

OMUSHKEGO ISHKOTAYO TIPACHIMOWIN

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A publication of Five Nations Energy Inc. Volume 6 Issue No. 1

Five Years of Grid-Based Power

The release of this issue of the Omushkego Ishkotayo Tipachimowin celebrates the fifth anniversary of connecting the communities of Fort Albany and Kashechewan to Ontario's electricity grid through Five Nations Energy Inc.'s transmission line. Fort Albany was energized on November 7, 2001, followed by Kashechewan on December 12, 2001. Attawapiskat was energized two years later, on December 3, 2003.

In the five years that the transmission line has been operating, the three communities have experienced the benefits that a connection to the provincial grid offers. Grid-based power is much more reliable than power from the diesel generators. This increased reliability benefits all community members and businesses, improving our quality of life. The quality of education for our children has improved, with reliable electricity meaning fewer interruptions in the classroom due to power outages.

Not only is the electricity more reliable, but the atmosphere in the community has improved. "The communities are much quieter at night now," said Mike Metatawabin, President of FNEI. "There isn't the constant noise of the diesel generators. The quality of the air has also improved because there is no more need for burning diesel all the time."

Although some diesel fuel is still required in the communities, the amount of fuel needed by the back up generators is greatly reduced. This means along with



The 2006 spring break-up caused significant damage but FNEI was able to repair it faster than expected. Read more on page 14.

lowering the amount of emissions put into the air by burning diesel, there is much less risk to the environment from possible spills.

The three communities had reached the capacity of the existing diesel generators by the time the FNEI transmission line was built and could not have grown without increasing the electrical capacity of the system. The FNEI transmission line allowed further economic development in the communities. This includes new residential sub-divisions, schools and recreational facilities, and several new businesses. The capacity of the local diesel generation plants is no longer a planning consideration for the communities. The extra cost of

upgrading diesel plants every three years or when a major community improvement project occurs is no longer a major impediment to improving life in the communities.

While reflecting on the successes and positive steps forward that Five Nations Energy Inc. has made in the past five years, it is important to consider the challenges that remain and what we must do in the future. Please read further in this newsletter to find more information about what Five Nations Energy Inc. has done this year and what we are working on and planning for the future, and how YOU can help to make sure our communities continue to grow and improve and remain safe.

The Omushkego Ishkotayo Tipachimowin is a free newsletter published by Five Nations Energy Inc.

The purpose of this publication is to keep the Mushkegowuk Communities as well as other members of the public informed about the Five Nations Energy Inc. Transmission Line Project and other issues associated with energy use.

Five Nations Energy Inc. is a federally incorporated non-profit corporation that owns and operates a 138kv electrical transmission line from Moosonee to Attawapiskat, ON. This line connects three remote Cree communities to the main Ontario transmission grid and covers a distance of 270 kms. For more information contact Mr. Cecil MacDonald at (705) 268 0056 or visit http://www.fivenations.ca. Cree translation provided by Greg Spence.

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— Winter 06/07 **Omushkego Ishkotayo Tipachimowin**



President's Message

It's hard to list in detail or in chronological order the events leading up to the successful completion of the grid-based electrification project to our communities. Along the way there were so many obstacles to overcome, not only with Indian and Northern Affairs, but with our local issues as well. Most of our issues had to do with transfer of assets from one party to another and the potential liability issues that came with it. There seemed to be so much abandoned infrastructure in place and the number of interest groups involved was overwhelming. I have to applaud the stick-handling work of the team to see this project through. I can't recall exactly how many legal firms were involved, each looking out for their client's interests. It is amazing the amount of work involved and how much control the department of Indian Affairs has over our communities. There was this lawyer who represented the department and he seemed to be the most problematic of the bunch but in hindsight, understandably so. I cannot explain exactly what I mean by that comment but each legal representative did what they had to for their client.

One particular experience I recall most vividly is our flight from Fort Albany over to Thunder Bay and on to Toronto from there the next day. It is amazing the types of hoops we had to jump through and what we did to get over them as well. Leaving our community very early in the morning in late fall itself was a gamble. As you know, we have inclement weather and most times travel is not possible at

that time. Anyway, we needed to get to Thunder Bay first to sign off on some documents to make a deadline; otherwise we were told that the connection to Fort Albany would be delayed. The situation we were facing had to do with our new houses and school. They had just been completed but could not be connected to the existing diesel generators and it was late October already. Our system was already to its limit and hence the reason why we needed to get connected to a reliable source. The trip and the meeting at Thunder Bay worked out and from there we continued on to Toronto flying on Commercial Airlines. I cannot say if we had anyone who was uncomfortable flying but if we did those flights would have been their last. We were flying through blizzards throughout the trip and they weren't smooth either. Anyway we got to Toronto and we sat down to proceed with our meeting. All the delegates from Indian Affairs and Hydro One were there along with our delegation. We needed to come to an agreement with Hydro One about the accounts that were left owing from individual homes and the First Nation. The Vice President and his Assistant were the last to arrive and we sat down to get underway. It wasn't too long after when the Vice President announced that he would have to leave very shortly to meet another commitment. We hadn't even begun to get anywhere near to an agreement. For anyone who finds themselves in this situation, don't feel any shame when you have to put your foot down and demand that the agenda tabled for discussion be completed. This bureaucrat living comfortably in the big city was just going to leave our new houses and school without power throughout the winter not realizing what the implications were. I have to give credit to the Indian Affairs representatives for backing us up then and there. It is rare moments like these which make partnerships successful. The Vice President relented and stayed to continue finding a solution to our predicament.

There are many other milestones that were achieved and perhaps the other members can recall those moments. I do want to recount the day when the seed was planted to carry out this project. It was a Chiefs meeting in Kasabonika and at the time it was Ignace Gull who was Chief in Attawapiskat. He tabled a resolution seeking support to undertake a project to connect our communities from the south. All I could picture at the time was this small hydro line cutting through the muskeg from Moosonee to our communities. I could not imagine the magnitude and the scale. I don't know how the idea came about but I do want to acknowledge the vision of former Chief Ignace Gull. Our communities would not have been able to have what they have today. We would not have been able to connect our water lines and baseboard heaters to our homes. The diesel units would not have been capable of supporting the demand. Our lifestyle changed for the better and our time with our families became even more comfortable. We now have running water and reliable heating sources. Our children are now able to take showers and be comfortable inside electrically heated homes. The days of being chased out of bed to get water are long gone and you no longer have to go out to the outhouse or throw out the honey bucket. Let us remember though, there are still homes that do not have what we now take for granted. It is now up to you as well to extend the same privilege you have been granted.

Despite the success we have had with connecting our communities we now have to learn from the challenges we continue to meet. We need to understand our past and how the system works and what it takes to control the cost of using these services. We had people who were thinking about our wellbeing when this project was envisioned. It wasn't done to take away anything from you but to bring comfort. It also allowed our

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communities to grow and expand. Other communities are envious and wish to be hooked up like we are to access the same comfort.

Perhaps in the next issue we can begin to elaborate on what this success story means to you and to all other interest groups. At this time I want to express my sincere appreciation to the many people who were involved in making this dream a reality. This is one milestone that deserves to be celebrated and appreciated by the people who own it.

Michael Metatawabin, President

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General Manager's Message

As we begin a new year, there are a lot of exciting things happening at FNEI. I would like to take the opportunity to welcome a new member of the FNEI team. Chris Innes, who has been hired as an Operations Technician. Since our last newsletter, we have also brought Bev Innes on board as our Administrative Assistant. You can find more information about these important new members of the FNEI team further on in this newsletter.

FNEI staff members are working hard to get part of the capital plan underway which will improve the reliability and quality of service that we are able to provide to you, our customers. We are working on, or have completed, the following projects:

The second transformer has

been connected and tested in Fort Albany to connect the second transformer there as well, which will be in service in the summer of 2007.

- De Beers' Canada's Victor Project has been connected to the transmission line and FNEI is now providing the project with the electricity it needs for its construction phase. The Victor Mine Project will need a lot more electricity when it begins mining operations, which is why De Beers Canada Inc. is building a second transmission line between Otter Rapids and Kashechewan to provide more capacity to the system. This new transmission line is scheduled to be completed and operational in late 2007, if construction goes well and Mother Nature cooperates.
- The Kashechewan, Attawapiskat

- Attawapiskat, which means it is now ready for service. Although this transformer was already located in the Attawapiskat substation, it would have taken many days to bring it on-line in case of the primary transformer failure. Now it is capable of being brought online to restore power in a matter of hours. This will provide better reliability and will decrease the amount of time that the power is out, if the primary transformer is not functioning. Similar work is progressing in
- summer. Valard Construction is installing fibre-optic cable from Moosonee to Attawapiskat under contract with FNEI. We anticipate that the fibreoptic project will be completed by fall 2007. Construction of fibre-optic control and connection buildings at each substation in the communities are underway.

and Fort Albany substations are

also undergoing upgrades related

to the construction of the De Beers

Canada second transmission line.

Upgrades to the Attawapiskat

substation were completed this

- Repairs have been made to the berm wall that was damaged during 2006 spring breakup on the Albany River. Two other berms near the same location were also constructed this summer. Project Manager Jacques Camirand ensured that the berms are higher and stronger than they were before they were damaged.
- Switches on the transmission line have been installed in Fort Albany so that any problems on the transmission line north of Fort Albany would be isolated the community of Fort Albany and enable us to power the community from the transmission line. This is especially important since Fort Albany currently doesn't have any back-up generation in place. Attawapiskat would temporarily be powered from their community back-up generators until the problem is repaired.
- FNEI is also having discussions with contractors to repair erosion problems at structure 908 on Albany Island along the north channel of the Albany River. We are looking at possibly installing sheet piling this coming winter of 2007.

Continued on the next page....

Cecil MacDonald, FNEI's General Manager, beside Structure 910 in Spring 2006



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At this time I would like to thank (Getchi Meegwich) the LDCs and their staff, local workers from the communities, outside contractors, the FNEI Board of Directors and the FNEI team for making our system safe and reliable. With a great team effort from you all, it makes my responsibilities that much easier.

FNEI is committed to providing you, our customers, with the highest reliability of power possible, which is why we continue to invest in upgrades to our system. I would like to wish everyone, on behalf of the whole FNEI team, a Safe and Happy New Year! God bless you and your families.

Cecil MacDonald, General Manager

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Powering the Future-Upgrades to the FNEI Transmission Line

By now you have probably heard that a new transmission line is being built between Otter Rapids and Kashechewan. You might have also heard that the electricity to power the new Victor diamond mine near Attawapiskat is being supplied by FNEI's transmission line. And you may have heard something about fibre-optic telecommunications coming into the communities. So you may be wondering, how will these changes affect our power supply and communications in the communities?

First of all, it is important to know that the Victor Project will not take any electricity away from the communities and will not endanger the electricity supply in any way. In fact, the new transmission line and upgrades that are being built will provide more capacity to the system, and also help to make our electricity supply more reliable – two transmission lines are better than one!

The good thing about the fact that the power for the mine will be supplied through the transmission line is that it avoids the need to bring in millions of

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litres of fuel for diesel generation for the mine. This means less fuel needs to be hauled on the Winter Road and on the barge, less pollution, and less risk of environmentally hazardous spills.

Aside from increased capacity and reliability, the construction of the new transmission line is providing an opportunity for FNEI to install fibre-optic telecommunications capability in order to monitor its substations. "The ability to more closely monitor our substations is important to improve the reliability of the transmission line," said Ed Chilton, Project Coordinator for FNEI. "In addition, this could provide fibre-optic capability to the communities in the future," he said.

The ability to monitor the substations over the fibre-optic cable will help FNEI to pinpoint exactly where and when a problem has occurred when the power goes out, as soon as it happens. Right now, the system phones into the substations every 30 minutes, so there can be up to a half hour delay in finding problems on the system. "The ability to monitor the substations on a continuous basis means that we will be aware of problems sooner and will be able to find them more quickly, meaning that the power can be restored much more quickly if there is an outage," explained Cecil MacDonald, FNEI's General Manager.

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The existing transmission line is already supplying a limited amount of power to the Victor site for its construction. Since the existing transmission line system was not designed to handle the extra energy that the Victor Project requires, it is necessary to upgrade both the Hydro One Networks System from Otter Rapids to Moosonee as well as the Five Nations Energy Inc.system from Moosonee to Kashechewan with modifications at the substations. As set out in Ontario's Transmission System Code, De Beers is paying for the cost of these upgrades. Once construction is complete, DBC will turn ownership of the Otter Rapids to Moosonee portion of the new line over to Hydro One Networks and the Moosonee to Kashechewan portion will be turned over to FNEI. DBC has entered into agreements with Hydro One and FNEI regarding the costs of operating and maintaining this new line, as long as the Victor Mine is in operation.

The new transmission lines between Otter Rapids and Kashechewan are still under construction and should be completed by summer 2007. This will provide the extra power that the Victor mine will need when it begins operations, currently scheduled for April 2008.

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FNEI staff repair one of the poles damaged during the spring 2006 break-up

In Memoriam: Ernie T. Sutherland



It is with deep regret that Five Nations Energy Inc. reports the death of Ernie T. Sutherland, who played an instrumental role in the development of the Omushkego Ishkotayo project. Mr. Sutherland passed away on November 27 at Sudbury

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Regional Hospital, surrounded by his family. He was 51.

Mr. Sutherland served as President of FNEI from its inception in September 1997 until December 2003. It was one of many positions Mr. Sutherland held while serving his people. Mr. Sutherland also held the position of Grand Chief of the Mushkegowuk Council and served two terms as Chief of the Moose Cree First Nation. Most recently, he had been the Health Director for Nishnawbe-Aski Nation.

Over many years and through many different roles and appointments, Mr. Sutherland made a difference in the lives of many and worked tirelessly to improve the conditions of the communities on the Western James Bay Coast. He will be dearly missed by everyone who had the opportunity to know him and work with him.

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New Members of the FNEI Team!

FNEI is proud to welcome two new members to our team: Bev Innes was hired in March as an Administrative Assistant, and Chris Innes was hired in November as an Operations Technician.

Bev brings significant experience in administration to the FNEI team. She holds diplomas in Secretarial Science and Office Administration from Northern College of Applied Arts and Technology. She has over 23 years of experience in office administration, secretarial and bookkeeping duties with organizations such as Wawatay Radio, Misiway Milopemahtesewin CHC, Mushkegowuk Student Services and the Timmins Native Friendship Centre.

"Bev has played an important role in keeping the office organized and running smoothly," said Cecil MacDonald, General Manager. "FNEI is fortunate to have someone as capable as Bev as our Administrative Assistant."

Chris Innes joined the FNEI team as an Operations Technician in November. He has recently earned an Electrical Engineering Technology Diploma (Advanced) from Northern College, and brings experience working at Hydro One to his new role at FNEI.

"Chris has been hired to assist with the many projects we are undertaking to implement FNEI's capital plan," said Mr. MacDonald. "He will play a very important role in continuing the many upgrades to the FNEI transmission system to ensure that we are providing our customers with reliable electricity."

FNEI congratulates both Chris and Bev and looks forward to working with them.

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Apprenticeship Update

One of the benefits that we have seen since the beginning of FNEI's operations is more jobs in the communities and more local control over the power supply. Money is remaining in the community to pay local linesmen and apprentices to operate and maintain the transmission line and distribution systems.

Two apprentices work for each of the local distribution companies. One is a full time employee, and the other is part time. They are: David Wesley and Matthew Wynne in Kashechewan, John Chookomolin and Sally Louttit in Attawapiskat, and Douglas Nakogee and George Edwards in Fort Albany.

The apprentices must each get 2,000 hours of working experience every year in order to complete their apprenticeships, as well as travel to Mississauga to train with the Electrical & Utilities Safety Association (EUSA) for two weeks per year.

Although there has been some turnover since the apprenticeship program started in 2002, one apprentice has passed his fourth year, two are at their third year level, and all are continuing to complete their experience hours and will need to write an exam in order to become licensed journeymen-linesmen.

David Wesley is one of the apprentices from Kashechewan. He has been pleased with the experience so far. "As an apprentice, I have had the opportunity to work with licensed linesmen and to

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learn not only in the classroom, but also by doing," he said. "Once I pass my final exam and become licensed, I will be able to take a lead role with minimum supervision. I am glad that I have had this opportunity to begin building a career while also remaining close to home."

To help the apprentices obtain their practical hours and learn what they need to know before they take their final exams, FNEI, with funding from Mushkegowuk Employment Training Services, has employed Northern Ontario Wires, Espanola Hydro and most recently Jim Quinn, a journeymanlinesman, to work with the apprentices for six months.

FNEI would like to congratulate the apprentices on all of the hard work that they have done so far and wishes them luck as they prepare for their final exams!

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Ontario's Electricity Market: How it Works, What it Costs, and Why

With all of the changes in Ontario's electricity industry over the past few years and the switch from diesel generators owned and operated by Hydro One Remote Communities Inc. (formerly Ontario Hydro) to a transmission line owned and operated by FNEI, you might be wondering what these changes really mean. Now that your home is connected to Ontario's electricity grid, it might interest you to know how the provincial energy market works, exactly what you are paying for, and why you pay your Local Distribution Company (LDC) what you do.

Who are the participants in the electricity industry?

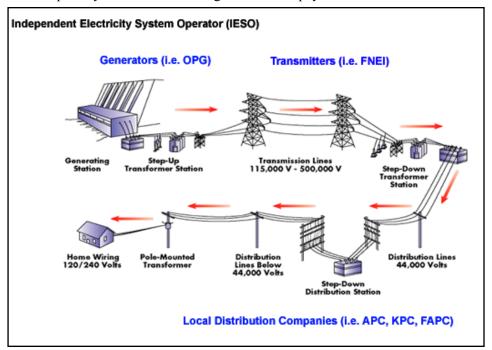
The Independent Electricity System Operator (IESO) works 24 hours a day, 7 days a week and oversees the entire electricity market in Ontario. It forecasts how much power is needed throughout the province every 5 minutes and makes sure that there is enough power to meet the demand. To do this, it buys power from generators and other suppliers in Ontario, and if necessary outside of the Province. It also monitors the transmission of electricity throughout the province. The IESO is also responsible for collecting money from Local Distribution Companies (LDCs) and paying transmission and generation companies.

Generators make the electricity we use. The biggest generation company in Ontario is Ontario Power Generation (OPG) which used to be a part of Ontario Hydro. OPG generates 75% of the electricity used in Ontario. Generators are paid by the IESO.

Transmission Companies move the electricity created by generators around the province using highvoltage transmission lines. FNEI is the transmission company that services the western James Bay coast. Hydro One owns and operates most of the transmission assets (high-voltage lines and towers) in Ontario, although there are other transmission companies in the province. Transmission companies are also paid by the IESO according to

How does the money flow?

Each LDC receives a monthly bill from the IESO, which is based on the total electricity used by the community, measured by a meter in the substation in each community. Some of the monies collected from electricity customers (homes and businesses) by the LDCs are used to pay the IESO and the rest is used



rates that are set by the Ontario Energy Board.

Local Distribution Companies deliver electricity from substations connected to the transmission lines to individual homes and businesses. They maintain their local distribution systems (poles and wires), and conduct the billing and collections from its customers in the community. All LDC's in Ontario collect money on behalf of the IESO which then pays the generators and transmission companies. FNEI's transmission line brings electricity to the substations in the communities of Attawapiskat, Kashechewan and Fort Albany. The local distribution companies then distribute this electricity to homes and businesses in their communities. Local distribution companies set the rates charged to their customers according to the distribution rates that are approved by the Ontario Energy Board.

to cover the LDC's operating costs.

The bill from the IESO is received on or about the 15th of each month and payment is due within 48 hours of receiving a bill – no exceptions. The IESO then pays the generators, transmission companies and itself from these funds. If the IESO is not paid on time, the LDC would be considered to be in default and the Ontario Energy Board (OEB)could appoint another distributor to take over its operations. This would mean that the LDC would no longer be locally owned and operated – which is why it is so important for everyone to pay their electricity bills on time!

How are electricity prices determined?

Rates are determined through a rates application process to the Ontario Energy Board (OEB). The OEB sets the rates based on:

Continued on page 16

-Winter 06/07 **Omushkego Ishkotayo Tipachimowin**

Spring 2006 Break-up: FNEI Team Repaired Damage Faster Than Expected

As many of you will recall, FNEI customers experienced a power blackout this spring due to damage to the transmission line caused by the spring break-up. At about 5:00 pm on Saturday, April 22, 2006, extremely high water and ice conditions on the Albany River caused one transmission line pole to break completely and caused another pole to lose two of its three guy wires, making it lean over. Once the line went out of service, safety protection measures caused the entire Five Nations Energy Inc. system to disconnect at Moosonee.

The damage caused to the transmission line during this time was the most severe that FNEI has had to deal with in its five years of operations. Fortunately, an excellent team, the necessary equipment, and the right plans were in place to get the line repaired quickly and power restored to FNEI customers as soon as possible.

"The damage caused to the transmission line during the 2006 spring break-up was worse than we had expected," said Cecil MacDonald, General Manager. "It was a test of our team and our resources, and fortunately, we had the right ingredients in place to restore the power to our customers even sooner than we thought would be possible," he said.

Soon after the power went out, George Edwards and Douglas Nakogee of Fort Albany Power Corporation inspected the transmission line using a helicopter and determined that pole structures were damaged between Kashechewan and Fort Albany. Due to the switches that FNEI had recently installed in preparation for such a situation, it was possible for the community of Fort Albany to be isolated from the problems on the line to the North. Power was

restored to Fort Albany at 12:45 am on Sunday, April 23, after an outage of approximately eight hours. Electricity in Kashechewan and Attawapiskat was supplied by back-up diesel generation systems during this time.

In order to safely restore power to the FNEI transmission line, there was a planned power outage in the community of Fort Albany during the afternoon of May 2nd for about 1 hour. This allowed crews to reconnect the previously damaged portion of the circuit so that Kashechewan and Attawapiskat could shut down their back-up diesel generators and go back to grid-based electricity. The restoration of grid-based supply of electricity in Attawapiskat and Kashechewan also required short power outages in those communities, when the local distribution companies switched from locally generated electricity to the transmission line.

The Five Nations Energy Inc. transmission line system was restored

to service as of the evening of May 2, 2006. At 6:02 pm the M3K and K5 circuits went back into full service and the communities of Kashechewan and Attawapiskat were transferred back to grid-based power from their standby diesel generation units soon after.

FNEI would like to recognize several key people and organizations that allowed the swift repair of the transmission line and the restoration of power. Special thanks to Wayne Taipale, Hydro One's representative from Moosonee, the utility workers from Fort Albany Power Corporation, (Douglas Nakogee and George P. Edwards), the utility workers from Kashechewan Power Corporation, (David C. Wesley and Mathew Wynne), the Hydro One high tension crew and helicopter team from Sudbury, as well as a crew of Fort Albany labourers that went in to prepare the site. This hard work and dedication allowed restoration of the line a full 11 days sooner than originally estimated.



Ice flows around the transmission line poles

Omushkego Ishkotayo Tipachimowin winter 06/07 —

Continued from page 14

- Expected future demand for electricity;
- Planned future capital expenditures;
- Historical operation and maintenance costs; and,
- An allowable rate of return (profit) and asset base.

The rates application process has very specific rules and guidelines that must be followed. Once the distribution rates are approved, they are in place until the next rates application — which means your LDC can't change the rates without the OEB's approval.

Once the OEB approves the rates application, those rates form the basis of the operating budget for the LDC for several years. Your LDC has no direct control over its income, which is based on electricity consumption by rate class (for example, residential, Standard "A", etc.) So LDC's can't increase their rates whenever they want, they can only do their best to make sure all bills are paid by their customers. Most of the price increases seen recently are a result of an increase in the commodity price of electricity, which your LDC and FNEI

cannot control.

The amount of money that is paid to each transmission company is also determined by the OEB. Each transmission company gets a percentage of the total transmission revenues in the province. Currently FNEI gets 0.423% of the transmission revenues of the province. This money goes to paying back the debt that was incurred to construct the transmission line, paying the salaries of all FNEI staff, operations and maintenance, and new equipment and upgrades to the line to improve reliability, a self-insurance fund, community communications, and providing scholarships and sponsorships for community members and organizations, and all other operating expenses of FNEI.

We hope this has given you a better understanding of how the electricity industry in Ontario works and why it is so important to pay your electricity bill so your community can continue to have electricity for everyone and your LDC's can continue to be locally owned and operated.

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The Crew that repaired the transmission line after the damage caused by the spring 2006 break-up.

