the Board and all Parties to this Diesel Zone Application:
 - a) Confirmation that the Settlement Agreement (from the 2004 Minutes of Settlement) has been fully executed;
 - b) A true copy of the fully executed Settlement Agreement;

- c) Confirmation of payments or adequate funding arrangements for the capital costs incurred by MH, by community, since 2004; and
 - d) Indication of capital costs still in dispute, if any, and the process and timeline for resolution of such dispute(s).
4. MH, supported by the written consents of INAC, MKO, the four First Nations and CAC/MSOS, is to seek an Order of this Board to confirm, as final, all Diesel Zone rates approved on an interim basis since 2004, including those interim rate approvals in Board Orders 17/04; 46/04; 159/04; 176/06.
5. MH to advise the Board and all Parties to this Application as to the Utility's ability to provide electronic spreadsheets, as well as any attendant incremental costs had this application been filed with electronic spreadsheets.
6. In the event that there is no positive support for removing the service restrictions, including the 60 Amp restriction, and eliminating the use of diesel fuel to supply power to the off-grid communities, Manitoba Hydro is to develop and file with the Board, within one year of the issuance of this Order, a five year fully costed plan to migrate Residential and non-government General Service Diesel Zone customers to grid rates for all consumption.

THE PUBLIC UTILITIES BOARD

"GRAHAM LANE, CA"
Chairman

"H. M. SINGH"
Acting Secretary

Certified to be a true copy of Order No.
134/10 issued by The Public Utilities
Board

Acting Secretary

Appendix A

Appearances

Bob Peters)	Board Counsel
Odette Fernandes)	Manitoba Hydro Counsel
Patti Ramage)	
Myfanwy Bowman)	CAC/MSOS Counsel
Glynis Hart)	INAC Counsel
Mary Ann Thompson)	
Michael Anderson)	Representing MKO

Appendix B

Witnesses

Vince Warden)	
)	
Robin Wiens)	
)	Manitoba Hydro
Rob Cox)	
)	
Shannon Johnson)	

Fred Mills, of INAC

Dale Hildebrand, of Desiderata Energy Consulting Inc. (on behalf of INAC)