



THUNDER BAY HYDRO

2010 Annual Report



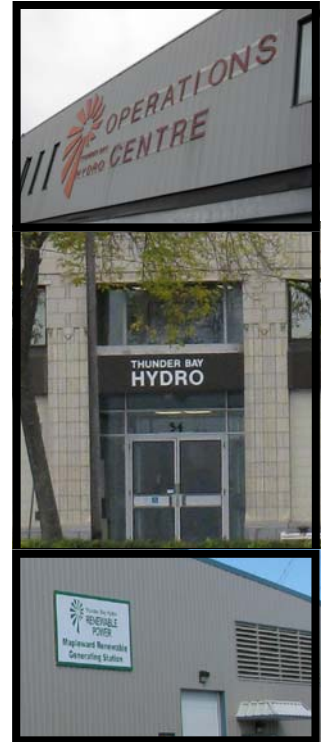
ABOUT THUNDER BAY HYDRO

THUNDER BAY HYDRO CORPORATION is a group of companies serving Thunder Bay and area with electricity.

THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC. is responsible for the power line system and delivering electricity to the homes and businesses within the city limits of Thunder Bay and Fort William First Nation. We answer billing questions, provide for the reading of meters, offer energy conservation advice and programs, build and maintain the local power line system and provide 24-hour emergency response.

THUNDER BAY HYDRO RENEWABLE POWER INCORPORATED is a subsidiary whose strategy is to develop renewable energy generation projects in the Thunder Bay area.

THUNDER BAY HYDRO UTILITY SERVICES INC. provides back office systems and support, IT hosted applications and program management that includes conservation programs to other electric utility companies in the district .



OUR CORPORATE STRATEGY

Ensure that the health and safety of our employees and public is the utility's first priority.

The potential danger associated with the product we work with everyday cannot be overstated. It is critical that the utility's primary focus remain on the safety of our operations.

Provide a reliable supply of electricity to the residents and businesses of Thunder Bay.

The provision of electricity to the residents and businesses of Thunder Bay is our reason for existence and is critical to the economy of the City and the quality of life of its citizens.

Protect and grow the value of the utility to our shareholder.

Thunder Bay Hydro is a valuable asset, owned by the City of Thunder Bay. The owner has the right to expect that the value of this asset will increase. The Board and Management of the utility must make this growth a priority.



A MESSAGE FROM THE PRESIDENT AND THE CHAIR OF THE BOARD OF DIRECTORS

The Directors have continued to improve adherence to the principles of good corporate governance in the past year.

The Audit Committee has expanded the scope of its activities to ensure that, as a Board of Directors, we are providing more direct engagement in the process to fulfill our fiduciary duties. To that end, the Board made recommendations to City Council regarding changes to the size of our Board and the compensation received by Board members. These were approved by the Shareholder. We then worked with the City Recruitment Committee to help select the best candidates for upcoming vacancies. The Chair of the Board of Directors for Thunder Bay Hydro Corporation sat on this committee and is pleased to see the results of our efforts come to fruition for the current year.

The political environment continues to be favourable to develop renewable generation business opportunities. With this in mind, the Board continued to spend time on issues that were outside of the focus of the distribution company.

The Province's Green Energy Act is an example of how the electricity industry continues to be a primary focus of the provincial government. The Act opened several avenues to engage the Shareholder with projects of mutual benefit. Thunder Bay Hydro's SEED Initiative (Sustainable Electric Energy Development) outlined plans to expand the development of renewable energy sources within the city.

Our commitment to these plans in the past year included providing both time and resources to ef-

fectively take advantage of these opportunities by focusing on business plans to develop, own and operate new local renewable generation installations. Shareholder approval of our business plans was granted during the second quarter of 2010.

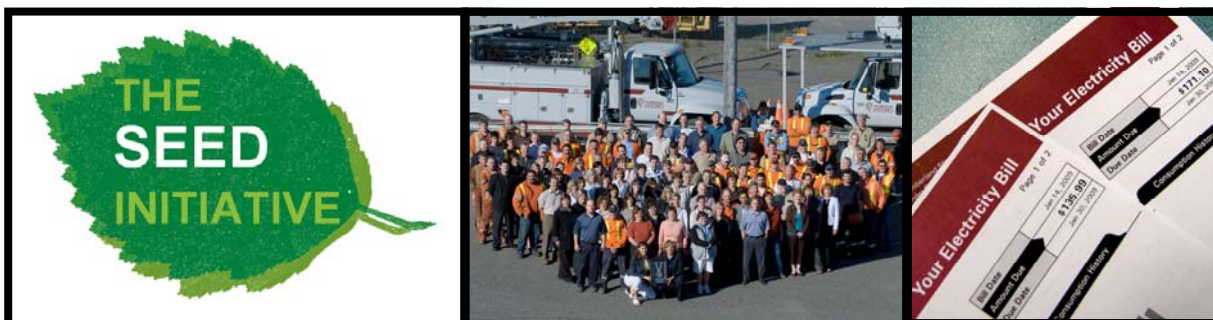
With the City of Thunder Bay, we jointly announced an agreement that allowed Thunder Bay Hydro Corporation to be the exclusive solar photovoltaic developer to the City. The agreement means that we are given preferred access to City-owned buildings, particularly rooftops, and property for the installation of solar photovoltaic panels.

This plan is consistent with both the City's Official Plan, the 'Clean, Green and Beautiful' policy and supported by the results of three successive Citizen Satisfaction Surveys regarding citizen support for sustainable or green energy projects.

Our company has since applied for contracts with the Ontario Power Authority under the Province's Feed-In Tariff program to sell the generated electricity back to the provincial grid.

In August, we completed our work on the Mapleward Renewable Generating Station. This 3.2-megawatt electricity generating station is the first of its kind in Northwestern Ontario. The generating station harnesses the power of 263 million cubic feet of methane gas which would otherwise be released into the environment to, instead, power approximately 3,000 homes annually.

Whether it is our community or our employees and contractors, Health and Safety continues to be a top priority for our company. To that end, the Tar-





get Zero program tracks the practices and processes needed to achieve zero lost time off due to injuries. After experiencing one non-critical lost time injury early in the spring, we proceeded through the rest of 2010 without any further lost time injuries. This takes commitment from all staff and management.

For the past few years, we have also had a priority to increase the rate of replacement for our infrastructure. We have more than doubled our annual investment in replacement infrastructure compared to 2007. This makes up for a trend of slipping investment since the mid 1990's.

Overall, we replaced more of our electrical system in 2010 than ever before. As we rebuild, our infrastructure will operate at a higher voltage, reducing the need for sub-stations that step the power down for distribution within the city. Our extensive work in the north of the city allowed us to remove the John Street substation from our system and completely dismantle it last year. Our plans are to continue to remove fifteen of our eighteen substations in coming years.

In other capital work, the Smart Meter installation project was completed in 2010. Our staff then moved their focus to configuring and testing the computer systems that are needed to bring about the implementation of Time of Use pricing. This is a considerable change for our customers and we put great effort into educating the public to prepare them for the new Time of Use rates that will be introduced in the summer of 2011.

Last year, the province announced that, as of 2011, meeting conservation targets would be a new requirement of our license to operate. In preparation, we added resources to organize ourselves for the increased role of Conservation and Energy Services for delivery of programs to our customers.

Subsidiary companies are doing their role to help us achieve success. Thunder Bay Hydro Utility Services Inc. continued to provide back office and re-

lated services to other LDC's in the region. The implementation of work to move the industry to Time of Use pricing has created revenue growth in this company and contributed to corporate net income.

The formal wind up of Thunder Bay Hydro Energy Services Inc., the company that previously managed our rental water heater business, has been completed. Revenues from that sale have been funneled into Thunder Bay Hydro Corporation to be used for the initial funding needed to realize our solar photovoltaic projects.

A warm winter and early spring had a strong impact on our distribution earnings. In the first quarter, we anticipated the impact of the weather on our budgeted revenue and quickly made adjustments to our operating spending and deferred any capital expenditures that were considered non-critical. As a result, Thunder Bay Hydro Corporation has produced good financial results for 2010.

Our 2010 performance illustrates our continued corporate commitment to "Safety, Reliability, and Shareholder Value". The results could not have been achieved without the diligent work of our all Board members for the various companies including Councillor Mark Bentz, Councillor Trevor Gier-tuga, David O'Brien, Lawrence Timko and, later in the year, Hartley Multamaki. The efforts of our management team and individual staff members were also crucial to our success.

We are extremely proud of the company's legacy of accomplishments in a constantly changing economic and regulatory environment and will continue our efforts towards success in 2011.

Respectfully submitted,

Robert Mace,
President & CEO

Ralph Falcioni,
Chair

SUPPORTING OUR CORPORATE GOALS

In order to support our corporate goals, we have developed and implemented multi-year plans to address the following areas

Efficiency
Health and Safety
Asset Management
Succession Planning
Conservation Strategy
Information Systems Strategy
Non-Distribution Revenue Growth

CURRENT CHALLENGES AND OPPORTUNITIES

Implementing New Pricing Structures

Time of Use pricing depends on the careful integration of many different pieces of software and providers. With the installation of Smart Meters complete, the calibration of the system and fine tuning of data flow has been our focus. The need to educate customers about the new pricing system is also an important challenge to meet.

A successful implementation will result in a more stable power supply across the province as well as ease the ability for us to meet our regulatory obligations with the province.

Regulatory Demands

The Ministry of Energy and related governing bodies such as the Ontario Energy Board and the Ontario Power Authority have been ex-

tremely active in changing electricity policy and regulation. This has increased the burden for gathering data, reporting and responding to changing requirements in our policies and processes.

Customer Base

Much of the transportation, natural resource and manufacturing industry that formed the basis of the local economy has slowly disappeared over time. Over the past 10 years Thunder Bay Hydro customer growth has been very slight, averaging a .5% annual increase in the number of customers.

Conservation Culture

Energy savings targets and delivery of conservation programs have become a requirement of our license to operate. This is both a challenge and an opportunity.

Customers are being asked to think differently about their electricity use. But our education efforts increase our reputation as an organization dedicated to customer care in the community.

Green Energy Act

The Green Energy Act offers increased opportunities for the utility to actively invest in local renewable generation projects and expand its role in conservation program delivery.

Electricity Generation

Implementation of the provinces Feed-In-Tariff programs allows both small and large projects to connect to our distribution system. This provides challenges as we adapt to meet connection obligations. It also provides opportunities to develop our own projects that promise to provide a source of income.

MAJOR PROJECTS

Infrastructure

Major rebuilds of County Park, Westfort and the High Street area have been undertaken. In the past year, we installed 450 poles and 1.4 km of underground cable, as well as 1400 Smart Meters as part of our planned capital program. This reflects an ongoing increased investment in our capital program. The work brings the benefit of increased reliability for our customers.

Additionally, we connected one large and forty smaller micro FIT generators to the distribution system.

Within our maintenance program we cleared 85km of line, removed twenty-three PCB transformers, maintained forty switches and eighteen substations. We were able to assess 1/3 of our system condition as well.

Electronic Statement Service

More and more companies are offering online billing services to their customers. As the expectation for this service grew, we were under increased pressure to offer some form of digital statement service to our customers.

In the fall, a service that sent an electronic copy of the bill to our customers email address was introduced. By the end of the year, we were confident that the new service met our customer needs and

we made plans to extensively promote it in the following year.

Moving Toward Implementing Time of Use

Last year, we completed the installation of almost 48,000 Smart Meters at residential and small business customer locations.

The next step involved installing, configuring and testing the computer systems that would enable the data to flow from the meters to our back office systems, and into the provincial central repository (MDM/R). Integration testing with the MDM/R began late in the year and will be completed in time to begin Time of Use pricing by the end of summer 2011.

During the year, planning needed to take place regarding the interpretation of data into customer bills, education of customers on how to manage their electricity consumption and preparation to be the front line face of the many changes taking place in the province's electricity system.

Conservation Focus Shift

The continuation of our popular Phantom Load seminar series had our customers filling the available seats and providing positive feedback saying they had a clearer understanding of the changing electricity system and how



they could manage their electricity consumption.

An overhaul of the core Conservation and Demand Management programs being offered by the Province created a focus on planning for our Conservation and Energy Services staff.

Planning for programs that would be successful in our northern climate was particularly crucial for the future need to meet conservation targets as a requirement for our license to operate. A decision to expand staff was necessary to accommodate the expectations of successfully reducing our customers' electricity consumption.

RENEWABLE GENERATION

The Mapleward Renewable Generating Station went into commercial operation on August 5, 2010. It is designed to generate 3.2 MW of electricity by annually harnessing the power of 263 million cubic feet of methane gas from the landfill to produce enough electricity to power approximately 3,000 homes in the City of Thunder Bay.

A ribbon cutting and grand opening ceremony was held on September 7, 2010. It began with a ceremony for invited guests and continued into the afternoon with well attended tours for the general public.

The plant has operated at its designed rate with no significant issues encountered as a result of engineering, equipment or construction. We have contracted Toromont Energy for 24/7 plant operations and maintenance.

The plant is designed to expand generation capacity as the supply of gas increases.

This first project proved that we could successfully construct a modern state-of-the-art facility on-time and under budget.

Thunder Bay is well situated for successful solar PV installations. Our city weather records indicate that we are the sunniest location in eastern Canada with over 2,200 hours of bright sunshine annually.

As a result, Thunder Bay Hydro determined that solar PV generation provides the most beneficial opportunities for investment under the Green Energy Act to deliver renewable generation initiatives in a timely matter.

In March 2010, the Thunder Bay Hydro Board of Directors approved a business plan for investment of \$14 million in developing mid-sized commercial Solar PV rooftop and ground-mount installations.

By May, the shareholder approved the business plan and request of Thunder Bay Hydro to enter into the new line of business with investment in solar PV projects.

A strategic alliance with the City of Thunder Bay was approved by City Council which establishes Thunder Bay Hydro as exclusive Solar PV developer with preferred access to City owned buildings and land.

Last year, pre-feasibility studies were conducted to evaluate and prioritize twenty-one potential City rooftop and ground-mount sites during the summer of 2010. More detailed feasibility studies were initiated on nine of the approved priority sites.

As a result, we submitted six Feed-In Tariff (FIT) Program applications to the Ontario Power Authority in November 2010 for a total of 1.2 MW in selected rooftop solar PV installations.



HEALTH AND SAFETY

A primary focus of our company is to ensure that both our staff and the public remain safe when working with our product.

Safety Performance

On February 18, 2010 we held a company-wide celebration to note that we had gone an entire year without a lost time injury. However, a lost time injury then occurred on April 21. Fortunately, it was not a critical injury.

As of December 31, 2010, we had achieved 254 days without a lost time incident.

Training

Once again, our annual training program was significant and delivered on time and on budget.

We invested in excess of 3,500 hours in training and over \$170,000 to our programs. Although the majority of our training focuses on safe work practices and mandatory trades training, the utility also invested in staff in areas including, but not limited to, coaching and mentoring, leadership development, succession planning and customer service excellence.

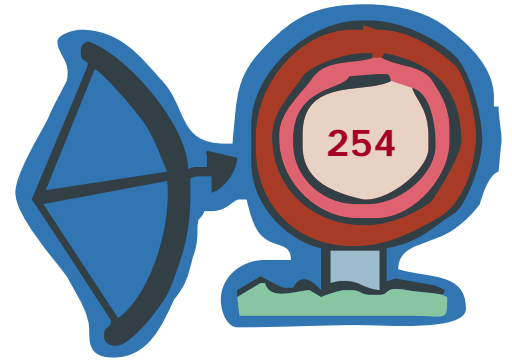
Public Safety

One of our public safety initiatives is the delivery of the Hi-Line Hazard & Energy Conservation Program. Last year, we reached almost 500 elementary students from Grades three to six in our local elementary schools.

In response to an increase in copper theft, the Joint Health and Safety Committee worked with Crimestoppers to educate the public on the hazards of copper theft as well as steps for identifying hydro workers and what to do if they witness individuals other than hydro staff in and around our plant.

We participated as a sponsor and presenter in the Forum North Health & Safety Conference held in Thunder Bay.

Thunder Bay Hydro was a silver sponsor for St. John Ambulance's educational programs for Grades 3 and 6 students. As part of their "We Can Help" and "Lifesaver" Programs, we provided take home materials for 2,500 students and provided Electrical Safety bags which will be used to provide the students with handout materials.



Number of days without a lost time incident as of December 31, 2010

We have a two year partnership with the Red Cross to promote proactive preparation for emergencies. Our message is to prepare for a power outage before it happens by stocking basic supplies and being informed. This included a well attended day of displays at Intercity Shopping Centre.

Industry Presentations

Representatives from Thunder Bay Hydro (from Power Line and HR & Safety) delivered a presentation to Thunder Bay Fire & Rescue on Electrical Safety for First Responders. A similar presentation was also delivered to all of the Superintendents from Superior North EMS. The information was for training their employees on electrical safety when responding to calls involving downed power lines.



CONSERVATION

Hi Line Hazard

During the month of May each year, Thunder Bay Hydro provides a school presentation which includes both safety and conservation messaging directed to grade three through grade six students. In 2010, we presented to students in sixteen presentations held at nine different schools.

Phantom Load Seminars

Building on a successful launch in the previous year, we continued our work educating customers about the concept of Phantom Load in their homes. We held a total of ten seminars with four taking place at the local Home and Garden Show. It is estimated that 1500 customers in total attended the series.

OPA Appliance Retirement (Great Refrigerator Roundup)

The Great Refrigerator Roundup promotion used bill stuffers, bill messages, posters, our website, newspaper ads, radio ads and trade show displays to get the word

out. We managed to exceed our goal of 710 participants when we added up our tally. By the end of the December, 844 fridges and freezers had been picked up throughout the year.

OPA ERIP (Electricity Retrofit Incentive Program)

This program targets larger commercial establishments. It was our goal to work with our general service customers to complete five prescriptive and two custom retrofits.

Our marketing included direct mail, posters, and our website. We attended a Chamber of Commerce After Hours event, and held an information session with local electric equipment & supplies wholesalers.

Twenty-three commercial conservation installations were completed by the end of the year. An additional fifteen applications are pending to be completed by Dec 31, 2011.

OPA Power Savings Blitz Program

The Power Savings Blitz program provides up to \$1000 in lighting retrofit rebates to small business customers.

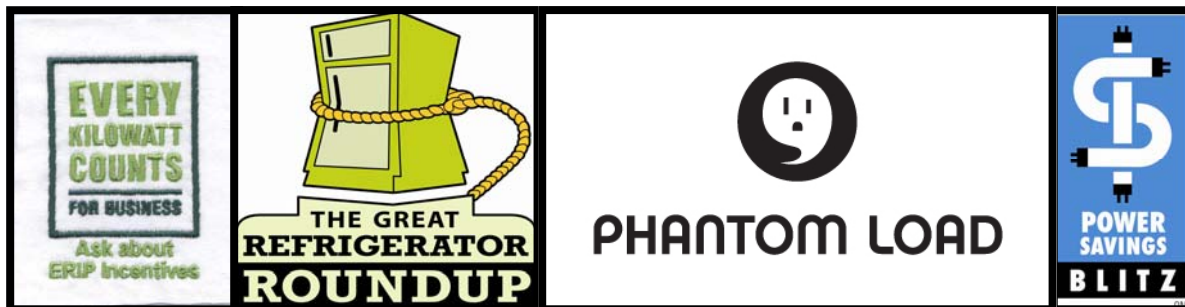
During 2010, we completed assessments and retrofits for 359 customers.

Other 2010 highlights

We partnered with Earthwise to advance the energy plan for City of Thunder Bay.

We received a Corporate Commitment award from Philips because of our use of energy efficient products with ALTO® low mercury technology for our Power Savings Blitz program.

We continued our work with Atikokan Hydro, Fort Frances Power Corporation, Kenora Hydro and Sioux Lookout Hydro to administer and market their OPA programs.



LOOKING TO THE FUTURE

Infrastructure Investment

In the coming year, as part of the continued need to increase our investment in infrastructure, a budget of \$10.2M will see us replace 500 poles. This is the sustainment level for our overhead plant. We also expect to replace 1.4 km of underground equipment which is about 24% of the level needed for sustainment of our underground plant .

Our approach to our underground cable replacement program will now change. To date our efforts have been focused on addressing the large line networks where failure of one component would impact many customers. Moving to a new “test and replace” approach is expected to make our underground replacement program not only more efficient by only replacing the required cables, but also more effective by addressing a larger portion of the system sooner.

Our 1930's era Fleet Services Garage has numerous structural issues including a sinking floor, leaking roof and deteriorating walls. In an evaluation of the cost of repairs, it became apparent that replacement was the most cost effective option. Our plan is to build a new garage on the property that houses the annex and then demolish the old garage. Construction is scheduled to begin in 2011.

Accommodating Renewable Generation Connections

As a condition of our distribution license, we have the obligation to connect generators to our system in accordance with recent Ontario Energy Board directives. As projects are approved, we will need to dedicate both time and resources to bring them online.

International Financial Reporting Standards

For our 2012 year end, Thunder Bay Hydro Electricity Distribution Inc. will be required to transition to International Financial Reporting Standards (IFRS). These accounting standards differ from Canadian Generally Accepted Accounting Principles (GAAP) which are currently followed.

The Finance Department has been reviewing the IFRS standards and comparing them with the current GAAP standards. As well, we have been monitoring the Ontario Energy Board (OEB) guidance and anticipated changes to IFRS upon our required adoption in 2012.

Conservation

An expanded conservation staff will be implementing twenty-two new conservation programs and adapting to a rebranding of previous programs. We will be spending upwards of \$2 million in the next four years and expect to distribute over \$4 million in incentives to our customers.

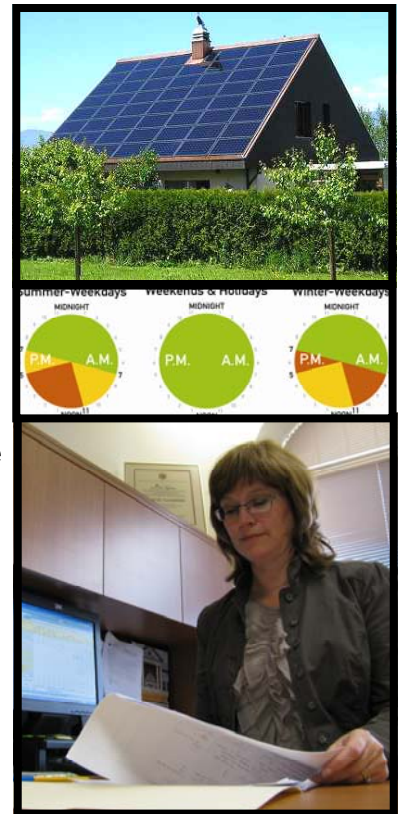
The success of our efforts will be vital to meeting targets set at the provincial level which reflect on our distribution license.

Implementing Time of Use Rates

The pricing structure for electricity is due to change during the summer of 2011. Final implementation will take concerted effort from almost every department in the organization.

Internal working groups are meeting regularly, testing and calibration is taking place, publications have been ordered, information sessions have been planned and staff have been gearing up for the onslaught of questions and concerns coming from our local customer base.

The new Time of Use pricing will represent the biggest change that any of our customers have ever seen in the province's electricity industry. We are working hard to educate them about the issues within the industry that affect them and how they can manage their electricity bills most effectively for their own lifestyles.

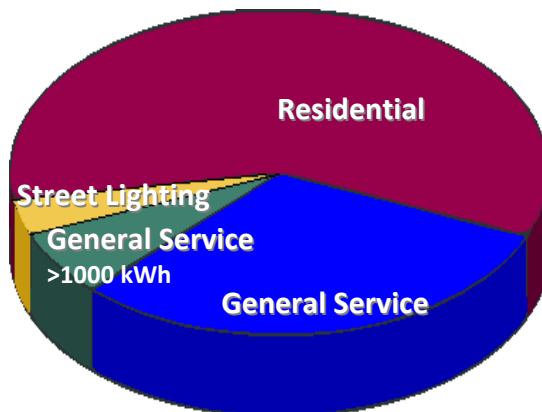


FINANCIAL PICTURE

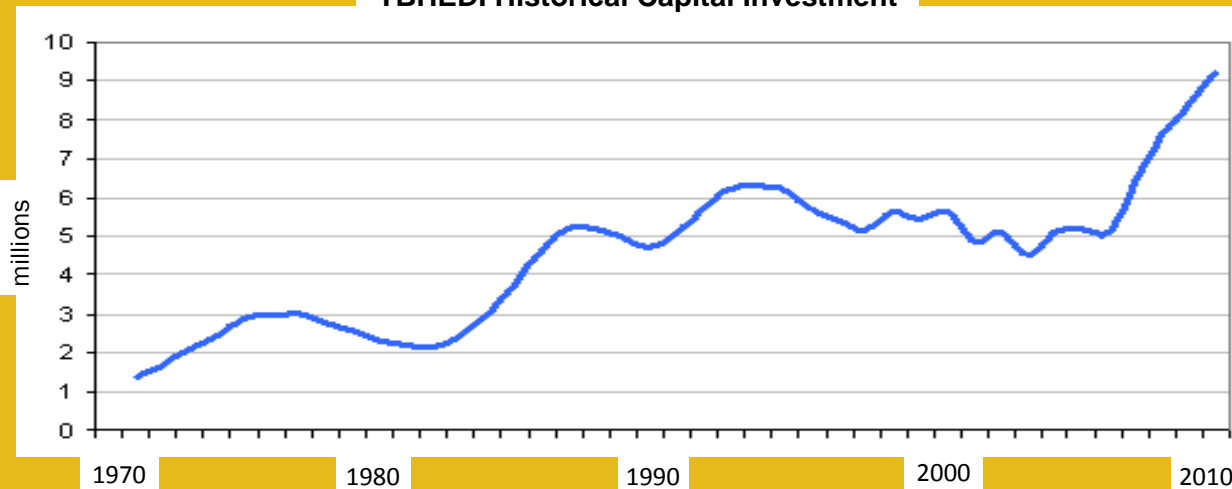
Consolidated Financial Highlights for 2010

Total Revenue	\$ 19,897,439
Total Expenses	18,419,983
Earnings before Taxes	1,477,456
Current Payment in Lieu of Taxes	477,500
Total Earnings for the Year	1,029,956

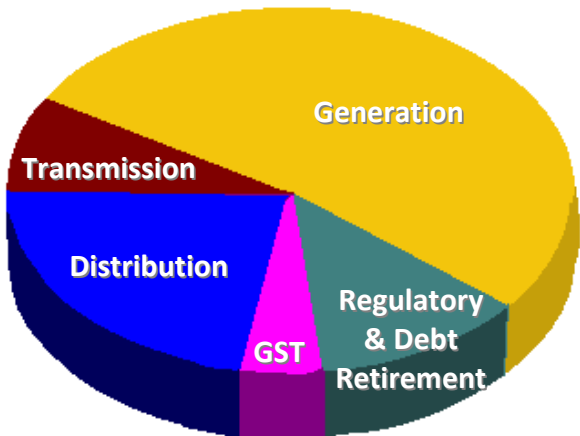
Sources of Distribution Revenue



TBHEDI Historical Capital Investment



Where Each Dollar on Your Electricity Bill Goes



Who Are Our Customers

Residential	44,559
General <1000 kW	4,990
General >1000 kW	19
Total	49,568

2010 BOARD OF DIRECTORS

CHAIR

Ralph Falcioni ^{1, 2, 3, 4, 5}

DIRECTORS

Hartley Multamaki, ²

David O'Brien, FCA, ²

Councillor Trevor Giertuga ^{1, 2, 3, 4, 5}

Councillor Mark Bentz ^{1, 2, 3, 4, 5}

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Legend:

1. Thunder Bay Hydro Corporation

2. Thunder Bay Hydro Electricity Distribution Inc. 3. Thunder Bay Hydro Renewable Power Incorporated

4. Thunder Bay Hydro Utility Services Inc. 5. Thunder Bay Hydro Energy Services Inc.

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Committed to Customer Satisfaction