



# ELECTRICITY REVIEW

A DISCUSSION WITH  
NORTHERNERS ABOUT  
ELECTRICITY





A diesel turbine engine.

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NWT Grasslands.

## LETTER TO THE MINISTER

June 17, 2009

Mr. Bob McLeod  
Chair, Ministerial Energy Coordinating Committee  
Government of the Northwest Territories  
Yellowknife, NT

Dear Minister,

### **Re: Electricity Review Team Phase One Report**

The members of the Electricity Review Team are pleased to provide you with the enclosed report outlining the results of the public discussion phase of the government's electricity review process.

The goal of this phase of the review was to identify people's views, visions and values on how best to address the challenges of providing safe, reliable and affordable electricity in our northern environment. To this end, the Review Team has conducted and participated in a number of public meetings. Over the last three months, forums to discuss electricity were held in Inuvik, Norman Wells, Fort Simpson, Fort Smith, Fort Resolution, Hay River, Yellowknife and Behchoko. The Team also met with numerous organizations and individuals to seek their views. In addition, the Team received written submissions and comments from a number of organizations and individuals.

The Review Team would sincerely like to thank all those residents who took the time and effort to engage in these discussions in such a committed and thoughtful manner. Many ideas and suggestions were presented. We have been very impressed by the public commitment to the review process and people's recognition of the complexities of making change to the NWT electricity system.

The Team also appreciated the warm welcome we received wherever we went and with whomever we met.

The Team will now review the comments we have received, complete data gathering and undertake analysis of the wide range of information we have obtained to this point. A second, final report, detailing results of our investigation and our recommendations will be submitted for consideration later this summer.

Mark Cleveland  
Gerry Forrest  
Doug Matthews

NWT Electricity Review Team

# EXECUTIVE SUMMARY



Snare Cascades Spillway.

## Who We Are

Earlier this year, the Government of the Northwest Territories' Ministerial Energy Coordinating Committee (MECC) appointed Mark Cleveland, Gerry Forrest and Doug Matthews to serve as the members of the Electricity Review Team. The Team was directed to review the NWT electricity system and engage Northerners in a discussion about their vision for the system and the steps that would need to be taken to achieve this vision.

## What We Did

The Electricity Review began in December of 2008 with the publication of a public discussion paper titled, *A Review of Electricity Regulation, Rates and Subsidy Programs in the Northwest Territories* by the Ministerial Energy Coordinating Committee. The discussion paper was made available to Northerners as an introductory first step of the review process.

Following the publication of the discussion paper, the Review Team conducted a series of meetings to discuss electricity matters. Public forums were held in Inuvik, Norman Wells, Fort Simpson, Fort Smith, Fort Resolution, Hay River, Yellowknife and Behchoko. These meetings, hosted by community leaders, were well attended by the public and the discussions were robust.

In addition, the Team met with representatives of the utilities supplying power in the NWT, business organizations, community groups, non-governmental organizations, municipal governments and individual citizens as well as, many of the Members of the Legislative Assembly. The Team also received written submissions and comments from individuals and organizations. In total, the Team heard from over three hundred people.

This report summarizes key highlights of information received by the Review Team during the public discussion phase of the Review process. The views in this report are not those of the Review Team members, but rather, they are those of Northwest Territories residents.



# EXECUTIVE SUMMARY

## What We Heard

If there were one word that could be said to summarize what the Team heard over the last few months, that word would be “frustration”. Virtually everyone the Team talked with - customer, community leader or company representative - expressed his or her frustration with one or more aspects of the NWT’s electricity system.

Whether it was families struggling with power bills or businesses seeking to somehow reduce their operating costs, the issue was the same – the high cost of power is a real problem in the north and if it is somehow not addressed, the cost of electricity will be a detriment of the long-term economic future of the Territories.

This report outlines the range of views that the Review Team heard in key areas of: conservation, efficiency and reducing dependence on diesel; utility companies and markets; electricity transmission and distribution; the role of the GNWT, the Public Utilities Board and the cost of regulation; electricity rates and rate structures; as well as residential and commercial subsidy programs.

The Review Team identified some broad areas of consensus in the meetings and submissions that it has received. The Team noted that people believe that:

- The electric system needs to provide a safe and reliable service focused on customer needs;
- Reduced energy use should reduce customer costs;
- The current rate system is too complex;
- Residential and commercial rates are too high;
- New technologies should be subjected to objective testing and documentation;
- A focus should be placed on green technologies, but not at any price;
- Residential subsidies may require change and the value of the commercial subsidy is uncertain;
- Existing electrical system resources should be used more efficiently; and
- The regulatory process is important but it is complex, legalistic, costly and not easily accessible.

There were also a number of areas of discussion in which there is no clear consensus. There are strongly held, differing views on a number of aspects of the electricity system and these views will require further discussion, analysis and leadership to resolve.

# EXECUTIVE SUMMARY



## Some Broad Observations & Next Steps

The Review Team was very impressed by the thought, interest and involvement of the NWT residents who participated in the public discussion phase of the NWT Electricity Review. While we had expected to hear a great deal about the cost of electricity from residents and businesses during our meetings, both the depth and the extent of the impact of high electricity costs on northerners surprised us.

A second report, including the recommendations on the Review Team, will be prepared and forwarded to the Chair of the Ministerial Energy Coordinating Committee later in the summer of 2009. This report will analyze information and data that is collected during the first phase of the review, summarize research, experiences and strategies that could be useful to the Northwest Territories, and make recommendations to the Chairperson of the Ministerial Energy Coordinating Committee on a vision for the future and the actions that need to be taken to achieve the vision.





Bear River.

# THE REPORT OF THE ELECTRICITY REVIEW TEAM ON ITS PUBLIC DISCUSSION PHASE

## Who We Are

The Electricity Review Team was established by the Ministerial Energy Coordinating Committee (MECC) with a mandate to review the electricity system in the Northwest Territories. It was directed to engage with Northerners in a discussion about their vision for this system and involve as many people as possible in identifying, and seeking solutions to the problems that stand in the way of realizing this vision.

## What We Did

The Electricity Review began in December of 2008 with the publication of a public discussion paper entitled *"A Review of Electricity Regulation, Rates and Subsidy Programs in the Northwest Territories"* by the Ministerial Energy Coordinating Committee.

This paper, along with a variety of fact sheets about the NWT's electricity system, was made available to a large number of residents, communities and organizations as an introductory first step for the public process that would follow.

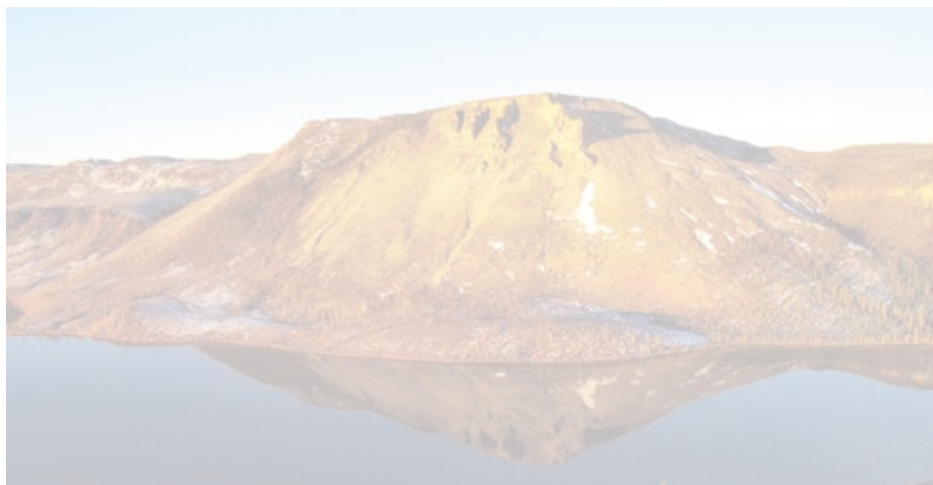
The Discussion Paper sought to provide some necessary background information on the NWT's electricity system and to outline a number of issues that would benefit from public input.

The Review Team, composed of Mark Cleveland, Gerry Forrest and Doug Matthews, initiated the public discussion of the key issues in February of this year. The content of the Discussion Paper became the focus for a series of public meetings that were held in March and April in each of Inuvik, Norman Wells, Fort Simpson, Fort Smith, Fort Resolution, Hay River, Yellowknife and Behchoko. These meetings, hosted by community leaders, were well attended by the public and the discussions were robust.

The Team members also attended a Northwest Territories Association of Communities (NWTAC) sponsored Yellowknife workshop for the non tax-based communities and followed up with attendance at the NWTAC annual meeting in Inuvik to report on its activities to date.

In order to ensure as many communities as possible were included in the discussion process, a letter was sent to all NWT communities, which outlined the purpose of

# THE REPORT OF THE ELECTRICITY REVIEW TEAM ON ITS PUBLIC DISCUSSION PHASE



the Electricity Review and offered to have the Review Team travel to any community to hold a public meeting on the subject. This offer was repeated by the Team at the NWTAC workshop in late March. The communities of Fort Resolution and Behchoko accepted this offer.

In addition to the public sessions, the Team also met with representatives of the utilities supplying power in the NWT, business organizations, community groups, non-governmental organizations, municipal governments and individual citizens, as well as many of the Members of the Legislative Assembly. In total, the Team talked with over three hundred people in this exercise.

This report is the first of two reports that will result from the Electricity Review. This report summarizes key highlights of information received by the Review Team during the public phase of the Review process. The views outlined below are not those of the Review Team members, but rather, they are those of Northwest Territories residents.

A second report, including the recommendations by the Review Team, will be prepared and forwarded to the Chair of the Ministerial Energy Coordinating Committee later in the summer of 2009.

## What We Heard

If there were one word that could be said to summarize what the Team heard, that word would be “frustration”. Virtually everyone the Team talked with - customer, community leader or company representative, expressed his or her frustration with one or more aspects of the NWT’s electricity system.

Frustration with electricity costs, seemingly always increasing, with hard to understand bills, with power outages, surges and brownouts.

Frustration with a complicated, costly regulatory system, with an apparent lack of concern for customer issues on the part of both utilities, and with the negative economic impacts of commercial power costs.

Frustration with a lack of reward for trying to use less power, with a situation that instead seems to result in a “use less, pay more” outcome.

But on a more positive note, the Team also heard a number of favourable comments about the success of the existing utilities in delivering electrical power across a large



## THE REPORT OF THE ELECTRICITY REVIEW TEAM ON ITS PUBLIC DISCUSSION PHASE

geographic area, while faced with difficult environmental conditions and limited resources.

As well, the Team became aware of the growth of a “conservation ethic,” among both individual customers and businesses, as they sought to reduce their use of electricity and the diesel fuel that provides it in so many of our isolated communities.

The third broad theme that the Team heard at its meetings throughout the NWT was a public appetite for change in the NWT’s electricity system.

In each of the sections of the report that follows, we will set out what we heard in our discussion from customers, the utility companies, the communities, businesses and other interested individual and government officials.

We will then attempt to describe the “values” that residents expressed through their comments, values that could help to guide the future of our northern electricity system.

### **Conservation and Efficiency and Reducing Dependence on Diesel**

*The original Discussion Paper began with an emphasis on ways to reduce the costs of the electricity system specifically by encouraging conservation practices, increasing the efficiency of the capital equipment and reducing the system’s dependence on expensive diesel fuel.*

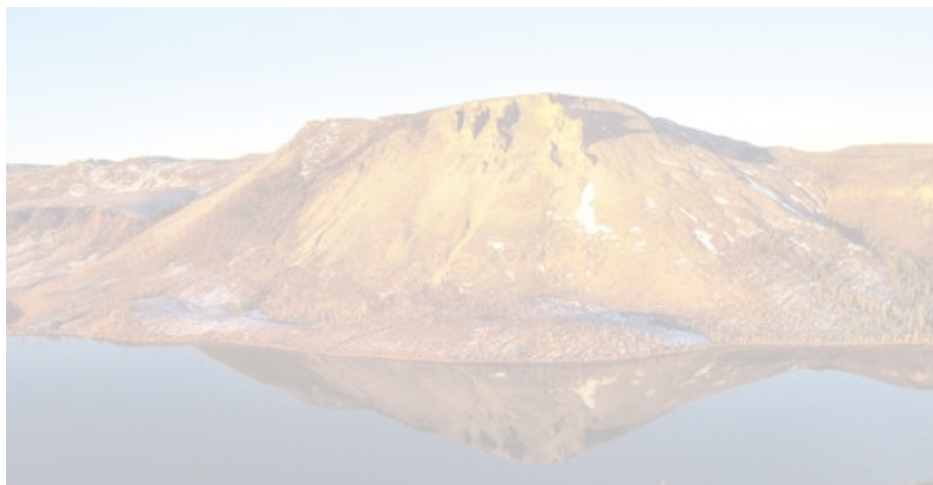
*During the public review, interest in this area was quite strong with a broad range of views and interests being expressed. Generally, residents suggested increased interest and attention is required to address conservation and focus on system efficiency without significantly impacting service and reliability. Highlights of the discussions are outlined below.*

As might be expected, **Ecology North and the Arctic Energy Alliance (AEA)** were supportive of conservation efforts and both organizations suggested that one means of encouraging conservation would be through the introduction of time of use rates in order to get people to use electricity throughout the cycle rather than loading generation unevenly.

The **AEA** currently provides assistance to homeowners and businesses seeking to reduce their energy demand and it encourages an expansion of these programs.

**Ecology North** argued for using waste heat from diesel generators as a way of getting additional value from the system and suggested that system efficiency could be improved with “right-sizing” of generators – ones that are closely tied to a community’s needs.

# THE REPORT OF THE ELECTRICITY REVIEW TEAM ON ITS PUBLIC DISCUSSION PHASE



Staff of the **Yellowknife Catholic School Board** provided an example of using waste heat to share between its St. Pat's High School facility and a nearby hotel, to the benefit of both buildings. As well, examples of waste heat recovery projects in other communities were highlighted on several occasions during the Review.

While there was general agreement in both the public discussion sessions and the individual meetings that efficiency gains should be a goal, there seemed to be little belief that either utilities or the GNWT, two of the major players, are effectively focused on conservation and efficiency gains and are committed to this objective.

During the **Inuvik** public meeting, residents noted that there should be a clear role for government in encouraging energy efficiency and that it would not be wise to leave the initiative to the power companies, as any efficiency gains could affect their revenues. It was also noted conservation efforts can often seem to lead to higher consumer costs, an issue that came up many times in discussions throughout the NWT.

On the subject of alternatives to diesel, there was significant support for increasing hydroelectricity to help lessen the impact of volatile oil prices and to reduce greenhouse gas emissions.

This view was also echoed in comments from the northern utility companies as well as the attendees at the **Northwest Territories Association of Communities** (NWTAC) workshop and Annual General Meeting.

In addition to hydro, there was support from people and community governments for a more aggressive approach to developing multiple forms of alternative energy.

For example, a **Hay River** resident made the case for pursuing a variety of alternative energy projects in order to reduce dependence on oil and lower our GHG emissions. He noted in particular the possible use of more hydro development on a macro and micro level.

Community meetings in **Fort Resolution**, **Fort Simpson** and **Fort Smith** all featured residents who encouraged the use of new technologies and alternative energies with Fort Simpson showing support for nuclear power and wood pellets in particular.

**Hay River** residents felt that in order to encourage alternatives, perhaps NTPC could be mandated to have a certain percentage of their power generated from alternative sources. Some members of the public also thought that government could encourage conservation by providing rebates/funding for energy saving appliances and subsidizing builders who create energy efficient homes.





## THE REPORT OF THE ELECTRICITY REVIEW TEAM ON ITS PUBLIC DISCUSSION PHASE

In addition, the Team heard comments from several people suggesting the increased use of biomass in southern NWT as one way to possibly help lower fuel costs associated with the production of electricity.

While there was broad support for developing alternatives, some members of the public did express reservations.

The staff of **the NWT Chamber of Mines**, noted that renewables are not particularly effective for use in addressing the base load needs of mines, so as a result, hydro or nuclear appear to be the only real alternatives to diesel for generating electricity. A resident in **Norman Wells** made the case that alternative energy funding and projects, to this point in time, appear to mostly benefit those communities on the grid and not isolated communities such as those in the Sahtu Region.

In order to encourage people and businesses to take up the opportunity to generate more of their own electricity needs through the use of alternatives, both **the NWT Chamber of Commerce and the Fort Smith Chamber of Commerce** supported the implementation of net metering technologies that would allow individuals and businesses to generate electricity for their own use and then sell back any extra electrical power to the grid at a fair market value rate.

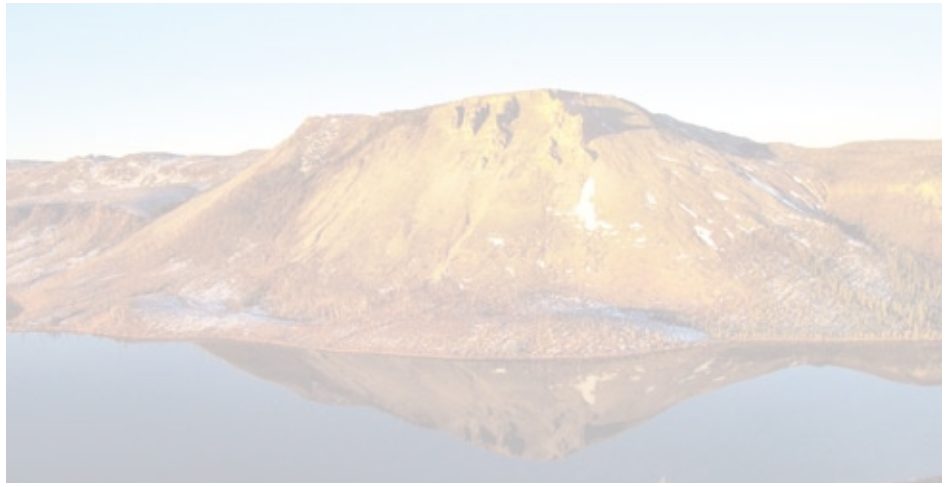
Both Chambers believe that NTPC should institute the technology that allows individuals to sell power they generate into the system as this would help to reduce inefficiencies that lead to unacceptable costs and consequently higher rates.

A resident of **Hay River**, in a written submission, spoke of the problems of living in a small community when faced with high power bills and argued for increased alternative energy use, including more hydro as one means of lowering total costs.

Some review participants felt that significant conservation gains could be achieved by making maximum usage of available hydroelectric power. Linked to this suggestion was the proposal that this could be achieved by making additional efforts to switch residents to electric heat.

While there are obvious costs associated with efforts to reduce the use of diesel fuel and its associated emissions, a **Norman Wells** business man pointed out that not doing so may be worse. He felt that perhaps we could learn from the B.C model where infrared analysis is used to identify conservation and efficiency targets in a community, followed up by individual analyses of a business or residence.

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## Utilities Companies and Markets

*The Discussion Paper raised the possibility that costs could be reduced through a change to the structure of the electricity industry perhaps with an increased role for private sector companies operating independently or in partnership with Crown corporations or through an expansion by NTPC into electricity markets beyond those currently being served.*

*Comments received by the Review Team with respect to utility companies and markets were extensive. These ranged from the general to the specific. Review participants offered many suggestions on the current utility companies, as well as the potential for future market growth and development. In addition, we heard suggestions for immediate actions as well as ones that might have a long-term impact on the NWT electricity system.*

**Ecology North** believed that a change in industry structure could mean there might be room for communities to own their own mini-hydro projects with government subsidy.

The **Arctic Energy Alliance** argued that we should look for ways to motivate utilities to find innovative ways reduce the total cost and greenhouse gas emissions of the NWT energy system. AEA felt that the best way to motivate a “for profit” utility would be to offer it the opportunity to share in the savings that they propose.

There was also the suggestion, made at a number of the meetings held throughout the NWT, that another way to reduce the cost to the NWT customers would be to look for new markets to generate extra revenue from the generating equipment that is already installed.

**Northland Utilities** was in agreement with this approach, noting that new revenue streams should be pursued through the development of hydro resources for export to southern markets. The company also argued that the development of other generation alternatives for sale to industrial customers or export markets would benefit from the involvement of the private sector and that economies of scale can be strengthened by a private-public-government partnership arrangement.

Both the **Fort Smith** and the **Yellowknife Chambers of Commerce** were supportive of changes to the industry structure as a means of lowering operating costs and, by extension, power rates. The Fort Smith Chamber argued that part of the system, possibly the power distribution component, could be turned over to the private sector to create greater efficiency and reduce the operating costs of the NWT Power Corporation.



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The **Fort Smith Chamber of Commerce** also believed that the excess capacity of Taltson Dam should be made available in some form (at reduced rates) to the connected South Slave communities in order to lower the cost of living, support the economy in the region and, at the same time, add new revenue to the electrical system and help to reduce their carbon foot print.

The **NWT Chamber** believes that the best model to use when considering private investment opportunities would be a three-way partnership among the GNWT, aboriginal governments and private industry and it supports new opportunities both within the NWT and to export markets by NTPC.

During the public sessions, there appeared to be a limited understanding of the current corporate structures for the crown agencies involved in the provision of electricity and the development of hydroelectric power in the NWT. During several of the public sessions the role of the NWT Hydro Corporation, the links between the GNWT, the NWT Hydro Corporation and NTPC were discussed. As well, public understanding of the structure and relationship of Northland Utilities was also limited.

Concerns were raised with respect to the potential exposure of ratepayers to losses in non-regulated activities, the appearance of growth to corporate overhead costs and the potential for operational focus on electrical generation for residents to be lost.

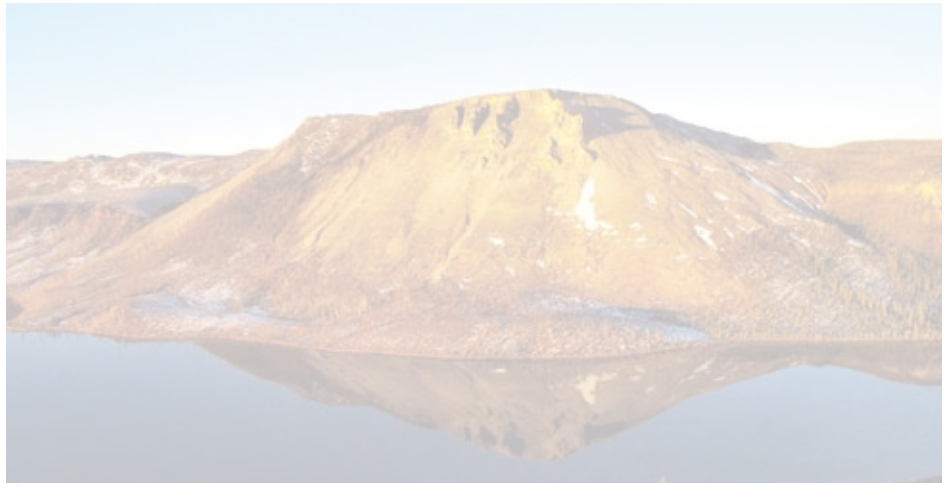
**NTPC** indicated that there are operational efficiencies and a potential for moderation of rates if there were to be a merger with Northland Utilities, but only if northern public ownership is maintained.

A **Hay River** resident echoed the views expressed by a number of Review participants when he noted that there could be benefits from NTPC and NUL coordinating their efforts toward similar ends. He cautioned, however, that public/private partnerships have been shown to lead to increased costs when compared to one or the other providing the service.

The Mayor of **Norman Wells** was supportive of exporting power to southern markets but questioned the relationship between GNWT and the Northwest Territories Energy Corporation, the corporate entity responsible for developing alternate markets. He questioned how the profits of that corporation, if any, would be shared with community ratepayers so as to reduce their cost of power.

Considerable time during the public forums was spent discussing the strengths and weaknesses of public and private sector delivery of electrical power. Generally, there was the view that a public sector utility was of considerable benefit to residents, but

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that any publicly owned utility must be run in an efficient and effective manner. Many felt that there is considerable room for increased efficiencies within the current NTPC organization and that there is the need for immediate changes in this regard.

Review participants also expressed the view that private sector utilities are usually run on an efficient basis. However, many expressed the view that private corporations' primary focus is not on the public interest, but rather to generate financial returns for the corporate shareholders.

This being said, the view that private sector firms could play an important role in investing in future hydroelectric development was also stated a number of times during the public discussions.

Some residents of **Fort Resolution** were supportive of regional power companies based on their concerns over the level of service and operational practices (e.g. bonuses) of NTPC. A number of the participants in the community meeting did support looking south for export markets to generate additional revenue for the system.

In **Fort Simpson** the view was expressed that communities could own and operate their own electricity systems and there was concern that any move toward privatization would see jobs flow south.

The **NTPC** commented on the potential for community ownership of generation and distribution systems. The Corporation said that it does not believe that community ownership can realize cost savings while retaining the current level of reliability.

**Norman Wells** participants also argued that NTPC could be run more efficiently and its system should be trimmed as much as possible to reach this goal. While some members of the community supported outright privatization, others noted that there are both benefits and risks to such a move and careful analysis was needed before any decisions are made. Several Review participants from the community did note, however, that both Yellowknife and Hay River should have electricity distributed by NTPC, rather than by NUL, as is presently the case, in order to increase economies of scale.

At the **Yellowknife** public meeting, some residents questioned the commitment of private companies to small community projects, feeling that such companies would likely prefer to be involved in larger, more lucrative projects.





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But, while there was some reluctance to fully support more private companies, several **Inuvik** residents strongly argued the case that NTPC needs to be refocused or dramatically overhauled, as there is, in their opinion, too much waste and inefficiency within the Corporation. Several residents noted that there is a natural monopoly in NWT and questioned the need for two distribution companies.

In addition to public concerns about a lack of efficiency with crown corporations in general, and NTPC in particular, some community members expressed concern with the way in which NTPC conducts itself. Review participants in a number of the public sessions said that the company seems to lack a customer focus. It is important to note that while there was limited concern regarding the efficiency of Northland Utilities, similar views with respect to a lack of customer service focus were expressed with respect to NUL's operations.

This criticism was consistent with that of several people from Jean Marie River who expressed their frustration with the level of service they feel they receive from NTPC.

As a middle ground between continued Crown Corporation or privatized delivery, some commentators made a strong case for private-public (P3) arrangements, particularly with respect to new market development.

### Electricity Transmission and Distribution

*In this section, the Discussion Paper sought to engage northerners in a discussion of possible cost savings in the long distance transmission and local distribution of electricity.*

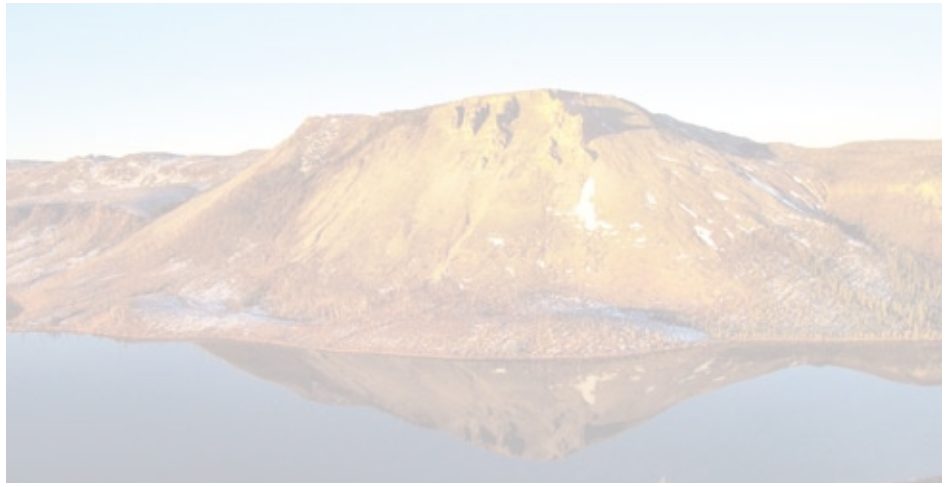
*As one means of realizing cost savings, the Paper raised the issue of possible community ownership of local power utilities.*

*Transmission and distribution received somewhat less attention from those participating in the Review. In many cases discussions related more specifically to issues of electrical generation and sector structure. Nevertheless, the Review team did receive a range of comments in this area.*

**Ecology North** believes there may be two different approaches here – Costs could be decreased through demand side management, customers using less and alternative energy projects could provide electricity at a lower cost than diesel.

**Northland Utilities** suggested the implementation of new technologies and operating practices as a means of providing some long term cost savings for customers and

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made the argument that any additional revenues generated from new markets could be used to reduce the cost of electricity for residents and businesses.

The **NWTAC** believes that increasing both macro and micro hydroelectric projects is the best way to bring down the cost of the system and that linking these systems into a grid would provide long-term advantages for the customer. The Association also suggested that the **GNWT** should seek Federal funding where possible to reduce any and all associated costs to our electricity system.

During the public session in **Fort Resolution** some residents argued that the mines, not the ratepayers, should pay for any transmission lines to the mines. In terms of current transmission and distribution, reliability of service is a major concern for residents and especially for businesses

**Fort Simpson** residents also believed that transmission lines to the mines should be paid for by the mines. While they were less concerned about system reliability than the Fort Resolution residents, some people at the public meeting did note that the current level of reliability comes at too high a price.

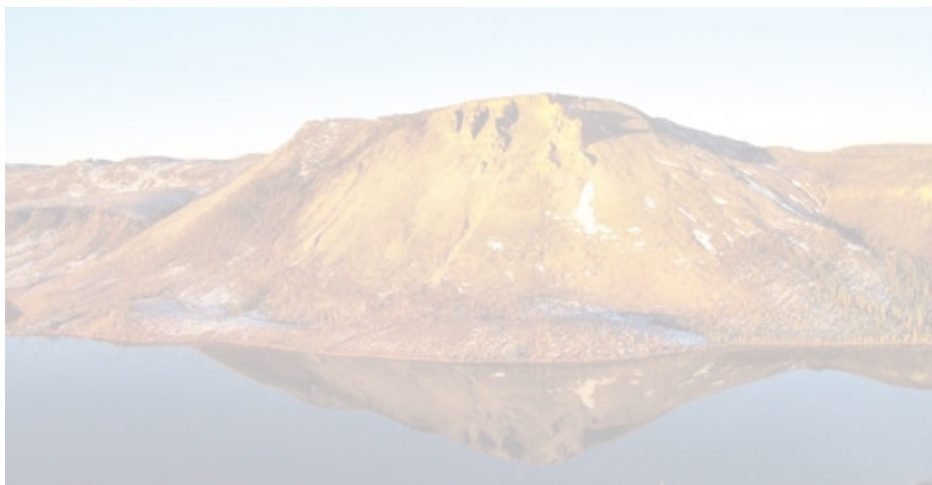
**Fort Smith** residents felt that NTPC's current level of service is not reliable. Their preferred solution was to develop the transmission grid so that Taltson power can be sent to Yellowknife, thus permitting load sharing and balancing between the Taltson and Snare hydroelectric systems. **Behchoko** also supported this proposed solution.

**Norman Wells** residents made the point that in small communities large businesses share an unfair burden of electricity costs, but some residents expressed the view that community ownership would not make sense as the issue of economies of scale would be a huge deterrent.

**Yellowknife** residents were quite vocal in expressing their opinion that reliability is a major concern, especially during winter months. Some community members believed that the introduction of real-time metering might help to increase reliability while encouraging consumers to reduce their power costs. Others felt that we must expand the grid to overcome issue of economies of scale.

At the **Inuvik** public meeting, residents made the case that the high cost of electricity is a catalyst for people leaving town. The Team also heard from individual residents active in community groups how higher electricity costs were having an impact on the fees that organizations, such as the curling club, had to charge members.

In addition to the high costs, some community members felt that NTPC provides unreliable power (with power/voltage surges) resulting in damage to household



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and commercial equipment; damage that is not compensated by the Power Corporation.

During the **Inuvik** session, a businessman shared his experiences in self-generating the electricity needed for his business operations and noted that the lower cost meant that he had recovered his initial costs within eight months.

A number of those participating in the Review were supportive of seeking to develop the NWT's electricity potential, but noted that transmission is a challenge given the long distances, the high costs and unsettled land claims.

They also noted that we seem to always be studying the issue and making little practical progress.

A businessman in **Yellowknife** suggested that perhaps NTPC could generate more solar power, not leaving it to individual customers to do on their own, as a means of lowering the cost of electricity. He went further to suggest that should NTPC agree to purchase solar power from individuals, competition to supply solar units to home owners could result in the lowering of the prices for solar units. This last idea found a slightly different approach in **Behchoko** where it was suggested that upon reaching a certain age, rather than continue to receive a price subsidy, elders should have solar panels installed by the community and/or Power Corporation as a means of lowering their energy costs.

The staff of the **Chamber of Mines** expressed a view that was generally supportive of increased generation and long distance transmission, but also noted possible access impediments associated with unsettled land claims.

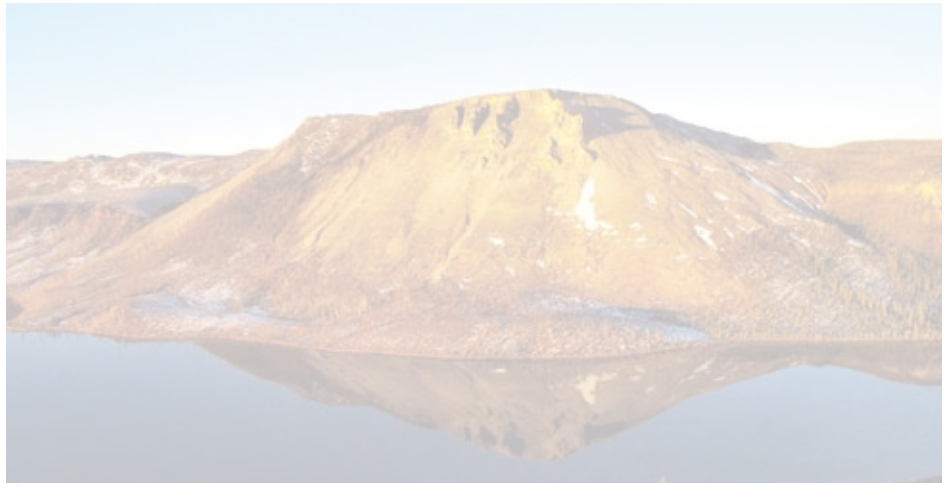
### Role of the GNWT/PUB and Costs of Regulation

*The Discussion Paper included a section on the role of the NWT's Public Utilities Board (PUB) in reviewing and establishing electricity rates and the costs associated with this work.*

*This section led to two questions being posed: "Are there opportunities to reduce the costs of regulation?" and "Should the GNWT be able to issue policy direction to the PUB?"*

*Views expressed during the review were generally supportive of the need for an arms-length body responsible for regulation of the electrical sector. In addition, the Review Team received a number of comments and suggestions as to the role of the Public Utilities Board, its relationship to the Government of the Northwest Territories and the current regulatory processes.*

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**Ecology North** felt that the current regulatory system works well and that it was not the role of the PUB to lower costs.

**Northland Utilities** felt that there was a need to streamline the regulatory process by using negotiated settlements wherever possible and felt that the PUB's role should remain focused on high level matters, such as the determination of utility costs and rate structures and should avoid intervention in day to day matters of utility operation. The company also felt that the GNWT should be able to issue policy direction to the Board.

**NTPC** indicated that it believes that there should be utility regulation and an independent PUB. However, the Corporation also believes that regulatory processes should change so that those intervening in the regulatory process are directly responsible for any additional regulatory costs. This was proposed as a way to increase accountability of interveners and increase cost control over the regulatory process.

The company further felt that as a cost saving measure, rate of return decisions should be set on a formula basis and be tested annually for inflation impacts and a standardized GRA process should be developed, thus avoiding drawn-out, costly hearings.

**NTPC** argued that the GNWT should amend the *Public Utilities Board Act* so that Cabinet can provide the PUB with clear policy direction and an oversight function should be created to ensure the PUB is efficiently fulfilling its mandate.

As a further cost saving measure, the company believes that it should be regulated as one utility, not as a series of community-based enterprises each requiring their own analysis.

**NWTAC** thinks that the PUB does a good job acting as a proxy for competition in the electricity industry, but noted that communities are frustrated with their inability to access the regulatory process, as it is considered costly, not fully transparent and difficult to understand. Efforts to ensure greater representation on the PUB from all regions could allow for better community input.

**Three Hydro Communities** (Yellowknife, Hay River and Fort Smith) wrote to the Review Team and commented, "The current regulatory process is providing a reasonable balance between costs and regulatory oversight" but went on to encourage efficiencies and continued cost reduction opportunities.

The Review Team also heard the view that it is government's role to provide balance and to ensure residents do not suffer from perceived inequities. Additional





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comments suggested that under the current structure, the PUB is not accountable to the Minister, nor to the ratepayers and that as a consequence, the PUB legislation needs to be revised.

A few participants suggested that eliminating the PUB could reduce regulatory costs greatly and, as an alternative to the present Board structure, the GNWT could absorb the PUB functions with citizen input transferred to MLA's. There was also a suggestion, heard several times, that the PUB or government should appoint a Utility Ombudsman.

Several presented the opinion that both the GNWT and the PUB need to provide better oversight to the utility companies and that the PUB should consult with communities when making changes.

One participant in the **Fort Simpson** meeting made the case that a move to a one-rate zone would save on regulatory costs and several **Fort Smith** residents argued that the General Rate Application (GRA) process is too costly and the current intervener system does not work.

Specifically, this latter community thought that the PUB should come to the communities to consult or create an ombudsman to provide more public access to the regulatory process. Some community members also thought that the PUB is too close to government and it should be more independent.

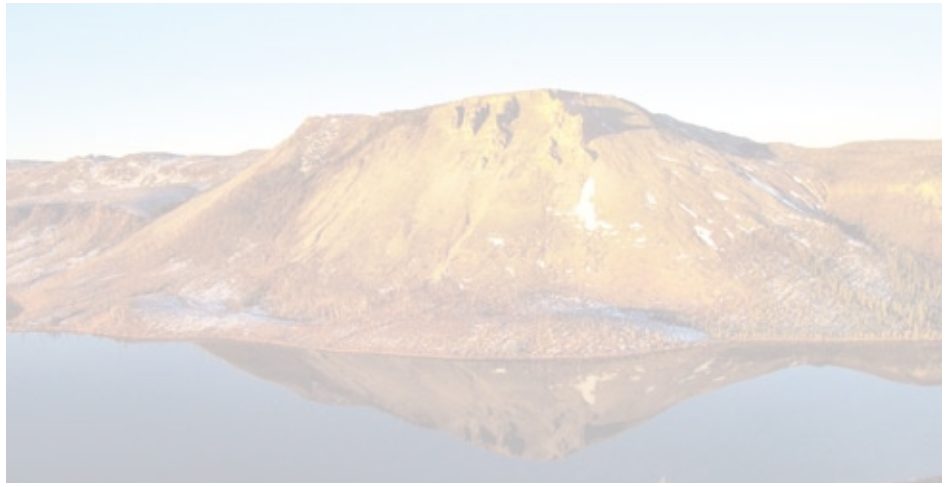
A similar concern was voiced at the **Inuvik** public meeting, with some residents saying that the GNWT exerts too much influence over the PUB.

**Hay River** residents spoke about the need to trim the regulatory system as much as possible to lower costs. In terms of the independence of the Board, some residents argued that the PUB should operate at arms length to ensure objectivity, while others thought the GNWT should absorb the PUB or at least be allowed to provide it with clear direction.

There was also some discomfort with the GRA process, as it appears to allow too much influence from special interest groups. In general, though, residents felt that any move to deregulation could create a more profit driven electricity system at the expense of smaller customers.

A similar concern was heard at the **Norman Wells** meeting with one resident pointing out that, in Alberta, deregulation has lead to fragmentation of the electricity system between many service providers and suggested that this was the cause of a doubling of electricity rates in a two year period.

# THE REPORT OF THE ELECTRICITY REVIEW TEAM ON ITS PUBLIC DISCUSSION PHASE



A **Norman Wells** businessman expressed a concern that the costs of intervention are high and intervener funding appears self-serving. Based on his experience with other boards, he suggested a greater emphasis on consultation with communities. He also noted that any increase in privatization would need more regulatory oversight.

A **Yellowknife** businessman felt that NTPC is run inefficiently and could do better. He saw a role for having PUB more actively assessing operational costs of the utility. He felt that the Board could expand the definition of “public interest” to take into account more considerations in its decisions.

While some residents were concerned with the costs of the PUB, others maintained that the cost of regulation is “not a big deal” to consumers.

## Electricity Rates and Rate Structures

*The Discussion Paper next turned to the matter of electricity rates and how the costs of the system might be distributed across rate zones. As one might expect, this was the section of the paper that elicited the most comment and was the one that clearly showed the divergence in opinions on the subject of the cost of electricity among people in the NWT.*

*There were three issues that dominated the community discussions, private meetings and formal submissions – the high cost of electricity, the apparent lack of any relationship between lower usage and lower costs and the possible use of “rate zones” to more evenly distribute the costs of the system.*

*The Electricity Review Team found a clear divide between communities served by the integrated hydro system and those dependent on community-specific diesel generation when it came to the distribution of system costs.*

**EcologyNorth** was against any attempt to introduce a levelized rate in the NWT, as they believe that the current higher rates in thermal communities encourage conservation.

**Northland Utilities** was also against a levelized rate zone, but argued that the government must improve the TPSP to make electricity affordable as a viable solution to high rates.

This view was echoed by **NTPC**. NTPC suggested that the introduction of a levelized rate without a residential subsidy would cause most consumers to pay more for electricity than they do under the current subsidy system.

The **Fort Smith Chamber of Commerce** categorically opposed any rate system in the NWT where Fort Smith would subsidize the higher cost of power generation in other



## THE REPORT OF THE ELECTRICITY REVIEW TEAM ON ITS PUBLIC DISCUSSION PHASE

communities. The Chamber argued that electrical power in the community needed to be cheaper, more reliable and produced in an environmentally sustainable way.

It maintained that rates are out of control and that there are new sources of revenue available within the system that must be captured - in many cases, lower rates will lead to a greater volume of use that will result in greater income.

This position was echoed at the **Fort Smith** community meeting when several residents made it clear that they would categorically oppose any increase in the cost of power in Fort Smith resulting from a cost sharing with other communities.

Similarly, the **NWT Chamber of Commerce** indicated that it does not support anything that will increase the cost of power to the consumer in the NWT, believing that this cost is a huge barrier to economic development in the North.

During the review process, several people expressed the view that a focus should be on getting the capital requirements and the fixed overheads in line in order to help the ratepayer see a decrease in rates. Many felt there was a need to “right size” NTPC to help bring down operating costs and electricity rates.

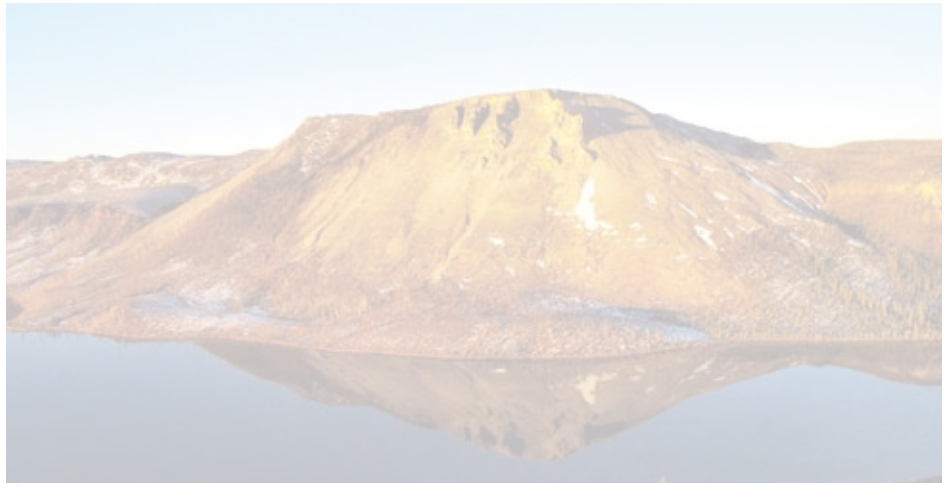
**Fort Resolution** residents maintained that it was difficult for consumers to understand monthly bills and cost components of electricity rate and this, in turn, made it hard for some community members to understand why is it that despite decreased fuel costs and an increase in residents, electricity rates have not fallen.

**Fort Smith** residents also argued that the members of the public need to better understand how rates are determined. Some residents also thought that utility costs in social housing could be increased to lessen the burden on other consumers.

It was, however, the Mayor of **Fort Simpson** who most forcefully raised the issue of the impact of power costs on small communities. In his written submission, Mayor Duncan Canvin noted that while he and the community were generally pleased with NTPC's system reliability, the impact on personal and town budgets of high power costs was unsustainable and the very real possibility existed that his town, along with Norman Wells and Inuvik, the three largest non-hydro customers of NTPC, could be forced to seek alternative power suppliers, to the unfortunate detriment of all the remaining communities.

The Team heard some frustration from **Hay River** residents that despite increases in conservation and decreasing oil prices, electricity rates seem to continue to increase. To them, this indicates something is wrong with the current rate system. Some residents felt that those who live in larger centres should not be forced to subsidize

# THE REPORT OF THE ELECTRICITY REVIEW TEAM ON ITS PUBLIC DISCUSSION PHASE



smaller communities and that perhaps a better approach would be a move towards a hydro zone and diesel zone.

Like other communities to the south, **Norman Wells** residents questioned why recent lower fuel prices haven't resulted in a rate decrease for a number of ratepayers. They also questioned the primary reason behind recent increases in electricity rates.

But, unlike their southern NWT counterparts, **Norman Wells** residents thought that the benefits of hydro must be shared amongst all NWT communities.

This viewpoint was shared by many of the attendees at the **Inuvik** public meeting who said that the cost of electricity in Inuvik is high and without a one rate zone the town will have to look for a new franchise. They believed that the rate structure should benefit all northerners and a one-rate zone is the best strategy for the NWT.

**Fort Simpson** residents were similarly inclined, arguing that the bigger cities in NWT should subsidize smaller ones, as in many other jurisdictions. It was pointed out to the Team that economies of scale will always remain an issue unless costs are spread over the whole territory - levelized rates are the only way for communities to invest in capital-intensive energy generation projects.

Some **Yellowknife** residents agreed that using less electricity didn't seem to result in lower power bills, but they were not inclined to support a one-rate zone, arguing that such a rate system would eliminate price signals that influence consumption.

As with community groups, so with individuals. The Team encountered a range of opinions on the factors causing the high cost of electricity and an equally broad range of solutions to address this cost. There was also conflicting opinions on the use of rate zones to more evenly spread the costs of the electricity system throughout the NWT.

We also heard a number of different suggestions from individuals on how some of the costs of the system could be reduced. For example, some thought that there might be merit in moving to a new capital model with communities not paying the full cost of their electrical capital needs. Others suggested that rapid depreciation of capital assets might assist in lowering costs.

The hydro communities of **Yellowknife**, **Fort Smith** and **Hay River** also provided a joint written submission to the Team in which they made the case that it would be inappropriate to move to a one rate zone for power as the impact on these three communities, and indeed on all those that currently receive the territorial power subsidy, would be negative.





## THE REPORT OF THE ELECTRICITY REVIEW TEAM ON ITS PUBLIC DISCUSSION PHASE

### Commercial and Residential Subsidy Programs

*The final subject area the Discussion Paper touched on was the affordability of electricity. The Paper noted that at present, the Territorial Power Subsidy Program (TPSP) provides for customers outside of Yellowknife to pay the same rate as the capital city residents for the first 700-kilowatt hours they use. Usage beyond that level is charged at the much higher community rate.*

*In our discussions with northerners, the Team talked about the continued existence of the TPSP, the appropriate usage threshold level and the possibility of providing an improved commercial subsidy program for local businesses.*

*As with the question of rate zones, there was a wide range of opinions on the issue of subsidy programs.*

**Ecology North** felt that the threshold for TPSP should be set below 700 kWh to encourage further conservation and that there was no need to extend commercial support.

**The Arctic Energy Alliance** was not as inclined to change threshold levels but did think that we should re-evaluate the current rebates and subsidies to ensure they are designed to produce the desired affordability and reductions in greenhouse gas emissions.

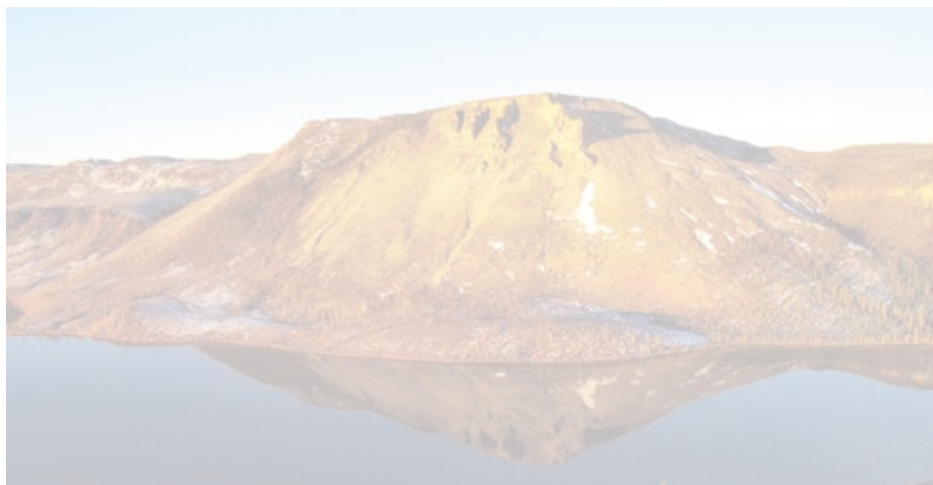
**Fort Simpson** and **Fort Resolution** residents thought that the 700 kWh threshold may not be appropriate and perhaps it could be seasonally adjusted with a higher level in the winter months and a lower one in the summer. This position was reflected by the **NWTAC** in its submission with the added provision that a way should be found to link the subsidy to energy conservation efforts.

**Fort Smith, Hay River, Norman Wells** and **Inuvik** residents all agreed that it was very difficult to stay within the 700 kWh threshold, with the latter two communities suggesting a change to 1000kwh/month.

Several people during the public discussions argued that the current rate of growth of the TPSP is unsustainable, having grown to over ten million dollars in 2008. They suggested that while the subsidy may be necessary to ensure the affordability of electricity, the impact on government spending might, in the long term, have a serious negative impact on other programming such as health, education or economic initiatives.

The Team also heard from social agencies that while the residential subsidies are critically important to customers in the qualifying communities, the price of

# THE REPORT OF THE ELECTRICITY REVIEW TEAM ON ITS PUBLIC DISCUSSION PHASE



electricity in Yellowknife and the other communities that do not benefit from the subsidy remains a significant issue. The representatives of these groups noted that the cost of electricity is limiting available funds for families to pay for other necessities such as food and clothing.

On the subject of the Commercial Power Subsidy Program (CPSP), while many residents, organizations and communities argued for such a subsidy, there seemed to be some uncertainty as to what, exactly, the subsidy was intended to accomplish.

The **NWTAC** maintained that the CPSP should be easier to access (a direct subsidy as opposed to an application) and that the structure of the CPSP should be examined to determine how to reduce costs of goods and services in northern communities.

**Norman Wells' residents** agreed that the CPSP should be improved, again with the intent of reducing the cost of living in communities.

**Northland Utilities** supported some form of residential and commercial subsidy program but noted that the GNWT needs to ensure its effectiveness.

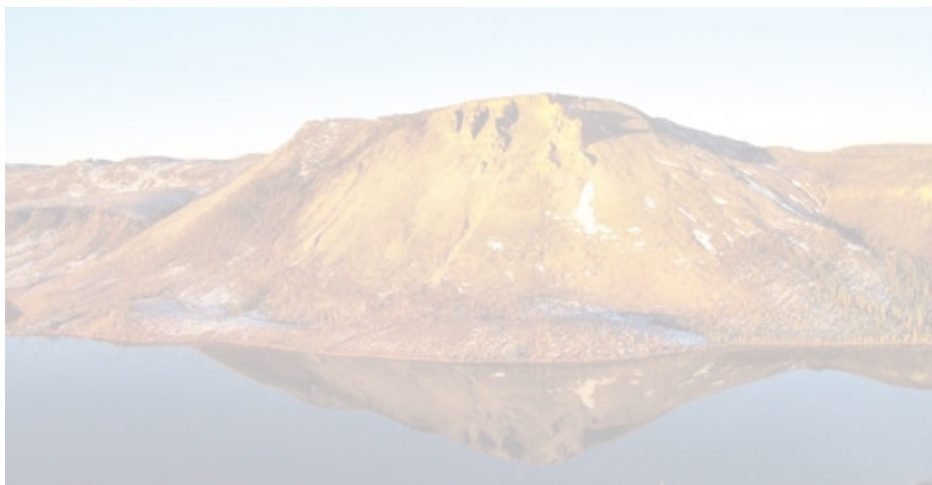
**NWT Chamber of Commerce** supported a reworked CPSP that would be more effective in assisting a greater number of small and medium sized companies overcome the development barrier posed by high power costs.

Both **Northland Utilities** and **NTPC** argued for an enhancement of the commercial program with the latter suggesting that an increased subsidy be funded by a 3 cent/kWh increase to the rates in hydro communities.

**NTPC** expressed the concern that without an expanded commercial power subsidy there is the danger that a large electricity consumer in a town might, by generating its own power more cheaply, be tempted to leave the community grid to the detriment of the remaining customers whose rates would have to increase to cover the community's fixed costs.

## Some Broad Observations & Next Steps

The Review Team was very impressed by the thought, interest and involvement of the NWT residents who participated in the public discussion phase of the NWT Electricity Review. While we had expected to hear a great deal about the cost of electricity from residents and businesses during our meetings, both the depth, and the extent, of the impact of high electricity costs on northerners, surprised the Team.



## THE REPORT OF THE ELECTRICITY REVIEW TEAM ON ITS PUBLIC DISCUSSION PHASE

Whether it was families struggling with power bills or businesses seeking to somehow reduce their operating costs, the issue was the same – the high cost of power is a real problem in the north and, if it is somehow not addressed, the cost of electricity will be a detriment of the long-term economic future of the Territories.

This report is not the vehicle for the Electricity Review Team's recommendations – they will follow in a second document – but we can at least indicate some broad areas of consensus that we believe we have seen as a result of our public discussion process. People believe that:

- The electricity system needs to provide a safe and reliable service focused on customer needs;
- Reduced energy use should reduce customer costs;
- The current rate system is too complex;
- Residential and commercial rates are too high;
- New technologies should be subjected to objective testing and documentation;
- A focus should be placed on green technologies, but not at any price;
- Residential subsidies may require change and the value of the commercial subsidy is uncertain;
- Existing electrical system resources should be used more efficiently; and
- The regulatory process is complex, legalistic, costly and not easily accessible.

There were also a number of areas of discussion in which there is no clear consensus. There are strongly held, differing views on a number of aspects of the electricity system and these views will require further discussion, analysis and leadership to resolve.

The Review Team has now completed the public phase of the Electricity Review. Using the information gained during this phase, the Team will be researching options and preparing a final report to the Ministerial Energy Coordinating Committee.

The final report will include recommendations from the Team for the Government of the Northwest Territories consideration. The report will be completed and submitted to the Government during the summer of 2009.

## APPENDIX ONE:

## MEETINGS AND SUBMISSIONS



Functioning wind turbine in Northern Canada.

### Public Forums

Inuvik – March 4, 2009  
Norman Wells – April 1, 2009  
Fort Simpson – April 8, 2009  
Hay River – April 20, 2009  
Fort Smith – April 22, 2009  
Yellowknife – April 23, 2009  
Fort Resolution – April 28, 2009  
Behchoko – May 19, 2009

### Workshops

Electricity Workshop (hosted by the NWT Association of Communities) –  
March 30/31, 2009

### Other Meetings

- Annual General Meeting – NWT Association of Communities
- NWT Public Utilities Board
- Ecology North
- M. Vaydik, NWT and Nunavut Chamber of Mines
- Ms. L. Fuller, YWCA
- Ms. A. Hache, Centre for Northern Families
- Inuvialuit Regional Corporation
- Mr. L. Voytilla, Chair, Mr. L. Courneya, President, Ms. J. Goucher, NWT Power Corporation
- Mr. J. Babyn, Mr. D. Morgan, Mr. J. Barbutza, Northland Utilities
- Peter Retallack, ATCO Midstream
- His Worship P. Guthrie, Mayor, Town of Norman Wells
- Students and staff, Aurora Campus, Aurora College
- Mr. I. Freemantle, SAO, Town of Norman Wells
- Board Members, NWT Chamber of Commerce and J. Curran, Executive Director
- Mr. G. Pemberton, businessman, Inuvik





## APPENDIX ONE:

## MEETINGS AND SUBMISSIONS

- Mr. D. Kaufman, businessman, Inuvik
- His Worship D. Lindsey, Mayor, Town of Inuvik
- His Worship D. Canvin, Mayor, Town of Fort Simpson
- Ms. S. Bassi-Kellett, ADM, Department of Municipal and Community Affairs, GNWT
- His Worship J-M Miltenberger, Mayor, Town of Hay River
- Chamber of Commerce, Hay River
- His Worship P. Martselos, Mayor, Town of Fort Smith
- His Worship G. Van Tighem, Mayor, City of Yellowknife
- Mr. M. Adamchick, businessman, Yellowknife
- Ms. S. Baker, Regional Superintendent, Department of Education, Culture and Employment, GNWT
- Mr. J. Auge, resident, Yellowknife
- Ms. W. Bisaro, MLA, Yellowknife
- Bob Bromley, MLA, Yellowknife
- Mr. G. Abernethy, MLA, Yellowknife
- Mr. J. Jaque, Yellowknife
- Mr. M. Huvenaars, Yellowknife Catholic Schools
- Mr. T. Beaulieu, MLA Tu Nedhe
- Mr. R. Hawkins, MLA, Yellowknife
- Mr. J.M. Miltenberger, MLA, Thebacha
- Mr. D. Ramsey, MLA, Yellowknife
- Ms. S. Lee, MLA, Yellowknife
- Mr. N. Yakeleya, MLA, Sahtu
- Mr. F. Roland, MLA, Inuvik
- Mr. R. McLeod, MLA, Inuvik
- Mr. P. Delorey, MLA, Hay River
- Mr. J. Anderson, President, NWT Housing Corporation
- Mr. M. Aumond, DM, Public Works and Services, GNWT
- Mr. J. Lafferty, MLA, Monfwi
- Mr. K. Menicoche, MLA, Nahendeh
- Ms. W. Macpherson and Mr. R. Swann, North Slave Service Centre, Education, Culture and Employment, GNWT
- Mr. B. Braden, resident, Yellowknife
- Mr. S. Quigg, Superintendent, Sahtu Divisional Board of Education

## APPENDIX ONE:

## MEETINGS AND SUBMISSIONS



### Written Submissions and Comments Received

- Northland Utilities
- Northwest Territories Power Corporation
- Arctic Energy Alliance
- Northwest Territories Association of Communities
- Ecology North
- Joint Submission from the City of Yellowknife, the Town of Hay and the Town of Fort Smith (“Hydro Communities”)
- NWT Chamber of Commerce
- Fort Smith Chamber of Commerce
- Mr. P. Kienholz, Hay River
- Mr. K. Menicoche, MLA, Dehcho
- Mr. W. Heath, Yellowknife
- Mr. H. Blake, Inuvik
- Ms. J. Mercredi, Yellowknife
- Mr. T. Lakusta, Fort Simpson
- Mr. K. Cox, Fort Smith
- Mr. B. Marta, Fort Smith
- Mr. Robert Billard
- Mr. P. Guthrie, Mayor, Norman Wells
- Mr. J. Rowe, Hay River
- Mr. J. Kelly
- Mr. D. Canvin, Mayor, Fort Simpson
- Ms. G. Burles, Yellowknife
- Mr. T. Pamplin, Yellowknife
- Ms. P. Burnstad, Hay River



Solar panel in Hay River.

## APPENDIX TWO:

# ELECTRICITY REVIEW PRESENTATION

### Electricity Regulation, Rates and Subsidy Programs in the NWT

Yellowknife, NWT

NWTAC Workshop

March 31st, 2009

*Electricity Review Team*

## Introduction

- Why an Electricity Review?
- Environment Scan
- Vision For the Future
- Electricity Regulation
- Electricity Transmission, Generation & Distribution
- Electricity System Costs
- Cost Distribution and Rates
- Ensuring Affordability
- Discussion Points for the Evening

## APPENDIX TWO:

# ELECTRICITY REVIEW PRESENTATION



### Why an Electricity Review?

#### Principles

- "... the regulation of energy, the provision of subsidies and the way in which rates are established need to be explored". pg. 35
- "Reliable and affordable energy should be available in all communities". pg. 2

*Energy For the Future: An Energy Plan for the Northwest Territories, March 2007*

### Why an Electricity Review?

- Northern residents, companies and various stakeholders have all expressed a desire for change
- Some Provinces and Territories in Canada have also recognized the need to rationalize regulatory systems and seen the need for change and are undertaking reviews





## APPENDIX TWO:

# ELECTRICITY REVIEW PRESENTATION

### Environmental Scan: NWT Electricity Market: Small and Expensive

#### Our Situation

- Limited economies of scale;
- Limited integrated grid;
- Service provided by both Private and Public Utilities;
- Due to our harsh environment and remoteness, it is especially critical that we have a back-up and emergency response plans; and
- Current pricing approach is cost of service and community-based.

### Environmental Scan: NWT Electricity Market:

#### Who are the Players and What Do They Do?

- The GNWT:
  - The role of Government is to establish the regulatory structure and set overall policy direction.
- The Public Utilities Board (PUB):
  - The role of PUB is to determine allowable costs for utilities, approve the rate of return and represent the public interest.
- NTPC and ATCO/NUL:
  - Generators, transmitters and distributors.

## APPENDIX TWO:

# ELECTRICITY REVIEW PRESENTATION



### Environmental Scan: NWT Electricity Market: Small and Expensive

#### Completed

- NWT Energy Plan
- NWT Greenhouse Gas Strategy
- Energy Priorities Framework

#### Ongoing

- Draft NWT Hydro Strategy – Out for Public Feedback
- Taltson Expansion Project – In the Regulatory Review
- NTPC Review – Commenced
- ATCO's Unsolicited Proposal – Commenced

### Vision For the Future: What Is Our Shared Vision?

- Reliable Energy Supply
- Minimize Environmental Impact
- Cost to Customers:
  - Cost Management; and
  - Distribution of Costs;
  - Ensure Affordability



## APPENDIX TWO:

# ELECTRICITY REVIEW PRESENTATION

### Electricity Costs - Generation

#### **Efforts could be made on a number of fronts:**

- Conservation and efficiency;
- Reducing our dependence on diesel;
- Public private partnerships; and
- Expanding northern markets.

### Electricity Costs - Transmission & Distribution

#### **Transmission**

- There are few transmission grids linking communities.

#### **Distribution (within communities)**

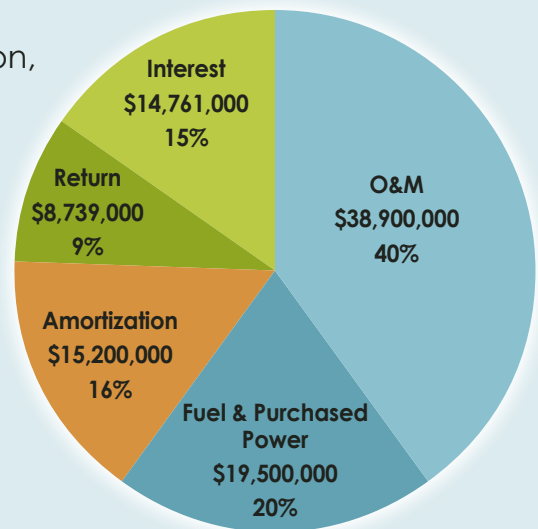
- NTPC
- NUL (NWT)
- NUL (YK)
- Inuvik Gas
- Norman Wells GAs Distribution System
- Siitco
- Aadrill

# APPENDIX TWO: ELECTRICITY REVIEW PRESENTATION



## Electricity System Costs - NWT Wide 07/08

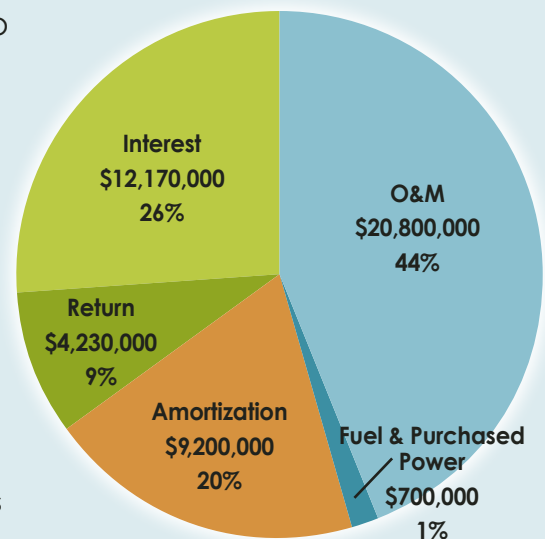
- The Total cost for electricity generation, transmission and distribution in the NWT are approximately \$97 million.
- \$47 million for Hydro and \$50 million for Thermal Communities.



Average Cost of 32 cents per kW.h

## Electricity System Costs - Hydro

- Total costs for hydro electricity is approximately \$47 million.



Average Cost of 20.1 cents per kW.h



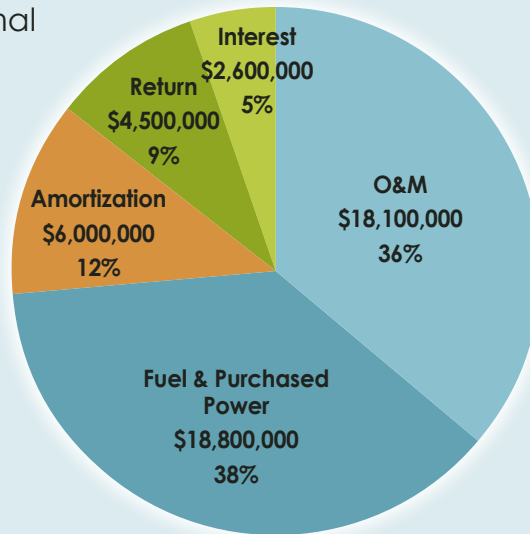


## APPENDIX TWO:

### ELECTRICITY REVIEW PRESENTATION

#### Electricity System Costs - Thermal

- Total costs for thermal electricity is approximately \$50 million.



Average Cost of 65 cents per kW.h

#### Electricity Regulation

Electricity rates are regulated and are established through a General Rate Application (GRA) process that takes place when one of the utility companies seeks approval from the PUB to change its rates. There are two phases to this process:

**Phase One** - determines the overall revenue requirement, examining utility expenses and revenues.

**Phase Two** - examine the cost of service study which determines the specific rates to be charged for each class of customer.

## APPENDIX TWO:

# ELECTRICITY REVIEW PRESENTATION



### Cost Distribution & Rates

#### Where we are today

- Total cost for electricity are approximately \$97 million.
- Average Hydro Cost: about 20 cents/kWh
- Average Diesel Cost: about 65/kWh

#### Where we might go tomorrow

- Should the benefits of past government investment in hydro should be shared?
- Should the benefits of future hydro development be shared?

#### How might we get there?

### Ensuring Affordability

#### Residential Subsidy Program

- For the first 700 kWhs used, every resident in the NWT pays the Yellowknife rates.
- Beyond 700 kWhs, residents pay their community - based rate.

#### Commercial Power Subsidy Program

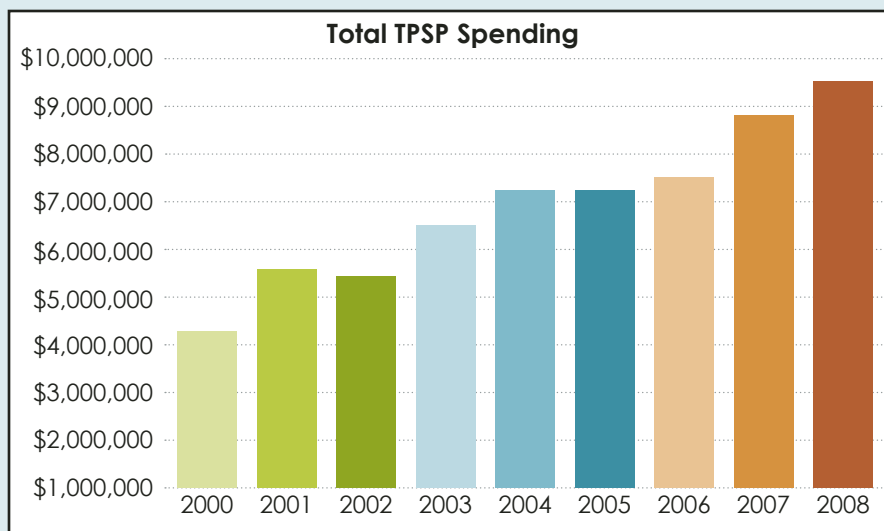
- High power costs often act as a barrier to local economic development.
- If an existing community business leaves the system, the economic impact on the remaining customers could be significant.
- The current CPSP does not fully address these two issues.



## APPENDIX TWO:

### ELECTRICITY REVIEW PRESENTATION

#### Current Subsidy Programs: Ensuring Affordability



#### Discussion Points - Shared Values

There are specific questions posed in the Discussion Paper that can be considered in the context of the question posed by Ministers in the Introduction:

##### **What should be our vision for the future?**

- Reliable Energy Source;
- Minimum Environmental Impact; and
- Cost to Customers.

**The approach taken should reflect the values of NWT residents and communities.**

## APPENDIX TWO:

# ELECTRICITY REVIEW PRESENTATION



### Discussion Points: Electricity Sector Structure

**Can the Electricity Sector Structure be improved and if so, how?**

- Strengthen NTPC?
- Increase private sector participation?

### Discussion Points: Generation, Transmission, and Distribution

**Can costs related to generation, transmission and distribution be reduced? If so, how?**





## APPENDIX TWO:

# ELECTRICITY REVIEW PRESENTATION

### Discussion Points: Regulation

- Who should have the responsibility to set overall direction for the electrical sector?
  - Government, companies or the PUB?
- What should be the primary role of regulators?
- Are there opportunities to reduce costs in the regulatory process? If so, what changes should be made?

### Discussion Points: Electricity Rates

- Should the GNWT promote community-based, regional or territorial approach to rate setting?
- Are there other rate design models that should be considered?

## APPENDIX TWO:

# ELECTRICITY REVIEW PRESENTATION



### Discussion Points: Affordability

- **Should the GNWT subsidize the costs of electrical power?**

If Yes, then:

- How should the amount of the subsidy be determined?
- How should the subsidy be funded?
- How can the overall costs of the subsidy be managed?

If No, then:

- How can power be made affordable/accessible in all communities?

### Your Thoughts & Ideas - Contact Info & Process

**Email:** [nwtelectricityreview@gmail.com](mailto:nwtelectricityreview@gmail.com)

**Mail:**

**NWT Electricity Review Team**  
C/O Industry, Tourism & Investment  
Government of the Northwest Territories  
P.O. Box 1320  
Yellowknife, NT  
Canada, X1A 2L9

**Fax:** Energy Planning: (867) 873-0101

If you would like to discuss your feedback or arrange a meeting with us, please call: (867) 873-7573

**Copies of "A Review of Electricity Regulation, Rates and Subsidy Programs in the Northwest Territories" can be downloaded from the Energy Planning website at: <http://www.nwtenergy.ca>**

**PLEASE HAVE ALL COMMENTS  
SUBMITTED BY APRIL 30th, 2009**





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