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***Before The National Energy Board In The
Matter Of An Inquiry Into Matters Relating To
The Northern Canada Power Commission
Mining/oil/energy, Energy General
Date of Report: 1985
Author: G.n.w.t. - Energy, Mines And
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BEFORE THE NATIONAL ENERGY BOARD IN
THE MATTER OF AN INQUIRY INTO MATTERS
RELATING TO THE NORTHERN CANADA POWER

Sector: Mining/Oil/Energy

6-5-26

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BEFORE
THE NATIONAL ENERGY BOARD

IN THE MATTER OF an Inquiry into matters
relating to the
NORTHERN CANADA POWER COMMISSION

DIRECT EVIDENCE OF
THE GOVERNMENT OF THE NORTHWEST TERRITORIES

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IN THE MATTER OF an Inquiry into matters relating
to **the** Northern Canada Power Commission pursuant to
Subsections 22(2) and 20(3) of the National Energy
Board Act.

Energy, Mines and Resources Secretariat
Government of the Northwest Territories
February 1985

List of Witnesses for
The Government of the Northwest Territories

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BEFORE
THE NATIONAL ENERGY BOARD

IN THE MATTER OF an inquiry into
matters relating to the
Northern Canada Power Commission

PANEL 1 - POLICY

PREPARED EVIDENCE OF PANEL CONSISTING OF:

THE HONORABLE T. CURLEY
MINISTER FOR ENERGY, MINES AND RESOURCES
GOVERNMENT OF THE NORTHWEST TERRITORIES

PREPARED TESTIMONY

Panel I - Policy

The Honorable **Tagak Curley**

1 **Q1 Would you introduce yourself, Sir?**

2

3 A1 My name is **Tagak Curley**. I am the Minister for
4 Energy, Mines and Resources and the Minister of
5 Economic Development and Tourism. I am also
6 responsible for the NWT Public Utilities Board.

7

8 **Q2 In what capacity are you presenting this evidence and**
9 **what is your purpose?**

10

11 A2 I am speaking on behalf of the Executive Council of
12 the Government of the Northwest Territories and on
13 behalf of the citizens of the Northwest Territories.

14

15 I intend to present to you the concerns and the
16 position of the Executive Council.

17

18 **Q3 Could you describe the Executive Council of the**
19 **Government of the Northwest Territories?**

20

21 A3 The Executive Council is the senior decision-making
22 body of the Government of the NWT. The Commissioner
23 and eight elected ministers chosen from the
24 Legislative Assembly, serve as members.

“25

26

...2

1 The Council **fulfils** a Cabinet function, establishing
2 territorial government priorities, policies and
3 programs.

4

5 Q4 **Would you describe the general attitude of the**
6 **Executive Council concerning the recent developments**
7 **of NCPC?**

8

9 A4 Let me say, at the outset, we were encouraged by the
10 decision of the federal Minister to relocate the Head
11 Office of N.C.P.C. to Yellowknife.

12

13 With all due respect Mr. Chairman, I believe it is
14 also appropriate to say that the G.N.W.T. is still
15 firmly **committed** to the position it **outlined** before
16 this Board in 1983. The Commission should be divided
17 into separate Yukon and N.W.T. companies, these
18 companies should be **regulated** by local authorities,
19 and in the N.W.T., the company should be transferred
20 to territorial ownership. These changes should take
21 place coincidental with a financial restructuring of
22 the Commission with a view to reducing the interest
23 burden and establishing equity. The Honorable
24 Richard Nerysoo's evidence was very clear on these
25 points, and I refer you to his previous testimony.

26

27

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28

1 I do not intend to infer that the National Energy
2 Board is incapable of adequately regulating N.C.P.C.
3 We are saying that the N.W.T. is capable of, and has a
4 right to control the instrument of their power
5 supply. This is a proper thing, it will come, and we
6 are prepared for it now.

7

8 Therefore we will continue to work closely with the
9 Honorable David Crombie, to effect the orderly
10 transfer of the Commission to the N.W.T.

11

12 Q5 **What is the opinion of the Executive Council on the**
13 **rate design With forms the basis of N.C.P.C.'s**
14 **current rate proposal?**

15

16 A5 I would like to deal first with the rate design
17 itself, as a separate question, putting aside for the
18 moment the effects of its implementation. We see the
19 adoption of a single diesel zone rate schedule and a
20 single hydro zone rate schedule, both based on costs,
21 as a reasonable rate design practice in the NWT. Such
22 a scheme will add a measure of simplicity and
23 stability that we have not had to date. Moreover, I
24 believe such a design meets our definition of fairness
25 and will be acceptable to most citizens of the NWT.

26

27

... 4

28

1 On the other hand, we believe that this rate design
2 will impair our ability to replace diesel electric
3 generation with local energy sources. In this event,
4 the design would frustrate the attainment of the
5 energy goals of the federal and territorial
6 governments, goals which were struck to improve the
7 economic and social well being of the citizens in the
8 **N.W.T.**

9
10 The point is that communities must be allowed to
11 benefit in exchange for the local risks and
12 disruptions that will accompany any alternative energy
13 project. The **.application** of equalized rates across
14 **diesel communities** must allow for some flexibility to
15 accommodate an incentive to accept more efficient means
16 of generation.

17
18 Turning now from the theoretical aspects of the
19 proposed rate design, we begin to have a great deal of
20 difficulty with the system as soon as the **resulting**
21 prices and their effects on certain customers are
22 considered.

23
24
25

...5

1 The implementation of the new schedules is utterly
2 impossible without a significant degree of
3 subsidization. **Without this subsidization, we are**
4 **absolutely opposed to the implementation of this**
5 **design and these rates.**

6
7 I realize I am talking about two things here, rates
8 and subsidies. It can be argued that these two issues
9 must be kept separate. Perhaps they can be
10 theoretically, but certainly not practically.

11
12 Mr. Chairman, I suggest that in the hearings that are
13 taking place now, you are getting only one side of the
14 picture - that being the costs that are attributable
15 to groups of customers. In another time and another
16 place, these would be translated into prices that
17 customers would be asked to pay.

18
19 However, in this time and place there is a necessary
20 second side that must be considered, that being a
21 subsidization package to be blended with the published
22 rates. The two combined should result in fair and
23 bearable charges to consumers in the NWT.

24
25
26

...6

...

1 "the subcommittee has no magic formula for
2 deciding what rates are fair in the North. "

3
4 "the federal and territorial governments, through
5 negotiations , will establish maximum prices for
6 electrical power rates in each of the territories
7 taking into account rates elsewhere in Canada."

8
9 It may not be possible for the two governments to
10 reach a satisfactory agreement before March 31, 1984.
11 In that event the current rate structure should remain
12 in force, with price increases subject to the 4% cap
13 of the federal Administered Price Guideline.

14
15 Mr. Chairman, that concludes my remarks **today**. There
16 are other important issues of an accounting and
17 technical nature that will be addressed by officials
18 of this government. I have appeared before you today
19 to ensure that there is no doubt or confusion with
20 respect to our perception of these rates and their
21 application to customers in the NWT.

22
23 ...8

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...

1 As a last item, I would like to take this opportunity to
2 welcome the Edmonton employees of N. C. P.C. that will be moving
3 here. The economic development of the North is a stimulating
4 challenge for us all. We need the assistance of these
5 dedicated men and women.

6

7 Those employees whose situation allows them to move, will find
8 Yellowknife a truly hospitable and vibrant **community**. I am
9 sure that **when** the dust of the move has settled, they will not
10 regret their decision.

11

12

13

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1 HONORABLE TAGAK E.C. CURLEY

2 MLA Aivilik

3
4
5 **Department Responsibilities:**

6 Economic Development and Tourism

7
8 **Other Responsibilities:**

9 Energy, Mines and Resources Secretariat.

10
11 **Boards/Agencies/Committees:**

12 Public Utilities Board, Priorities & Planning Committee,

13 Resource Committee (Deputy Chairman), Aboriginal Rights and

14 Constitutional Development Committee

15
16 Tagak Curley was born in Coral Harbour in 1944. He worked for
17 the Territorial Government and the federal government
18 Department of Indian and Northern Affairs between 1966 and
19 1970, and then was settlement manager in Repulse Bay in
20 1970-71.

21
22 He was founding member and was the first president of the
23 Inuit Tapirisat of Canada. He was also president of the
24 Nunasi Corporation from 1979-83.

25
26 Mr. Curley was elected to the Legislative Assembly in 1979 as
27 member for the Keewatin South and re-elected in the renamed
28 riding, Aivilik, in 1983.

BEFORE
THE NATIONAL ENERGY BOARD

IN THE MATTER OF An Inquiry into
Matters Relating to the
Northern Canada Power Commission

PANEL - 2 - TAB 2 REVENUE REQUIREMENT
TAB 3 RATE DESIGN

PREPARED EVIDENCE OF PANEL CONSISTING OF:

MR. P.J. HART
MR. S.C.W. WOOD

1 **A2** This testimony is intended to identify GNWT areas of
2 concern relating to NCPC accounting **practises**. More
3 specifically, I believe **NCPC's** cost allocation methods
4 with respect to head office and interest expenses are
5 inappropriate. As well, I feel there is a need for
6 the separation of NCPC'S **financial** accounts along
7 territorial lines.

8

9 **Q3** **In what way are NCPC cost allocations inappropriate?**

10

11 **A3** A basic objective of a rate structure is to enable a
12 utility to meet its revenue requirements without
13 burdening one group of customers to the benefit of
14 another. Because cost is the principle criterion in
15 the design of rates, an appropriate allocation of
16 costs is vital to the determination of just and
17 reasonable rates. We note that the National Energy
18 Board, in its August 1983 recommendations, endorses
19 cost base rates (4.1 pg. 9, 4.3.2 pg. 12). Mr.
20 Christie, in this evidence, also supports this concept
21 (3-17). Price Waterhouse and Associates in Appendix I
22 page 6 of Mr. Christie's evidence, further stresses
23 the importance of "track[ing] the manner in which head
24 office and regional office expenses are incurred on
25 behalf of the plants".

26

27

...3

28

1 Although the NEB, NCPC and its consultants appear to
2 agree on the importance of relating costs incurred to
3 their cause, it is not at all clear that **NCPC** has
4 followed this objective in the allocation of its head
5 office costs and interest expenses.

6
7 Head office costs have been allocated on the sole
8 basis of employee salaries and wages. Total interest
9 costs for NCPC have been averaged and applied equally
10 across all rate zones. Because these two costs add up
11 to almost 30% of NCPC'S cost of service, they are
12 material and should be **allocated** to rate zones on the
13 basis of cost causation to the extent that this can
14 reasonably be done.

15

16 **Q4 Could you elaborate on your statements with respect to**
17 **head office expense allocation?**

18

19 **A4**Head office costs have been allocated to rate zones on
20 the basis of total wages and salaries projected for
21 each rate zone. In my view, costs should be allocated
22 using a more scientific method based on cost causation
23 where practical.

24

25

...

1 note that the National Energy Board recommended that NCPC conduct a study to determine the extent to which its current allocation procedure tracks the manner in which head office expenses are actually incurred on behalf of service areas (4.3.2 pg. 12). Presumably this study is the one prepared by Price Waterhouse and Associates and submitted by Mr. Christie as evidence.

With respect to head office cost allocations this report **recommends** that:

“Head and regional office costs should be assigned directly to functional levels where practical, and otherwise allocated based on the relationship to functionalized assets and costs.”

Price Waterhouse and Associates describe functional levels as production, transmission, distribution and customer categories.

The Price Waterhouse study further states that “Costs which can be identified specifically to the Yukon or NWT or a particular plant should be assigned directly to these areas. ..” (pg. 8).

...5

1 The essential point is that Price Waterhouse and
2 Associates in their study were attempting to
3 rationalize head office costs so that these costs
4 could be matched with their cause. Nowhere in the
5 Price Waterhouse and Associates study was there
6 reference to the method of cost allocation being
7 proposed by **NCPC**.

8
9 Price Waterhouse and Associates suggest that
10 production costs be allocated on a per kWh basis, and
11 transmission and distribution be distributed on the
12 basis of customer group coincident demand. They also
13 recommended customer costs **be** allocated based 95% on
14 the number of customers and 5% according to revenues
15 assessed.

16
17 **Q5 What is your specific concern regarding the head**
18 **office cost allocation method being proposed by NCPC?**

19
20 A5 Head office expenses relate to all the cost elements
21 of **NCPC's** activities including the costs of customer
22 service, labour, materials, supplies and capital. A
23 simple allocation on the basis of **labour** costs does
24 not constitute as correct an assignment of these costs
25 as is possible. For example, 54% of head office
26 expense has been allocated to the **NWT diesel zone**.
27 This **does** not appear to be warranted considering that
28 these customers consume only 20% of system power.

1 In addition, it is proposed that NWT customers be
2 assigned 84% of head office costs. If NCPC had chosen
3 a different method of cost allocation, such as kWh
4 consumption, the NWT would only be paying 60% of head
5 office costs.

6
7 The size of head office costs and the significantly
8 different results obtained under various methods of
9 cost allocation, require that these costs be
10 distributed as logically and as fairly as practical.

11

12 Q6 **What direction should NCPC be given with respect to**
13 **head office cost allocations?**

14

15 A6 There are many methods that can be used to assign head
16 office expense. It is not my intention to recommend a
17 specific practice, but rather to suggest that the one
18 chosen is unacceptable. NCPC should be asked to
19 perform its cost allocations in a way that more
20 accurately reflects the cause of these costs.

21

22

23

...7

24

25

..

1 Q7 You mentioned the al location of loan interest as a
2 concern. Would you please elaborate on this issue?

3

4 A7 NCPC, in its evidence, lists each of its loans by rate
5 zone along with the interest rate charged on each
6 loan. The NWT diesel zone is recorded as having an
7 average cost of debt amounting of 9.7992% while the
8 NWThydro zone average cost of debt is 8.7730%. In
9 Yukon the diesel zone has an average cost of debt of
10 11.8290% and the hydro zone 11.0121%. NCPC's overall
11 average cost of debt is recorded at 10.1984% (R.
12 Philips Evidence Appendix I).

13

14 In Section 2 of Appendix I of the Board's hearing
15 order No. EHR-1-84 the Board stated:

16

17 "For each rate zone, revenue requirement . . . [should
18 include] . . . return on rate base."

19

20 I concur with the Board's desire that return on rate
21 base should be determined on a rate zone by rate zone
22 basis.

23

24

. . . 8

25

1 The principle of allocating cost to customers who
2 **cause** these costs should be applied to interest
3 expense. The proposed treatment results in any
4 increase in the debt cost rate being allocated across
5 the entire company and borne by customers in all rate
6 zones. For example, if a large capital project was
7 developed at a time of high interest rates, the
8 interest cost of the facility would be charged to all
9 customers, even though only one small **group** might
10 benefit.

11
12 An illustration of the effect and magnitude of **this**
13 phenomenon can be seen by examining interest costs in
14 the two NWT rate zones. Both NWT rate zones have a
15 lower average cost of capital than NCPC as a whole
16 (9.29% vs. 10.20%). Averaging debt costs across all
17 rate zones has the effect of shifting one million
18 dollars of cost from Yukon customers to NWT customers.

19
20 ...9
21
22
23
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...

1 **Q8** **What direction should NCPC be given with respect to**
2 **its interest cost allocations?**

3

4 A8 Interest constitutes a material cost element. It
5 represents 21.5% of N.C.P.C.'s total expenses. The
6 cost allocation method used will have a significant
7 impact on the rates charged in individual rate zones.
8 Rates charged to individual rate zones should reflect
9 the interest cost of the debt incurred to provide zone
10 based generating facilities.

11

12 **Q9** **You stated that the separation of NCPC's financial**
13 **accounts was an issue of concern. Would you please**
14 **elaborate on this issue?**

15

16 A9 I feel that NCPC needs a completely separate set of
17 financial records for its NWT operations which are
18 distinct from its Yukon or Field B.C. operations.

19

20 It is my opinion that this separation should include
21 an allocation of the "equity of Canada" and "retained
22 earnings" accounts on an individual territorial basis.

23

24

25

...

1 **Q10 What is your rationale for such a recommendation?**

2

3 **A10** Essentially, a separate accounting is required to
4 ensure that rates in each operational jurisdiction are
5 commensurate with the costs in that jurisdiction.
6 Account separation would assist in ensuring that each
7 territory was paying its cost of service, not only on
8 a projected annual basis but in fact over the longer
9 term. The existence or buildup of sizeable surpluses
10 or deficits on a territory by territory basis should
11 have an eventual impact on rates. If ratepayers in
12 one territory accumulate a deficit, the message to the
13 regulator is that rates need to be adjusted upwards.
14 If the opposite is true, rates would tend to rise less
15 rapidly.

16

17 As an example, N.C.P.C. since 1978 has accumulated a
18 profit from operations of \$13.5 million. Its retained
19 earnings account has shifted from a \$4.3 million
20 deficit to a \$9 million surplus. Of this profit,
21 \$12.8 million has been accumulated from the NWT rate
22 zone. Accumulated surpluses and deficits should have
23 an impact on the rates of subsequent periods. Current
24 accounting practices do not allow this to happen
25 easily.

26

27

...11

28

1 Provincial practice is perhaps instructive in this
2 case. The tendency of the provinces to establish
3 their own individual utilities, no doubt stems from
4 their recognition of the critical nature of the
5 service, and their desire to deal with the issue on a
6 province-wide basis. Regulation takes place to ensure
7 that the consumers within the **jurisdiction's** own
8 borders pay only the true costs of operation therein.
9 The fact that **N.C.P.C.** has a mandate to operate in
10 three jurisdictions does not release it from the
11 requirement to consider each area separately, as if it
12 had its own separate utility. I do not believe that
13 any provincial regulator or government, were it faced
14 with the same operational situation, would accept the
15 current accounting practice.

16
17 As long as **N.C.P.C.** continues to serve three separate
18 jurisdictions, it should be required to maintain
19 separate financial accounts for each jurisdiction.
20
21
22
23
24
25

...

1 Curriculum Vitae

2 Stuart C.W. Wood

3 Address: 600 Williams, Yellowknife, Northwest Territories

4 Date of Birth: November 9, 1954

5 Marital Status: Married

6 Education: Society of Management Accountants (RIA) - fifth level
7 student enrolled with the Alberta Chapter

8 University of Guelph (1974-76) B.A. Economics

9 Experience:

10 Canadian Imperial Bank of Commerce 1977-78

11 Hired as a manager trainee, Mr. Wood learnt all aspects of branch banking,
12 including security and stock trading, accounts reconciliation, limited money
13 lending and foreign exchange dealings. During his tenure, Mr. Wood worked in
14 three branches and supervised up to eight people.

14 NWT Housing Corporation 1978-82

15 Working first in the position of District Accountant, Mr. Wood gained
16 experience in organization planning, budget preparation and implementation,
17 cashflow analysis and internal auditing. As a program officer, Mr. Wood
18 designed teaching modules and developed training techniques. Finally, as
19 Program Coordinator, Mr. Wood was responsible for the training of staff, the
20 administration of home ownership programs, the counseling of clients, the
21 research of housing markets and the analysis of policy.

19 Energy, Mines and Resources Secretariat 1982 - present

20 In this current position as Resource Economist, Mr. Wood is responsible for
21 the analysis and evaluation of the economics of resource development and
22 provides advice and counsel to GNWT ministers. Working in this capacity Mr.
23 Wood has designed a resource management and revenue sharing strategy. Mr.
24 Wood also evaluates the economic impacts of major resource development and
25 energy supply projects.

PREPARED TESTIMONY

PANEL 2 - RATE DESIGN

Peter J. Hart

1 **Q1** **Would you please introduce yourself, describe the**
2 **responsibilities of your position, and your previous**
3 **experience with the National Energy Board (Board)?**

4
5 **A1** My name is Peter J. Hart. I am employed with the
6 Government of the Northwest Territories (GNWT) as an
7 Energy Advisor in the Energy, Mines and Resources
8 Secretariat, Department of the Executive.

9
10 I am responsible for the formulation of policy options
11 on energy issues. Further, I provide advice on energy
12 issues to the Executive Council.

13
14 I appeared before the Board in the matter of an
15 application by Arctic Pilot Project Inc. In addition,
16 I testified in the previous inquiry into the Northern
17 Canada Power Commission (NCPC) in June, 1983 at
18 Inuvik.

21
22
23
24
25

1 Q2 What is the purpose of **your** testimony?

2

3 A2 This testimony is in two parts. The first describes
4 some conceptual concerns with respect to the new rate
5 design. The second part deals with the anticipated
6 effects of the proposed rates and the transition from
7 the current structure to the cost-based rates under
8 consideration.

9

10 **Conceptual Issues**

11

12 **Q3 What is the position of the Government of the**
13 **Northwest Territories with respect to the rate design**
14 **proposed by NCPC?**

15

16 A3 The Government of the Northwest Territories believes
17 that the development of NWT diesel and hydro zone
18 specific rates for each customer class is an
19 acceptable approach to rate making in the N.W.T. We
20 recognize the direction given by the Board to this
21 effect in their report of August 1983, and concur with
22 the manner in which NCPC has implemented that
23 direction.

24

25

26 ...3

27

28

1 However, the GNWT does have some reservations with
2 this system.

3
4 The Honorable Richard Nerysoo **commented** on the
5 Board's report before the Parliamentary Standing
6 **Committee** on Indian Affairs and Northern Development
7 on February 14, 1984. His words were:

8 **"We agree that it is desirable in a theoretical**
9 **sense to establish uniform rates for similar**
10 **types of customers. In a practical sense,**
11 **however, for the NUT at this stage of its**
12 **development, there are reasons why such a scheme**
13 **is not suitable."**

14
15 One of the main reasons Mr. Nerysoo had for making
16 this comment was the need for sensitivity on the part
17 of each community to its own generating cost. This
18 sensitivity is necessary for the development of
19 alternatives to diesel generation.

20
21
22 ...4

23
24
25

1 It may be possible to accommodate this concern within
2 the framework **recommended** by the Board by allowing
3 some flexibility in pricing to encourage communities
4 to benefit from the acceptance of new, more
5 cost-effective production technologies.

6

7 Q4 **What rate design principles do you consider**
8 **appropriate for the NWT?**

9

10 A4 **Bonbright*** has put forward a list of rate design
11 principles which are generally considered to be
12 desirable. Some of these principles can be
13 summarized as follows:

- 14 simplicity
- 15 public acceptability, fairness
- 16 allows full cost recovery
- 17 stability of revenue and rates
- 18 promotes efficient use

19 I feel another principle must be emphasized, that
20 being:

21 **promotes efficient production**

22 *Decision 2-80, NWT Public Utilities Board, Yellowknife,
23 February 25, 1981

24

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25

...

1 make this point in the belief that much can be done
2 in the long term to increase the utilization of the
3 NWT's own energy resource, and in this way to promote
4 reasonable and more stable prices. This is a goal of
5 the GNWT Energy Policy (Attachment 1) and that of the
6 Federal Government.

7
8 **Q5 Why is "efficient production" an important principle**
9 **in the NUT's case?**

10
11 **A5 NCPC is dealing with an unusual electrical system**

12 in this jurisdiction. The system is unique in that it
13 is largely comprised of isolated communities, each of
14 which forms its own small system.

15
16 Development of a long run efficient production source
17 requires a community by community assessment, to
18 determine how local resources might replace diesel.

19
20 The second aspect of this question is the way in which
21 people in these communities perceive the land and the
22 resources on it. It is our suggestion that
23 alternative energy projects will not be permitted by
24 communities under the equalized zone pricing method.

25
26 ...6

27

28

1 Therefore, the assumption that communities are
2 connected for rate making purposes, will in our view,
3 hamper the long run development of more efficient
4 production means in the NWT.

5

6 Q6 How **can this difficulty be overcome?**

7

8 A6 The GNWT considers that communities willing to
9 undertake alternative energy projects should receive
10 special consideration with respect to the recovery of
11 cost .

12

13 In addition, the GNWT considers that the Board should
14 establish the ground rules for the pricing of
15 electricity before new capital developments occur.

16 These ground rules would allow NCPG, the Territorial
17 and Federal governments, and communities to continue
18 to assess the diesel replacement projects, forearmed
19 with a clear understanding of the ultimate affect on
20 rates.

21

22 We know that this is the Board's first year of
23 regulation, and that this issue is a planning and
24 futures oriented item. However, we must re-emphasize
25 that it is an issue of daily concern to those
26 attempting to achieve federal and territorial energy
27 goals. Clear N.E.B. direction would be a substantial
28 contribution to their efforts.

29

1 Q7 Can you give **examples** of the kind of capital
2 **development you** are referring to?

3
4 A7 Three types of development are worthy of mention in
5 this regard.

6
7 1. Diesel communities may have viable small scale
a hydro options open to them.

9
10 Coppermine is an example currently under study.
11 Whether or not the project is found to be
12 economic on the basis of technical studies is
13 beside the point; it stands as an
14 illustration of what might be done.

15
16 The scenarios that have been studied to date have
17 projected capital costs in the order of \$30 to
18 \$50 million. The inclusion of such in the hydro
19 zone pool would add a minimum of 23% to the
20 revenue requirement.

21
22 2. Relatively large hydro projects may be undertaken
23 either as additions to the current systems, or to
24 serve new industrial or municipal loads. A case
25 in point would be the Wolverine Creek project on
26 the Great Bear River to supply

27 ...8

28

29

1 Norman Wells, Fort Norman and Fort Franklin. I do not
2 believe this project is being actively pursued, but it
3 does serve as an example for the purposes of this
4 **argument.**

5
6 The projected capital cost is in the order of \$120
7 million. **The** inclusion of such a project in the hydro
8 zone pool would add 90% to the revenue requirement.

9
10 Obviously any new hydro project will have a noticeable
11 impact on the rates of the current customers. The
12 extent to which new hydro projects should be included
13 in the zone cost pool depends upon the relative weight
14 assigned to various rate making objectives. We
15 believe a relatively high value should be assigned to
16 the encouragement of production efficiency. Obviously
17 any new hydro project will have a noticeable impact on
18 the rates of current customers.

19
20 3. The last example relates to non-hydro alternative
21 energy projects utilizing wind, coal, wood
22 gasification, nuclear or other energy sources.
23 These may be further down the road than hydro
24 alternatives, but it is nevertheless important to
25 know now ~~what~~ rate making practices would
26 apply.

1 To establish sensitivity to the economic benefits
2 of projects, communities could be allowed the
3 full benefit of lower operating costs through an
4 averaging of these new costs with the diesel zone
5 rate on a **w**eighted basis.
6

7 **Q8 Do you have any other concerns with the proposed rate**
8 **design?**

9
10 A8 There are two other notable difficulties with the
11 equalized rate plan.

12
13 1. Affect on Conservation Decision

14 In practice, **community** electrical rates will be
15 relatively insensitive to community costs, since
16 these costs have already been pooled. Price as a
17 signal is somewhat attenuated. Agencies with
18 buildings in many **communities**, seeking to
19 conserve their own funds, will tend to base their
20 conservation decisions on factors other than the
21 true economic efficiency of the conservation.

22 There are a number of agencies in this situation
23 including the GNWT, the Government of Canada, the
24 Co-op stores and the Hudson's Bay Company.
25

26 ...10
27
28

1 To help overcome this problem, it would be useful
2 to have access to documentation that sets out
3 annually the avoidable costs of service in each
4 **community**. Each of these larger agencies could
5 then assess where conservation dollars should
6 really be spent.

7
8 If the correct price signals cannot be provided
9 through rates, then the **Commission** should provide
10 clear and detailed cost information as a
11 surrogate.

12
13 2. Self Generation

14 It is a simple fact of equalizing rates that
15 communities with relatively high costs will pay
16 less than their cost of service, and those with
17 relatively low costs will pay more. Considering
18 the latter case, the difference between actual
19 community cost and posted rate may be
20 substantial, particularly in larger centers such
21 as Inuvik.

22
23 Any large consumer in such a community will base
24 his own decisions with respect to sourcing his
25 energy needs on the posted price. In June 1983,
26 the Board heard testimony from a businessman in
27 Inuvik who said that the then **NCPC** rate was just
28 below the point at which he would install his own
29 generation.

1 The Board must recognize that the spread between
2 true cost and posted rate may lead to some
3 migration from **NCPC's** system, even though such
4 migration may not be economically efficient in a
5 social sense. If this tendency becomes
6 serious, the Board should consider modifying the
7 universality of equalized rates to take into
8 consideration "value of service" and other
9 appropriate rate design criteria.

10
11 **Practical Applications**

12 **Q9 To this point you have discussed the proposed rate**
13 **design in relation to rate making principle. Have you**
14 **assessed the impact of these rates on consumers in the**
15 **NWT?**

16 **A9 We assessed in a preliminary way the effect of the**
17 **proposed rates on non-government residential and**
18 **general service customers. Based on a sample of**
19 **diesel communities, power bills at the new rates would**
20 **require an average of 24 to 42% of after tax income of**
21 **residential customers.**

22
23 **A sample of general service customers in diesel**
24 **communities showed that power bills at the new rates**
25 **could reduce pre-tax profits by 5 to 51%.**

26
27 Our conclusion is that the new rates would cause
28 unacceptable social and economic dislocation in the
29 NWT .

1 Q10 Does the **GNWT** believe that the diesel zone residential
2 and general service rates proposed can be
3 implemented in a **practical** sense?
4

5 A10 The GNWT believes that these rates would place an
6 unusual and unacceptable burden on **diesel**
7 **zone residential and general service** customers. In
8 the absence of an **adequate** subsidy program, the **GNWT**
9 is **absolutely** opposed to their implementation.
10

11 In its work on rate design, the GNWT has attempted to
12 keep separate the issues of rational rate design,
13 according to principles described by **Bonbright**, and
14 social considerations such as "ability to pay".
15

16 We understand that the **N.E.B.'s** role as regulator
17 would cause it to focus on issues of cost, and
18 allocation of costs, leaving matters of social policy
19 to be the responsibility of elected representatives of
20 the people.
21

22 In our analysis, however, we have come to the
23 conclusion that adoption of a plan based on normally
24 accepted rate making principles, causes rates that are
25 often well beyond the means of many average customers.
26

27 ...13
28

1 We would suggest that a regulator's ability to stand
2 aloof from social considerations is a matter of
3 degree. **Therefore the Board must recognize what the**
4 **social impacts would be if these rates are**
5 **implemented, and must, if they deem them unacceptable,**
6 **identify to the Minister that action must be taken**
7 **prior to their installation.**

8
9 **Q11 What action does the GNWT believe is necessary?**

10
11 **All** The GNWT concurs with the **comments** of the Board in
12 this matter, given in their **August** 1983 report on Page
13 15:

14 " . . . given the high cost of electricity in the
15 North, it appears that subsidies will continue to
16 be required. "

17
18 " . . . the choice of the appropriate scheme and the
19 amounts involved should rest with the government
20 which is financially responsible for providing
21 the subsidy. "

22
23 The current Federal Power Support Program (FPSP) and
24 Commercial Power Rate Relief Program (CPRRP) which are
25 due to expire March 31, 1985, essentially establish a
26 predetermined reasonable block of consumption that
27 will be subsidized down to a predetermined reasonable
28 price.

1 We agree that this methodology appears to be the best
2 way in which to establish and deliver a subsidy.
3 However, we are not aware of the Federal Government's
4 intentions with respect to the continuation of the
5 current subsidies or their replacement with a new
6 program. We consider it important that there be a
7 dialogue between the two governments prior to a
8 Federal decision on subsidy program design.

9
10 **Continuation of the FPSP and CPRRP at the levels**
11 **implicit in the 1984-85 Yellowknife rates would not**
12 **compensate adequately for the proposed rate**
13 **increases.**

14
15 Determination and approval of the appropriate subsidy
16 program may not be complete by March 31, 1985.

17
18 Q12 **What should happen if an acceptable subsidy system is**
19 **not worked out by March 31, 1985?**

20
21 A12 Failing the development of an adequate subsidy system,
22 the Federal Administered Pricing Guideline should be
23 applied, whereby no customer in the NWT should be
24 asked to pay more than 104% of the 1984/85 rate in
25 1985/86.

1 Curriculum Vitae

2 February 1984

3 Peter J. Hart

4
5
6 Address: 4911 **Matonabee** Street, Yellowknife, Northwest Territories

7 Date of Birth: 1943, Ottawa, Ontario

8 Marital Status: Married

9 Education: Bachelor of Commerce (**ECON**), St. **Patricks** College,
University of Ottawa, 1965

10 Master of Business Administration,
11 Queen's University at Kingston, 1979

12 Experience: Supervisor, Computer Training Group
Bell Canada, Montreal, Quebec, 1965-1967

13 Senior Systems Analyst
14 Ontario Hydro, Toronto, Ontario, 1968-1972

15 Manager, Systems and **Program** Development
Government of the Northwest Territories
16 Yellowknife, Northwest Territories, 1973-1977

17 Special Assistant to the Minister responsible
for Energy, Government of the Northwest Territories
18 1980-1981

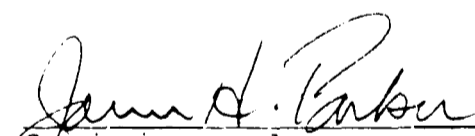
19 Energy Advisor
Energy, Mines and Resources Secretariat
20 Government of the Northwest Territories, 1982

21
22
23
24
25

The Government of the Northwest Territories will promote the efficient use of energy in the NWT and increase the utilization of NWT energy resources in a manner consistent with the economic and social well being of its people.

The Government of the Northwest Territories will act according to the following principles:

1. Residents will be helped to recognize and avoid waste.
2. Consumer financial responsibility for energy purchases will be increased.
3. Energy efficiency in buildings will be encouraged.
4. Administrative practices within government relating to energy use will be redesigned to promote conservation.
5. NWT energy use will be monitored to provide the basis for energy planning.
6. New sources of energy will be identified on a community by community basis.
7. Industry shall be encouraged to contribute to the identification of community alternative supply.
8. Projects proposing to supply energy to NWT residents will be evaluated and approved according to their long run ability to deliver a sure and low cost supply that is consistent with the interests of the people affected.



Commissioner and
Chairman of the Executive Council
83-10-19

Reference

For elaboration of this Policy refer to Directive.