Q. **Re: Rates Schedules, page 23-24 of 47.**
Please describe the group of customers served under Rate Class 1.1 (Island Interconnected, Domestic) and 2.1D and 2.1G (General Service Diesel, 0-10 kW), and explain why they are served by NLH rather than NP.

A. The group of customers served under Rate Class 1.1 (Island Interconnected, Domestic) are residential customers served by Hydro in rural areas on the Island, mainly on the Great Northern Peninsula, the Connaigre Peninsula and the Green Bay and White Bay region.

The group of customers served under Rate Class 2.1D (General Service Diesel, Non-Government, 0-10 kW) are non-residential customers, such as commercial customers, served by Hydro on Island and Labrador isolated systems. This rate class excludes, however, churches, schools, community halls and fish processing facilities, which receive preferential rates as outlined in response to PUB-NLH-078.

The group of customers served under Rate Class 2.1G (General Service Diesel, Government Departments, 0-10 kW) are federal and provincial Government Department customers served by Hydro on Island and isolated systems.

The customer classes outlined above are served by Hydro, rather than NP, as a result of the manner in which rural electrification of the province occurred. Please refer to the IN-NLH-102, Attachment 1, “History of Electrification”, an excerpt from the Board’s October 10, 1995 report on “A Referral by the Lieutenant-Governor in Council Concerning Rural Electrical Service.”

HISTORY OF ELECTRIFICATION

Being the closest North American land mass to Europe, Newfoundland has played a prominent role in the advancement of transportation and communication links between the old world and the new. During the last two centuries, the Island was the location from which were launched many of the "firsts" in technological improvements associated with these ventures.

Not the least of these was the successful installation of an undersea communications cable between the two continents in 1866. The real story of electrification of this Province began, not with the discovery of the electric motor and incandescent light in the late 1880's, but with the technical and entrepreneurial expertise that was imported some twenty years earlier in support of this transatlantic communications link. Without that talent, it is doubtful whether Newfoundlanders would have been able to take advantage of electricity in this new form as early as they did. A growing utility industry was well established before the turn of the century. Privately owned utilities and industries dictated the expansion of electricity use in the Province for the next fifty years. Pockets of electrification developed on the Island, principally centred around the larger communities as there was no incentive for the owners of the power systems to extend service to scattered, sparsely populated rural areas.

In 1954, the Government became involved in rural electrification, with the enactment of the *Newfoundland Power Commission Act*, which was aimed principally at extending electric service to unserviced communities. In 1958, the construction of extensive rural electrification facilities began in earnest; first, through co-operative arrangements with the investor-owned utilities and municipalities, and later by the Newfoundland Power Commission constructing, owning and operating facilities of its own.

The agreements with the four principal electric utilities provided that the Government would finance and own the new rural distribution facilities and pay the full cost of all subsequent replacements and additions. The utilities supplying power to these rural lines agreed to operate and maintain the facilities at their own expense except that, in isolated diesel areas, the Government would pay all costs of generation in excess of two cents per kWh. The utilities also agreed to pay to the Government a portion of the revenue collected based on the average customer density on these systems.

In co-operation with the Department of Municipal Affairs, the Power Commission also constructed diesel generating plants and distribution lines for some municipalities for which the cost of extending service from the existing utility was cost-prohibitive. These plants and lines were financed in part by a twenty year bond issue arranged by the Department of Municipal Affairs and guaranteed by the Provincial Government. The Power Commission furnished the design, certain materials, supervisory personnel and, in some cases, the diesel generators. Title to the diesel generators supplied was retained by

the Power Commission, but materials, wages, overhead and other expenses incurred by the Power Commission during construction were considered "grants-in-aid" to the municipalities concerned. The operation of these installations was the municipalities responsibility.

In the meantime, the Power Commission had established itself as a functioning utility in other communities, one of the largest being Happy Valley in Labrador. In 1963, the Government elected to expand their rural electrification program by way of the enactment of the *Rural Electrification Act*. It authorized the formation of independent authorities called Power Distribution Districts and, with an infusion of funds from the Federal Government, financing was arranged for the extension program. The target was to extend electric service to virtually every community in the Province.

By 1965, the Government had decided to develop a major hydro-electric resource on the south coast of the Island at Baie d'Espoir and construct a trans-Island grid to interconnect all major generation and load centres. In order to arrange the financing for this major project, it was necessary to restructure the Power Commission to relieve it of any financial obligation for the heavily subsidized rural electrification program. The *Newfoundland Power Commission Act* was repealed and replaced by the *Newfoundland and Labrador Hydro Power Commission Act*, which removed all responsibility for rural electrification from the newly-created utility. A new Newfoundland and Labrador Rural Electricity Authority (REA) was established and charged with the responsibility of providing for the distribution of power in rural areas using funds made available to it by the Provincial Government. The REA assumed the assets of the old Power Commission relating to the provision of power in rural areas.

Between 1967 and 1971, in an effort to reduce administrative costs, the assets of the REA were transferred to the Power Distribution Districts and the fifty-two districts were combined into one Power Distribution District (PDD). The REA was retained only as the avenue by which funds were transferred from the Consolidated Revenue Fund to PDD in order to provide grants for capital construction and operating subsidies.

At various times since 1968, PDD transferred certain of its distribution systems to Newfoundland Power. Where savings could be achieved by having the investor-owned utility own and operate a section of PDD rural distribution, and where the utility could assure the Board that the assumption of this responsibility was not detrimental to its existing customers, the Government agreed to transfer those sections. Such transfers relieved the Government of the responsibility of providing funds for further expenses in these areas.

Areas which were transferred included Twillingate Island, areas of the Port au Port Peninsula, the Doyles area on the West Coast, the area from Flat Bay to Highlands, Bay L'Argent-Harbour Mille, Trouty to Old Bonaventure, Country Road Holyrood, Point Leamington to Glover's Harbour and Leading Tickles, Lake Bond to Badger, Point of Bay to South East Arm, Notre Dame Bay, Wild Cove, White Bay and all of the rural lines servicing the districts of Ferryland, St. Mary's, Placentia East, Placentia West, Trinity South and Trinity North.

In 1975, PDD became responsible for the diesel plants and distribution systems in Northern Labrador which had, until that time, been operated by the Department of Rural Development. This resulted in a large increase in the subsidy with only a relatively small increase in revenue to offset it. This same year also saw the introduction of the "lifeline

block" for isolated diesel customers: that measure of electricity deemed necessary to service the most essential aspects of life. As to the rate structure, the Provincial Government, on February 17, 1975 (MC 171-75), ordered as follows:

> "(i) the rates charged by the Power Distribution District of Newfoundland and Labrador to customers served from its integrated (hydro) system be adjusted from time to time to conform with the rates approved by the Board of Commissioners of Public Utilities for the Newfoundland Light and Power Company Limited;
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> "(ii) the rates charged by the Power Distribution District of Newfoundland and Labrador to domestic customers served from diesel systems be adjusted from time to time to conform with the rates approved by the Board of Commissioners of Public Utilities for the Newfoundland Light and Power Company Limited, such to apply to the first five hundred (500) kilowatt-hours consumed in any month and, further, that the charge for each additional kilowatt-hour consumed in any month be increased by an amount equal to the average rate of increase approved from time to time by the Board for the Company; and
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> "(iii) the rates charged by the Power Distribution District of Newfoundland and Labrador to customers other than domestic customers served from its diesel systems be increased from time to time by an amount equal to the average rate of increase in rates approved from time to time by the Board of Commissioners of Public Utilities for the Newfoundland Light and Power Company Limited."

On February 18, 1975 (MC 184-74), Government also approved the recommendations of the Minister of Mines and Energy with regard to the rates charged for electrical services to customers of PDD as follows:

> "the provision of service to fish plants fed from diesel systems at Island interconnected rates be continued;
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> "the existing diesel system commercial and general service rates be continued except as provided above;

"the hydro system rates of the PDD be adjusted to conform to the rates approved by the Public Utilities Board for Newfoundland Light and Power Company Limited; and

"no discounts for early payment of accounts be allowed on either the hydro or diesel systems of the PDD."

During 1979, the Board held hearings and issued a report on the then existing rates and rules of the Board of Trustees of the Power Distribution District of Newfoundland and Labrador. In its report issued on April 27, 1979, the Board recommended, among other things, several changes to the rate structure. The first recommendation was that PDD should continue to charge its diesel domestic customers at the rate approved by the Board for Newfoundland Power's domestic customers for the first 500 kWh consumed in any month. On March 31, 1980, Government approved this lifeline block, given that the recommendation was in accordance with its above referenced directives of 1975.

In its report, the Board also recommended that 5.65 cents per month per kWh be charged to diesel domestic customers for consumption of electricity from 501 kWh to 700 kWh, and that a rate of 11.4 cents per month per kWh be charged for kWhs in excess of 700 kWh. In this instance, Government decided that the present rates in effect should remain unchanged. Escalation of rates ought to be in accordance with the provisions of the 1975 Government directives, whereby rates charged by PDD for domestic customers served by diesel systems that consume over 500 kWh per month be increased from time to time by an amount equal to the average rate of increase approved by the Board for Newfoundland Power.

Further, the Board also recommended that the present rate of 11.4 cents per kWh

be continued for diesel general service customers. This was approved by Government, with the proviso that further escalation of rates ought to be in accordance with the 1975 Government directives.

As well, the Board recommended that PDD install demand meters for general service customers with a demand in excess of 10 kW per month and that a demand charge then be implemented. Government decided not to implement this recommendation. Finally, the Board recommended that PDD continue to charge Newfoundland Power rates to Island interconnected customers. This was approved by Government.

By 1980, the REA had been abolished and the assets of the PDD transferred to Newfoundland and Labrador Hydro. From that date, the PDD functioned only as the vehicle by which Government subsidized rural electrification.

In 1987 (MC 520-87), Government decided to increase the lifeline block from 500 kWh per month to 600 kWh per month as of April 1, 1987. The Government decision stated:

"(a) That the quantity of electricity for which the interconnected rate applies be increased from 500 kilowatt hours per month to 600 kilowatt hours per month.

"(b) That the rates to be charged by P.D.D. to domestic customers served from diesel systems be as follows:

- For the first 600 kilowatt hours per month, the rate to be the interconnected rate as approved by the Board from time to time for customers of NLP, presently being 6.101 cents per kilowatt hour.

- For the next 400 kilowatt hours per month, the rate to be 8.68 cents per kilowatt hour and this rate will be increased from time to time by an amount equal to the average rate of increase approved by the

Board for customers of NLP.

- For consumption in excess of 1,000 kilowatt hours per month, the rate to be 11.76 cents per kilowatt hour and this rate will be increased from time to time by an amount equal to the average rate of increase approved by the Board for customers of NLP.

"(c) That these alterations in P.D.D.'s rate be reflected in all bills issued on or after April 1, 1987.

"(d) That the Provincial Government pay to P.D.D., as an additional subsidy, the amount required to pay P.D.D.'s additional deficit on the cost of service as a result of the change."

In 1989, the Provincial Government directed Newfoundland and Labrador Hydro to apply to the Board to request a further increase in the lifeline block from 600 kWh per month to 700 kWh with application to all customers, both general service and domestic. This application was granted by the Board and subsequently approved by Government later in the same year, with the new 700 kWh per month lifeline block to take effect as of July 1, 1989.

Also in 1989, PDD was abolished and a plan was adopted to phase out the annual Government subsidy by 1992 and to assign to Newfoundland and Labrador Hydro the responsibility of recovering this deficit on the rural systems from all of Newfoundland and Labrador Hydro's customers (MC 651-89). The Government ordered that:

"(1) The subsidy paid to the Power Distribution District of Newfoundland and Labrador ("PDD") by Government to subsidize electricity rates in areas where the revenue received from customers does not cover the full cost of serving those customers be phased out over a period of three years, commencing in 1989 with Government's subsidy fixed at $20 million in 1989/90, $10 million

in 1990/91 and $0 in 1991/92.

"(2) The revenues lost by PDD as a result of the phase out of this subsidy be collected by Hydro from all of its retail and Island industrial customers with all losses accruing to PDD after April 1, 1989, as a result of the phase out of the subsidies being accrued by Hydro and included as a cost in subsequent rates charged by Hydro to its customers.

"(3) Hydro be directed to apply to the Board of Commissioners of Public Utilities for approval to establish a threshold limit for all electrical consumers (domestic, commercial, etc.) in the diesel areas served by PDD at 700 kWh/month up from the existing 600 kWh/month now applicable to only domestic diesel customers and to increase the rates charged all its customers in 1990 and later as required to provide for the collection of the revenue lost as a result of the phase out of the PDD subsidy."

In 1992, Newfoundland and Labrador Hydro filed an application with the Board which dealt with proposed electricity rates to be charged to its rural customers. Hearings on the application were held and the Board made the following recommendations to Government:

"(1) that Hydro's policy of charging Newfoundland Power rates to rural isolated customers for the first 700 kWh per month of consumption and to street and area lighting customers, should continue, and that the Board's interim report dated June 29, 1989, which recommended the level be increased to 700 kWh per month for all customers, be finalized.

"(2) that the Board will not recommend an increase of kWhs beyond the first 700 kWh at Newfoundland Power rates.

"(3) that the subsidy for consumption over 700 kWh per month should gradually be reduced or eliminated.

"(4) that the rates to isolated rural customers for energy over 700 kWh per month rise by 10% on May 1, 1992.

"(5) that at its next rate hearing, Hydro present a proposal for eliminating or

reducing the subsidy over a definite period and (indicate) the percentage reduction per year and the annual impact on each customer class.

"(6) that at its next rate hearing, Hydro should present a proposal for eliminating preferential rates over a definite period and (indicate) the percentage reduction per year and the annual impact on each customer class."

Government declined to implement these recommendations. Instead, it directed the Board to conduct an investigation into certain issues surrounding the establishment of rural rates in the isolated areas and report to the Minister of Natural Resources after so doing. The inquiry into these issues was conducted in 1995.

At the close of 1994, there were 30 isolated rural power systems with an installed capacity of 46,200 kW, serving 8,300 customers with a population base of 22,100. These are illustrated on a map of Newfoundland and Labrador, Appendix 2. The plants serving these areas are, for the most part, diesel powered, and range in size from 90 kW in Norman Bay, a community with only 18 customers and a population of 58 to 14,200 kW in the St. Anthony/Roddickton area with 3,800 customers and a population of 10,500. In support of the latter system, Hydro also operates an additional 400 kW hydro plant and 5,000 kW thermal plant in Roddickton bringing the total capacity to 19,600 kW.

In 1995, the net financial deficit for all of Hydro's rural interconnected and isolated systems was $34.0 million. Of this amount, $25.5 million was due to the operation of the isolated systems.

Construction has started on a transmission line and associated support facilities to tie communities north of Hawkes Bay on the Great Northern Peninsula into the Island interconnected system. It is estimated that this project will be completed by late 1996. Once

this line is in service, the isolated rural power systems will reduce in number to twenty-nine, serving 4,400 customers.

The entire rural electrification program has achieved its aim of supplying electricity service to the most remote areas of the Province. However, this service carries with it a heavy financial burden. This is the issue being addressed in the present enquiry.