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# Message from the President

Yukon Energy's 2012 annual report was prepared under our Board's direction and represents a balanced and accurate summary of the Corporation's economic, environmental and social performance for the calendar year ending December 31, 2012.

Yukon Energy's primary focus in 2012 was three-fold:

- 1) continue working to improve system reliability;
- with input from Yukoners, move ahead with resource planning to ensure there is enough sustainable electricity to meet the growing demand; and
- secure sufficient funding so that we can continue to provide ratepayers with an adequate supply of energy now and into the future.

All our major projects and initiatives are outlined in detail in this report. Briefly, key projects include:

- » Completing the last few details of the Mayo B project, which involved building a 3.7-kilometre penstock and new powerhouse downstream from the existing plant. It more than doubled the amount of hydro power that could be generated at our Mayo facilities.
- » Upgrading the Mayo substation, including updating our transformers and protection system. The work will result in improved reliability.
- » Finishing the final details of the Aishihik 3 project, which saw the installation of a seven megawatt hydro generator in our existing Aishihik hydro plant.
- » Filing a rate application with our regulator, the Yukon Utilities Board.
- » With input from a wide variety of Yukoners, updating our 20-year resource plan and providing it to the Yukon Utilities Board.
- » Starting work on the Takhini/Whistle Bend project, which will allow us to service the new Whistle Bend subdivision in Whitehorse.
- » Completing Phase 1 of the work necessary to refurbish the spillway gates and structures at our Whitehorse dam.
- » Conducting overhauls on one of our older Aishihik hydro units and one of our Dawson diesels.
- » Continuing research into other potential energy options, including biomass, district heat, wind, solar, LNG, hydro enhancements and new hydro.
- » Developing a suite of programs to help residential and commercial customers save energy in collaboration with the Yukon government and Yukon Electrical Company Limited, and carrying out several energy-related pilot projects and initiatives.
- » Holding a series of workshops as a follow-up to our 2011 energy-planning charrette. Like the charrette, these workshops brought together a variety of Yukoners to help plan for a sustainable energy future for the territory.



Of special note as well is Yukon Energy's continued excellent safety record. Our employees have now worked more than five years without a lost time incident. Our safety record was recognized this year by the Canadian Electricity Association (CEA) by way of a Vice President's Bronze Award for top safety performance among utilities with fewer than 500 employees. This recognition of our employees' high standards of safe work practices is one we are very proud of. As always, our ultimate goal is to achieve operational excellence. We measure our success by our ability to deliver safe, reliable and sustainable power to our customers, our ability to attract and retain a skilled and engaged workforce, our respect for the environment and for the communities and people we serve, and our recognition that Yukoners' needs power what we do.

David Morrison President and CEO

# **Corporate Profile**

Established in 1987, Yukon Energy is a publicly owned electrical utility that operates as a business, at arms length from the Yukon government.

We are the main generator and transmitter of electrical energy in Yukon. We work with our parent company Yukon Development Corporation to provide Yukoners with a secure supply of clean electrical energy by focusing on renewable sources of power and energy solutions that complement our legacy hydro assets.

There are almost 15,000 electricity consumers in the territory. Yukon Energy directly serves about 1,800 of these customers, most of whom live in and around Dawson City, Mayo and Faro. Indirectly, we provide power to many other Yukon communities (including Whitehorse, Carcross, Carmacks, Haines Junction, Ross River and Teslin) through distribution to the Yukon Electrical Company Limited. Yukon Electric buys wholesale power from Yukon Energy and sells it to retail customers in the territory.

Yukon Energy has the capacity to generate 129 megawatts of power. Ninety-two megawatts of that are provided by our hydro facilities in Whitehorse, Mayo and Aishihik Lake (40 megawatts at Whitehorse, 37 megawatts at Aishihik and 15 megawatts at Mayo), 36 megawatts by diesel generators (which we currently only use as back-up) and 0.8 megawatts by two wind turbines located on Haeckel Hill near Whitehorse.

Yukon Energy is incorporated under and regulated by the *Business Corporations Act*, the *Public Utilities Act* and the *Yukon Waters Act*.

Our headquarters are located near the Whitehorse Rapids hydro plant in Whitehorse, with community offices in Mayo, Faro and Dawson City.

# **Guiding Principles and Values**

# »Safety

- »Respect
- »Efficiency/Effectiveness
- »Transparency/Accountability
- »Integrity

- »Teamwork
- »Professionalism
- »Sustainability
- »Partnerships
- »Innovation

We have a vision for Mukon's energy future that embraces the social, economic and environmental needs of all Mukoners.

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Every decision we make is driven by that vision.



# **Strategic Priorities**

# Optimize System Reliability and Efficiency

Priorities include:

- » Continue to implement operational training and staff development plans to enhance the integration of the Mayo–Dawson and Whitehorse–Aishihik–Faro grids.
- » Continue to implement operational plans for the Aishihik plant that incorporate the addition of the Aishihik third turbine into the system.

- » Continue to implement new operational protocols for the operation and integration of the Mayo B hydro project into the generation system.
- » Continue the operational review of system efficiencies and implement capital upgrades that support system reliability.
- » Improve system reliability to meet or exceed national standards and continue to decrease controllable outages on the new integrated grid in 2013.
- » Continue system impact reviews to ensure new customer loads and/or generation do not adversely affect system reliability.

# Secure Project Capital Financing

Priorities include:

- » Achieve Yukon Energy's applied-for Return on Equity
- » Identify sources of existing funding for both project planning and project construction.
- » Establish a framework for financing new generation projects to mitigate risk that includes long-term capital contributions and financial support.

# Develop Sustainable Energy Solutions to Meet Forecast Demand

Priorities include:

- » Work to bring into service new supply projects that will provide at least 100 GWh/yr. of sustainable energy by the end of 2014.
- » Acquire funding or new methods of risk financing to enable Yukon Energy to plan for new projects without a requirement for equity returns or ratepayer risk.
- » Procure financing that will enable Yukon Energy to build the projects and mitigate ratepayer risk over the long-term.
- » Complete the development of a Yukon First Nation partnership and investment plan to assist in building new energy projects.
- » Continue with our ongoing series of public discussions on energy challenges and technology opportunities that will support Yukon Energy's commitment to meaningful public engagement on energy planning.
- » Work with the Yukon government regarding policy initiatives; specifically the independent power producers (IPPs) and net metering policies currently being developed.

# Implement an Energy Conservation/ Efficiency (Demand Side Management) Program

Priorities include:

- » Submit a completed electricity conservation/efficiency plan to the Yukon Utilities Board for approval.
- » Establish evaluation criteria and verification tools for utility-led electricity conservation programs.
- » Upon approval, implement Year 1 of a five-year electricity conservation plan in partnership with Yukon Electrical Company Limited.
- » Build on industrial energy conservation measures implemented in 2012; extend industrial energy conservation measures to include a second mine in 2013.
- » Deliver public education through advertising, web tools, training and adult education, public outreach and engagement, youth and school initiatives.
- » Assist communities, organizations, partners and government agencies in the development of programs, projects and policies which are complementary to energy conservation.
- » Lead by example through internal energy conservation/ efficiencies at Yukon Energy.



# Alignment with Shareholder's Letter of Expectation

Under both the Yukon Development Corporation Act and the Corporate Governance Act, the Minister Responsible for Yukon Energy is to work with our parent, Yukon Development Corporation (YDC), to negotiate a protocol on an annual or bi-annual basis.

That protocol outlines what is expected each year of both Yukon Energy and the Yukon Development Corporation. In addition, it has been the practice of the Yukon government to provide the Corporations with additional guidance in the form of a Shareholder's Letter of Expectation.

The most recent letter states that the Corporations will:

» Work with the Yukon government and other stakeholders on the implementation of the *Energy Strategy for Yukon* and the *Yukon Government Climate Change Action Plan,*  and in particular by participating in the development of an independent power producer policy, a net metering policy and a demand side management program;

- » Complete the financial arrangement transfer payment agreement with the Yukon government regarding Yukon Development Corporation's financial assistance.
- » Work with Yukon Energy to ensure both Corporations carry out their obligations under the Yukon Energy/First Nation of Na-Cho Nyak Dun Project agreement.
- » Work with the Yukon government and Yukon Energy in preparing and implementing a workplan for demand side management initiatives.
- » Work with First Nation Development Corporations on economic development opportunities.
- » Ensure that Yukon Energy completes construction of the Carmacks–Stewart Transmission Line Phase 2, thereby connecting the territory's two existing grids.
- » Ensure that Yukon Energy completes the Mayo B project prior to March 31, 2012.
- » Ensure that Yukon Energy continues work in preparation for the installation of the third turbine at the Aishihik hydro facility in anticipation of a winter 2011–12 in-service date.
- » Work with Yukon Energy to increase energy capacity by enhancing existing infrastructure including improved efficiencies at the Whitehorse hydro plant, assessing ways to reduce line losses and the continued evaluation of the Atlin River, Marsh Lake and Gladstone Lake storage concepts.



Alignment with Shareholder's Letter of Expectation

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Succession planning strengthens our team while making our intellectual grid more reliable for the future.

# **Our Employees**

### **Human Resources**

Yukon Energy employs approximately 95 employees. We recognize our corporate vision can only be achieved with a strong, competent and professional workforce. To maintain and enhance the skills needed to achieve our business objectives, we continually strive to:

- » attract, recruit and retain a competent work force that shares our values and is motivated to help sustain and improve the company's assets;
- » offer our employees opportunities for professional development to ensure a high level of skills, expertise and leadership; and
- » ensure succession planning and the transfer of critical knowledge.

# **Recognition and Congratulations**

We would like to recognize and congratulate our 2012 Long Service Award recipients:

25 Years

Steve Blysak Hector Campbell Guy Morgan Les Rowland

**15 Years** Bill Haydock

**10 Years** Barbara Bowen

Darryel Collins Darcie Schroeder

5 years

Jeremy Germaine Lawrence Joudry Wes Marsh Melanie Pettefer Travis Ritchie Ramona Toth

# **Apprenticeship Program**

Yukon Energy's apprenticeship program is an important part of our human resource strategy in meeting some of our labour needs for both the present and future. It is rewarding to see how far the program has progressed since it was implemented in 2006. Since that time, about 17 Yukoners have gone through our apprenticeship program in the areas of power systems electrician, powerline technician, systems control centre operator and heavy duty equipment technician. Upon completing their apprenticeships, many of these individuals have remained valued Yukon Energy employees.

# **Summary of Utility Operations**

	2012	2011	2010	2009	2008	2007
Generating Capacity (in MW)						
Hydro	92	92	75	75	75	75
Diesel	36	36	36	36	36	36
Wind	1	1	1	1	1	1
Total	129	129	112	112	112	112
Peak Demand (in MW)						
WAF System	Connected	Connected	67	65	64	59
Мауо	Grid	Grid	7	5	5	5
Total	83	77	74	70	69	64
Generation (in GWh)						
Whitehorse Rapids	230	195	234	224	206	206
Aishihik	143	38	112	119	107	98
Мауо	50	11	32	29	28	27
Wind	0	0	0	0	0	0
WAF Diesel	3	12	3	2	1	0
Other Diesel	0	15	2	1	0	1
Total	427	401	383	375	342	332
Electric Sales (in \$000)						
Residential	1,930	1,800	1,524	1,535	1,523	1,509
General Service	3,627	3,342	3,315	3,007	2,804	2,731
Industrial	5,086	4,599	3,311	3,191	329	-
Wholesale	25,875	24,170	23,301	22,291	22,999	22,459
Secondary Sales	165	46	644	1,442	777	1,000
Other	94	90	83	81	86	377
Total	36,777	34,047	32,178	31,547	28,518	28,077
Electric Sales (MWh)						
Residential	13,289	12,834	11,398	11,596	11,359	10,908
General Service	22,446	21,538	22,570	20,042	18,523	17,507
Industrial	44,030	43,259	30,255	29,355	3,200	-
Wholesale	310,264	290,541	276,345	267,229	263,820	254,914
Secondary Sales	1,993	552	10,489	17,384	18,753	24,225
Total	392,021	368,724	351,056	345,607	315,655	307,554
Cents Per kWh						
Residential	14.52	14.03	13.37	13.24	13.41	13.84
General Service	16.16	15.52	14.69	15.00	15.14	15.60
Industrial	11.55	10.63	10.94	10.87	10.27	-
Wholesale	8.34	8.32	8.43	8.34	8.72	8.81
Secondary Sales	8.30	8.30	6.14	8.30	4.14	4.13

Hydro enbancements like the Aishihik 3rd turbine (pictured) make smart use of our existing resources, improve affordability, and ensure we remain environmentally responsible.

# Ensuring Reliability of Service

We take our responsibility to provide reliable power very seriously. Almost four years ago, Yukon Energy embarked on an aggressive capital maintenance schedule that saw approximately twothirds of our core capital budget go towards projects related to reliability. In 2012 we continued to work our way through a list of maintenance capital projects. While we did see an overall increase in outages, the majority of those were beyond our control (weather related, trees on lines, etc.). In terms of controllable outages (equipment failure or human error), we saw a decrease, dropping from 19 in 2011 to 16 in 2012.

On average, the total time that each Yukon Energy customer was without power over the course of the year decreased from three-quarters of an hour in 2011 to half an hour in 2012.

We will continue to work hard to decrease controllable outages throughout the territory. One initiative that will help address reliability is our Computerized Maintenance Management System that we began phasing in this year. This tool, when fully implemented, will improve our ability to plan for, budget for, and schedule equipment maintenance on a daily to multiyear basis.



# **Outage Data**



# **Meeting Demand**

Yukon Energy is planning for the future in ways that will ensure a secure and continuous supply of energy that is sustainable, affordable and clean.

Our goal is to meet the growing demand for electricity as much as possible with renewable energy, recognizing that there will likely be a need for some fossil fuel generation for some time to come. We pursued a number of initiatives in 2012 that are already enhancing or will enhance our infrastructure. Each initiative is outlined below.

# Mayo B

The Mayo B hydro project involved building a new powerhouse 3.7 kilometres downstream from the existing hydro plant. It was tied into the territory's transmission grid in December 2011, although there was some final work that needed to be done in 2012 before the project could be deemed completed.

Mayo B increases our capacity to generate clean power at the existing site from five megawatts to 15 megawatts, without the need for a new dam or reservoir. It offsets several million dollars' worth of diesel each year and reduces greenhouse gas emissions by about 25,000 tonnes annually.

Mayo B created more than 60 direct jobs for Yukoners and provided spin-off benefits to approximately 120 Yukon businesses. Close to \$12 million was spent in Yukon as a result of this project including labour, materials and supplies. Of that amount, close to \$2 million was spent in the Village of Mayo.

The Mayo B project was completed on time and a million dollars under budget (original budget was \$120 million). Contributions came from the federal government's Green Infrastructure Fund (\$53.35 million), the Yukon Development Corporation, and the Yukon government (combined total of \$30.14 million), and from electrical customers (\$36.5 million). The cost to ratepayers will be spread over the lifetime of the project (50+ years).

# Mayo B Award

Yukon Energy, along with KGS Group Consulting and Kiewit Infrastructure Group (our two major contractors on the Mayo B project) jointly received an excellence award in 2012. The award was established by the Association of Professional Engineers of Yukon to recognize achievements by local professional engineers and to promote excellence in engineering in unique northern climates and terrain. It takes into account northern innovation and adaptation, services that make environmental consideration and/or increase the sustainability of northern communities, enhancement of community services, and enhancement of the quality of life through engineering and other work.

The Mayo B project was chosen over four other entries. It's the first award of its kind ever given out in Yukon.

# **Mayo Substation**

This was Yukon Energy's largest capital project of 2012. Our Mayo substation was at the end of its life and needed upgrading, especially with Mayo B online.

The project allowed us to update our transformers and our protection system at the site. This should result in fewer power outages. It should also reduce the size of the area affected when uncontrollable outages occur.

The substation went into service in late 2012, allowing power coming from both our Mayo A and Mayo B hydro facilities to be routed so it can be transmitted to communities connected to the Yukon grid. Note that the Mayo substation project was totally separate from the Mayo B project.

Other major work done at our Mayo facilities in 2012 included refurbishing the spillway gates at the Wareham Lake dam and installing a new head gate.

# Other 2012/2013 Capital Projects

Here is a summary of the other major capital projects that Yukon Energy started or completed in 2012:

» Takhini/Whistle Bend – this project will allow us to service the new Whistle Bend subdivision in Whitehorse. In 2012 we issued a Request For Purchase to find a contractor and engineer. The work is expected to start early in 2013 and will take about a year to complete.

- » Whitehorse spillway in 2012 we began refurbishing the spillway gates and structures at our Whitehorse dam. The work will be completed in 2013.
- » Overhauls: we completed overhauls in 2012 on one of our older Aishihik hydro units and one of our Dawson diesels. In 2013 we will overhaul one of our Whitehorse hydro units, the second of our older Aishihik generators, and another of our Dawson diesel units.

# Aishihik 3

This is another of our hydro enhancement projects that was put online in late 2011, although some final project tasks took until 2012 to complete. Adding a seven-megawatt hydro generator to the Aishihik hydro facility (which until December 2011 had two 15-megawatt hydro generators) has allowed us to use our plant more efficiently, since it has given us the ability to produce more power using less water. This new unit is saving Yukoners \$1 million or more per year in diesel costs and reducing greenhouse gas emissions by approximately 3,800 tonnes annually.

> Substation upgrades don't usually make the beadlines but they are critical to making our grid smarter and more reliable.

# **Enhanced Storage Concept Studies**

Yukon Energy is committed to optimizing our existing hydro infrastructure before developing new hydro projects. To this end, there are a number of enhancement concepts we are examining that could increase production at our Whitehorse, Mayo and Aishihik hydro facilities. These include increased storage ranges in the Southern Lakes (Marsh, Tagish and Bennett) and Mayo Lake, which together could increase the winter output of our Whitehorse and Mayo hydro facilities by up to 12 gigawatt hours per year on average. This is the energy equivalent of displacing approximately \$2.5–\$3 million of diesel generated electricity annually. Diverting water from Gladstone Creek into Aishihik Lake would allow more power to be produced at our Aishihik plant; up to 30 gigawatt hours per year increase in renewable energy production could result.

In 2012, Yukon Energy continued engaging with local stakeholders, First Nation governments and the general public on these potential projects.

# New Medium and Small Hydro

Yukon Energy is exploring the next generation of new hydro development projects (i.e. 2012 to 2020 time frame). This includes possible sites on the upper reaches of the Pelly River (between 10 and 80 megawatts and up to 500 gigawatt hours a year) and in the area of Moon Lake and Tutshi/Windy Arm in the Southern Lakes region (up to 12 megawatts and up to 70 gigawatt hours a year).

In 2012 we reinstated a gauging station on the Upper Pelly River near Fortin Lake to collect additional hydrological data. We also installed a new hydrometric station near Moon Lake. Collection of stream flow data will continue in 2013 to refine power benefit estimates at each site.

# Wind

Yukon Energy recognizes there is strong support among Yukoners for wind energy in the territory. We continue to look for ways of using wind as a part of our clean



energy complement. Yukon Energy has completed an initial assessment of the wind regime on Tehcho (formerly Ferry Hill) near Stewart Crossing. The results are positive enough that we are now seriously looking at the feasibility of building up to a 20-megawatt wind farm on the site. In 2011 wind monitoring equipment was installed at Tehcho. We are using this equipment to collect data through 2012 and into 2013 to help us determine if a wind farm is viable in the Tehcho area. Our plan is to have a wind project shelf-ready for a time when grid loads and other relevant conditions indicate that this project would be cost effective.

We will continue to examine the feasibility of smaller wind projects up to 10 megawatts as well.

# Geothermal

Because Yukon is located in an area of the Pacific known as the Ring of Fire, the potential is good for finding significant geothermal resources that could be used to produce electricity. Early results show there is good geothermal potential in the Central Yukon and around Whitehorse, although much more work is needed before a decision could be made as to whether one or more geothermal plants would be feasible.

# Waste-to-Energy/Biogas

Yukon Energy spent the last couple of years looking at the possibility of using municipal waste to produce electricity and district heat. We estimated that this process could allow production of up to two megawatts of electricity year-round, using waste from Whitehorse area landfills and possibly supplemented with sawmill waste or other surplus wood material. However, further study showed that it is not economical at this time with the amount of waste we currently produce.

We have shelved this idea for now, although it may be an option at some point in the future.

Similarly, we have put on hold work on the potential of using organic matter (food, brewery spent grains, waste cooking oil, slaughterhouse waste and sewage sludge) to produce a methane rich gas known as biogas. A study into this potential energy option has assessed that biogas would not be economical at this time, as the amount of waste in Whitehorse is quite small. This option could also be looked into at a later date if economic factors change.

#### **Biomass**

Another concept Yukon Energy is assessing for a possible energy source is to use fire kill and beetle kill wood, along with waste from sawmills, to produce electricity and district heat. In 2011, Yukon Energy had a biomass preliminary energy evaluation done. The report identified biomass resources within a 250-kilometre radius of Whitehorse that could potentially provide the feedstock required to maintain a 25-megawatt electrical generating facility for 20 years.

Subsequent to that report however, stakeholders and members of the public attending a Yukon Energy-sponsored workshop on this issue asked us to look at smaller scale biomass options instead. In partnership with Champagne and Aishihik First Nations, the Dakwakada Development Corporation, Cold Climate Innovation at the Yukon Research Centre and the Village of Haines Junction, we are now assessing the viability of a smaller plant in the Haines Junction area in the range of .5 to two megawatts. hesearch is indicating natural gas is likely a more affordable and flexible alternative to aging diesel back-up infrastructure.

# **Liquefied Natural Gas**

As long as we are a grid that's isolated from the rest of North America, we will need some kind of non-renewable energy source for back-up. At minus 40, electricity is not a luxury. Renewable options are being implemented where possible but a back-up system that works regardless of the situation is crucial. Today's back-up diesel generators are aging, produce GHG emissions, and are expensive to run. We believe that switching to liquefied natural gas (LNG) as a replacement for back-up diesel is a promising option: LNG is more cost effective, potentially cleaner, and is a more efficient option for Yukoners. In 2013 we will continue to assess the feasibility of using LNG.

### **District Heat**

The benefits of any thermal project in Yukon, whether it be waste-to-energy, biomass, biogas or liquefied natural gas, can be more fully realized if use can be made of the waste heat that is produced as a by-product of this form of generation. In 2012, Yukon Energy – in partnership with the City of Whitehorse, Cold Climate Innovation at the Yukon Research Centre and the Yukon government – completed work on a feasibility study assessing the potential of a district heat system in Whitehorse. The work examined areas of potential load and energy sources to supply the system with heat. The study will be assessed by Yukon Energy on whether to proceed to the next stage of feasibility work in 2013.

### Independent Power Producers/ Net Metering

Yukon Energy is working with the Yukon Electrical Company Limited and the Yukon government on independent power producers (IPPs) and net metering policies. Work will continue in 2013 on these initiatives. When implemented, a net metering policy will allow customers to generate their own renewable electricity and reduce the amount of power they buy from a utility. An IPP policy will enable Yukon Energy to buy power from private sources and support the development of Yukon's renewable economy.

# Net Metering Solar Project

In 2012, Yukon Energy continued the work we started a year earlier on a net metering solar pilot project. In July we installed a solar system on the roof of the Whitehorse Rapids Fishladder that consists of four panels at 235 kilowatts each. This solar system is serving two purposes: it's helping to power the ladder's visitor reception building, and is allowing us to test run the steps other Yukoners will need to take if they wish to generate renewable power and send a portion of it back to Yukon Energy's grid. We are also monitoring the amount of solar generation produced.

The panels are expected to produce on average 2,000 kilowatt hours a year. The fishladder visitor building uses on average 52 kilowatt hours a day, or almost 19 megawatt hours a year.

# **Energy Conservation and Efficiencies**

Yukon Energy recognizes that energy conservation is one of the most cost-effective, inclusive, and environmentally responsible supply options available to help us meet the near-term electricity needs of the territory. As such, it is a crucial element in our energy portfolio.



In 2012 Yukon Energy worked to develop a suite of programs to help residential and commercial customers save energy in close collaboration with our partners Yukon government and Yukon Electrical Company Limited.

From January to June we conducted interviews with local contractors, distributors and Yukon shoppers to understand how efficient products and technologies currently make their way into Yukon homes and businesses. This market characterization study is helping Yukon Energy and Yukon Electrical Company Limited to develop a territory-wide electricity conservation plan.

In 2013 the plan will be submitted to the Yukon Utilities Board for review. If the plan is approved, Yukon Energy and Yukon Electrical Company Limited could offer a range of conservation programs to Yukon residential and commercial customers later in the year. In the meantime, Yukon Energy is acting now to help reduce the amount of electricity Yukoners use.

In 2012 we worked with Alexco Resource Corporation to implement the recommendations from their recent energy audit. Efforts include lighting retrofits, a re-commissioning of the air system in their mill and the development of a compressed-air leak-reduction program, among other things.

Yukon Energy has also assisted the City of Whitehorse in doing a comprehensive audit of their facilities. In 2013 we will work with the city to develop a series of recommendations for other Yukon municipalities based on the results of the audit. In our own operations we are working to implement the recommendations from our 2011 audit of our facilities in Whitehorse and Dawson. We've completed a redesign of our lighting and are retrofitting many of our current fixtures. Most of Yukon Energy's community staff houses are undergoing their own energy audits. Yukon Energy has installed a data management system that allows us to collect and maintain information about how our facilities are using energy. We are also sub-metering areas that haven't previously collected data.

In 2011 we did research on Light Emitting Diode (LED) streetlights in Dawson City, with positive results. The research shows that the annual energy used by the traditional High Pressure Sodium streetlights is approximately 416 kilowatt hours per light, compared with only 150 kilowatt hours per LED streetlight, a savings of 64 percent.

LED streetlight technology is advancing rapidly and the cost is becoming more attainable. We decided to do a follow-up pilot to test the newest models from a few different brands. In partnership with the Yukon Electrical Company Limited, we installed six new LED streetlights (three different brands/types) at various spots in Mendenhall, a subdivision northwest of Whitehorse. The lights were installed in late 2012. We'll monitor them for the remainder of this winter to determine which will best suit our northern needs.

Early in 2012 we hosted an energy conservation minicharrette where we had an opportunity to hear from Yukoners about how they perceived the value of energy conservation. Participants also offered recommendations for our developing programs. In the summer and fall of 2012 we visited several Yukon communities to keep the conservation conversation going. We shared information about our efforts and listened to community input on what we've accomplished so far.

We also participated at a number of local events and tradeshows throughout the year, giving away coupons for LED light bulbs, programmable thermostats and car heater timers. Our Energy Conservation Plinko board was very popular with the public at these events.

During the summer Yukon Energy partnered with the Yukon Conservation Society and the Conservation Action Team at Environment Yukon to bring our Conservation Kids program to youth in the communities. In 2013 we plan to engage youth again through classroom visits and other outreach work in the schools.

For the last couple of years we have, in partnership with the Yukon Electrical Company Limited and Natural Resources Canada, hosted a series of energy management workshops for Yukon businesses and First Nation and municipal governments. In 2012 we also piloted public information sessions on emerging technologies. We're looking forward to offering more industry relevant education in 2013.

Yukon Energy continues our partnership with the Yukon government's Energy Solutions Centre to help members of the public replace their old refrigerators and freezers with new more energy-efficient models. The used appliances must be at least five years old and in working condition. Not only will Yukoners received \$50 for each fridge or freezer they have replaced (up to two appliances) but the Energy Solutions Centre will remove the old model, take it to the landfill, and pay the landfill tipping fee. Yukon Energy will continue to support this program into 2013.

#### **Secondary Sales**

With the growing demand for electricity, Yukon Energy no longer has a great deal of surplus power that can be sold at a secondary sales rate. In 2012 we were able to provide a handful of Yukon businesses secondary sales from August through until December, providing us with approximately \$165,000 in revenues that we would otherwise not have had.

The secondary sales program gives eligible Yukon businesses the option of using hydro power to heat their facilities instead of diesel fuel or propane, both of which are more expensive and generate greenhouse gas emissions. They pay two-thirds of the cost of heating with diesel fuel, in exchange for the service being limited and fully interruptible. They are required to maintain a back-up heating system for use when secondary sales are not available.

A contractor surfaces after inspecting the intakes of three of the Whitehorse hydro generators for frazil ice. Frazil ice can cause major problems for Yukon Energy's equipment. Yukon Energy

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# Meeting Our Regulatory Obligations

# 2012 General Rate Application

In April 2012 we filed an application with the Yukon Utilities Board (YUB) for our first retail rate increase since 1999. We asked for a 6.4 percent increase for all customer classes (residential, commercial, industrial and government) in 2012 and an additional 6.5 percent raise in 2013, for a total of 12.9 percent. The increases would impact both Yukon Energy and Yukon Electrical customers.

At the time this report was printed (summer 2013), the YUB had ruled on our application, granting us an 11.01 percent increase over those two years. The 2012 rate changes and other YUB directives are reflected in this report's financial statements.

Although no one likes a rate increase, we felt it was necessary to request one for a variety of reasons:

» Increased energy consumption in all sectors has strained Yukon Energy's power grid, and has depleted the corporation's surplus hydro. While our new hydro assets (Mayo B and the Aishihik third turbine) have helped address this problem, expensive diesel generation is still needed to supply an increasing share of the new demand.

- » The cost of keeping aging infrastructure efficient, up-to-date and safe for Yukoners has increased faster than electricity rates.
- » Inflation: thirteen years is a long time to go without a rate increase. In that time, salaries have gone up and the cost of our materials keeps climbing. The cost of living in Yukon has gone up more than 20 percent since the late 1990s.
- » Funding tomorrow's energy: finding sufficient clean, affordable and reliable energy requires years of public and stakeholder consultation, research, engineering and project approval. All this work comes with a price tag.

# Part II Hearing

In October 2011, Yukon Energy and the Yukon Electrical Company Limited appeared before the Yukon Utilities Board for what is known as a Phase II hearing. The purpose of the hearing was to provide the Utilities Board with the information it needed to make decisions regarding three topics:

- What percentage of the total amount of money the utilities need to operate should be paid by each class of customer (residential, small business, government and industry);
- 2) How the rates within each class should be designed; and
- 3) Whether there should be any changes in the terms under which the utilities provide service to customers.

The Yukon Utilities Board made its ruling in early 2012. In summary:

 The YUB recognized that as a result of Yukon government Orders-in-Council, no changes can be made before 2013 to the overall revenues charged to each rate class. The Board also observed that the revenues from the residential rate class are considerably below the costs to serve this class – residential customers pay less than 80 percent of the true cost of their power, while business and industry pay more than 100 percent and government general service customers pay over 140 percent of what it costs to provide them with power.

In its Order, the YUB said that once the government's Ordersin-Council expire at the end of 2012, "the Board expects that both utilities will jointly come before this Board with a new Phase II Application to correct the current imbalances". *Note that 2012/68 now extends this deadline to December 31, 2013.* The Utilities Board writes, "In terms of pricing signals, the Board is of the view that the best pricing signals to customers are those prices that reflect the full cost to serve those customers." That means that unless there is another Yukon government Order-in-Council that again prohibits the re-balancing of rates, non-government residential customers may be faced with significant rate increases over and above any general rate increases that either utility may require.

2) In terms of how the rates within each class should be designed, both Yukon Energy and the Yukon Electrical Company Limited argued that there should be price signals set to encourage people to conserve electricity. The utilities suggested that a new rate block be established and that the more power used, the higher the rate charged for that power. Yukon Energy also proposed that there be a substantial increase in the cost of any power consumed by residential customers above 2,500 kilowatt hours per month, and there be a decrease in power bills for those residential customers who keep their usage under 1,000 kilowatt hours per month (the average monthly residential usage is about 800 kilowatt hours per month). The Utilities Board did create three blocks instead of the current two for residential and small business customers, each block being at a higher rate.

The YUB rejected Yukon Energy's idea of a decrease for nongovernment residential customers in the First Block (up to 1,000 kilowatt hours per month), making the observation that a reduction in these first-energy block rates is not warranted because the revenues paid by these residential customers are below the cost of their power and that this issue should be corrected when Order-in-Council 2008/149 expires (see Point 1). The Second Block, between 1,001 and 2,500 kilowatt hours per month, sees a slight reduction of up to .2 percent, and the Third Block, also known as the runoff rate, (anything over 2,500 kilowatt hours per month) sees an increase of between .2 percent (at 2,600 kilowatt hours per month) and 4.4 percent (at 5,000 kilowatt hours per month).

The Utilities Board approved the utilities' proposal for four blocks for non-government small business and municipal government rates, with the fourth block being an initial step toward the transition to a new large business rate class that the YUB directed the utilities to put forth in their next General Rate Applications. The rates for these customers have the following bill impacts: The First Block (up to 2,000 kilowatt hours per month, sees reductions of between .8 and 2 percent. The Second Block (from 2,001 to 15,000 kilowatt hours per month) sees reductions of between .1 to 1.5 percent. The Third Block (15,001 to 20,000 kilowatt hours per month) sees increases of up to 4.8 percent. And the Fourth Block (over 20,000 kilowatt hours per month) sees increases of between .7 and 3.8 percent.

For the government residential and general service rate class, the Board has agreed to the same rate blocks as for nongovernment customers with inclining block rates for the first three rate blocks. Compared to the equivalent non-government rate classes, the Board suggested higher runoff rates for the government rate classes and also adjusted the utilities' proposals to ensure that rates increase as monthly use increases.

# Health and Safety

# Safety Record

Yukon Energy's excellent safety record continued in 2012. Yukon Energy employees have now worked more than five years without a lost time incident. This safety record was recognized in 2012 by the Canadian Electricity Association (CEA). In November Yukon Energy received the CEA Vice President's Bronze Award for top safety performance among utilities with fewer than 500 employees. This recognition of our employees' high standards of safe work practices is one we are very proud of.

Also in the fall of 2012 our Health and Safety Manager received an award for Safety Professional of the Year from the Canadian Society of Safety Engineering. This award is presented to safety professionals who have shown a strong commitment to the field of occupational health and safety in B.C. and Yukon.

As part of our Certification of Recognition (COR), which we obtained in 2009, Yukon Energy was required to undergo and successfully pass an independent external maintenance audit. This was completed in the fall. The COR is issued to employers who develop and implement health and safety programs that meet established standards set out by the Northern Safety Network and the Yukon Workers' Compensation Health and Safety Board.

We will continue to require contractors bidding on construction work to provide proof of their COR as a tendering or bidding requirement. For contractors in Yukon's communities, Yukon Energy extended the COR requirement until January 1, 2013.

There were no serious injuries or lost time injuries suffered by our contractors on Yukon Energy construction projects in 2012.

# **Public Safety Campaigns**

Yukon Energy's Whitehorse Rapids hydro dam is located within city limits and in the heart of a popular recreational area, used by runners, hikers, kayakers and dog walkers. Because of this, public safety is a priority for us. As in previous years, we ran an annual media campaign in 2012 that warned people of the dangers of being near a hydro dam. In addition, we continued to distribute a safety booklet aimed at elementary school children. The booklet focuses on the importance of taking care when playing or recreating near or on water that is close to our hydro facilities.

The boat lock at Yukon Energy's Lewes dam is frequently used by travellers on the Yukon River. In 2012 we gave an evening workshop so members of the public could receive personal instruction on how to use the boat lock.



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Mitigating the environmental impact of bydro generation on fish species has long been a focus of Yukon Energy investment. The new salmon rearing channel at Mayo B is the latest example of this commitment.

# Protecting Our Environment

Yukon Energy is proud of our commitment to environmental stewardship and biodiversity. We are a member of the Canadian Electricity Association (CEA) and as such we actively participate in the CEA's Sustainable Electricity Program.

Yukon Energy recognizes that in providing services and products to Yukoners, there will always be environmental impacts. Our goal is to balance the need for safe, reliable and affordable energy with that of meeting Yukoners' energy requirements without significant adverse effects to the environment or the people and animals that depend on that environment.

# Stewardship and Biodiversity

Yukon Energy is proud of our commitment to environmental stewardship and biodiversity. In cooperation with our partners the Yukon Fish and Game Association and the Yukon government, we maintain one of the world's longest fishladders. It not only provides passage for migrating Chinook salmon beyond the Whitehorse dam, but offers opportunities for scientific and cultural information gathering and sharing. Last year, 1,035 salmon passed through the ladder, compared to 1,534 in 2011.

As part of the Mayo B project, a salmon rearing channel was constructed on the Mayo River in 2012. The nearly 1,000-metrelong channel is providing high quality rearing habitat for juvenile Chinook salmon as well as resident fish species throughout the year. In fact, on its first day of operation several whitefish and grayling were already observed in several upstream pools. Within a few weeks of completion the first juvenile Chinook salmon were also observed in the channel.

The channel is not intended to provide habitat for spawning adult salmon, although we will monitor it for such occurrences.

Yukon Energy, in partnership with the Yukon government, operates an important fish hatchery on the Yukon River in Whitehorse. For the fourth year in a row, the hatchery was able to support a Ta'an Kwäch'än First Nation initiative to re-introduce Chinook salmon to Fox Creek by providing approximately 35,000 juvenile salmon for the program.

Yukon Energy, in cooperation with the First Nation of Na-Cho Nyak Dun, has two fish and fish habitat enhancement studies underway that will continue in 2013 on the Mayo River.

# **Climate Change**

During the summer of 2011 Yukon Energy hired scientists from the Northern Climate ExChange, the University of Alberta and the Yukon Geological Survey to gather information on the expected impacts of climate change on the glaciers that feed our hydro systems.

The report pointed out a number of areas where there were information gaps. In particular, it suggested that more study be done of the Llewellyn Glacier due to its large size and potentially high sensitivity to climate change. Another recommendation was to focus on how snow conditions might change with continued warming.

In 2012 we took that advice and worked with the same organizations on the next phase of our glacier research. Scientists installed two monitoring stations in the Fantail River basin, the headwaters of the Yukon River, close to Atlin, B.C. The stations are tracking changes in the weather both in the medium and long term. By having a network of long-term weather observations stations, the researchers will be able to recognize the differences between long-term climatic changes and year-to-year or cycle-to-cycle weather variations. As well, we'll be able to better predict water flows coming through the Whitehorse dam gates.

### Sustainable Electricity Meeting

Yukon Energy, in cooperation with the Canadian Electricity Association, hosted the CEA Sustainable Electricity Program Steering Committee spring meeting in June 2012. About 20 utility representatives from across the country were in Whitehorse to discuss various sustainability issues.

### Sustainable Electricity Award

Yukon Energy is among five utilities that received Sustainable Electricity awards from the Canadian Electricity Association (CEA) in 2012. Yukon Energy's award, in the category of Social Responsibility, recognizes the work we've done with our stakeholders regarding the energy charrette we hosted in March 2011, and the follow-up mini-charrettes we've organized since that time. We feel honoured to have won this award and look forward to continuing our conversation with Yukoners about the territory's energy future.

### **CEA** Appointments

In 2012, the CEA appointed David Morrison, President and Chief Executive Officer of Yukon Energy, as Executive Chair of the Association's Sustainable Electricity Program. The program is a flagship industry-wide initiative committed to managing the electricity sector's impacts.

Mr. Morrison was also appointed as First Vice-Chair of the CEA for one year, starting in January 2013.



# **Engaging Yukoners**

As part of our priority to engage Yukoners, we are changing the way we involve First Nations and other local governments, stakeholders and the Yukon public in our project-specific and longer term resource planning.

Previously public involvement began once a decision was made to move forward on a specific project or a resource plan was finalized and ready for filing with the Yukon Utilities Board. It is now corporate practice to engage Yukoners at the concept stage of a project so that we can all work together to identify issues, and research priorities and opportunities for project collaboration.

# 20-Year Resource Plan Update

After extensive consultation and discussion with governments, stakeholders and the public, Yukon Energy completed a draft in 2012 of our latest 20-year resource plan.

In the late summer and fall we held public meetings in several Yukon communities to get feedback on the draft. The plan has been given to the Yukon Utilities Board for review.

Based on input from Yukoners, near-term options (potentially available to start construction by 2015) in the resource plan include the following:

- » Energy conservation/efficiencies: up to 8.5 gigawatt hours per year by 2015 (including up to 3.5 gigawatt hours per year for internal energy efficiencies).
- » Hydro enhancements Mayo Lake Storage (4 gigawatt hours per year), Southern Lakes Enhanced Storage (6.4 gigawatt hours per year), and Gladstone Diversion (36.6 gigawatt hours per year).
- » Wood biomass: original plan of up to 25 megawatts has been scaled back to a small plant (between 0.5 and two megawatts) based on feedback from Yukon public.

- » Liquefied natural gas from a B.C. or Alberta gas source (in the future, adequate Yukon gas resources may become available).
- » Wind Tehcho (formerly Ferry Hill) or Mount Sumanik: up to 21 megawatts or 56 gigawatt hours per year.
- » Default diesel potentially an unlimited supply but has high costs and high GHG emissions.

Longer-term options (potentially available before or by 2021) in the resource plan include:

- » New hydro projects up to 70 gigawatt hours of small (less than 10 megawatts) of hydro, more than 2,070 gigawatt hours of medium (11–60 megawatts) hydro, and more than 4,700 gigawatt hours of large (more than 60 megawatts) hydro.
- » Yukon Energy is currently doing preliminary work on the Hoole Canyon option that has potential for 275 gigawatt hours (40.4 megawatts).
- » Geothermal needs further exploration and assessment of cost benefits potential.
- » Solar needs cost-effective proven technology for Yukon market conditions.
- » Pipeline/natural gas needs commitments by others re: Alaska Highway Pipeline and/or potential Eagle Plains gas development.
- » Grid connection to B.C. or Alaska needs commitments by others.

### Follow-up Workshops

During the energy charrette that we hosted in 2011, stakeholders and the public asked us to do more research into the viability of a number of potential energy options. Along with gathering technical data, we held a series of follow-up workshops that allowed Yukoners to continue the conversation started during the charrette. In 2012 we held two such workshops: one on energy conservation; the other exploring the possibility of using liquefied natural gas as an energy source.

Stakeholders and members of the public had an opportunity to hear presentations from a wide range of experts, ask questions, and share opinions. The feedback we received at these workshops helped inform our latest 20-year resource plan.

In 2013 we plan to host a workshop on wind energy.

### **Project-Specific Public Information**

To help keep the public up to date on specific projects and concepts that Yukon Energy is undertaking, the Corporation held public meetings and/or open houses in 2012 in many Yukon communities, including Whitehorse, Mayo, Dawson, Faro, Carmacks, Watson Lake, Haines Junction, Marsh Lake and Tagish.

Yukoners were provided with regular updates on all our major projects via three householders that were mailed to them in 2012 and posted on our website, as well as a series of videos we produced and posted on YouTube, our website and our social media sites. Frequent project updates were also provided on our blog, Twitter and Facebook.

At spring meetings held in the Southern Lakes communities, Yukon Energy took the opportunity to update the public on what we expected peak summer water levels would be. The information is useful to residents because it assists them in preparing their properties for possible flooding in high water years.

In addition to the public meetings, Yukon Energy provided regular summer water level updates to Tagish and Marsh Lake residents via email, posters, and our website and blog.

We balance the principles of Flexible, Affordable, heliable and Environmentally hesponsible electricity generation because Mukoners have told us that's what's important to them. Their needs power what we do.

Underground at our Aishihik hydro facility. archbould.com



# Building Partnerships with First Nations

Yukon Energy believes in building enduring business partnerships with local First Nations for energy projects. We devoted considerable time to engaging Yukon First Nations on potential renewable energy projects and opportunities within their traditional territories. In particular, we partnered with the Champagne and Aishihik First Nations (other partners were the Dakwakada Development Corporation, Cold Climate Innovation at the Yukon Research Centre, and the Village of Haines Junction) to explore the viability of a small biomass plant for the Haines Junction area. The partners hired the engineering firm Stantec to do a feasibility study for us; the results are expected in the spring of 2013.

We are also working with the Kwanlin Dün First Nation (KDFN) and Ta'an Kwäch'än Council (TKC) to assess the feasibility of using LNG as a fuel source in Yukon.

# Supporting Our Communities

While Yukon Energy's primary job is to ensure a secure and sustainable energy future, we also feel a responsibility to help Yukon communities be as strong and healthy as possible.

That's why, each year, we give some of our profits to local organizations. In 2012 we donated approximately \$82,500 to more than 30 community groups. The list covered everything from sports and recreation, the arts, education, and health and social services. Here are just a few examples of the types of organizations that we helped.

# **Arctic Winter Games**

Yukon Energy is proud to have been the presenting sponsor of the Arctic Sports and Dene Games at the 2012 Arctic Winter Games (AWG), which took place in Whitehorse. Two thousand athletes, coaches, mission staff, officials and cultural performers converged on Whitehorse for this event. The AWG not only test athletes' capabilities physically and mentally, but also celebrate the cultural diversity of the circumpolar world.

### Whitehorse Food Bank

Yukon Energy is a fervent supporter of the Whitehorse Food Bank, a facility that assists hundreds of needy Yukoners. 2012 was the fifth year in a row that Yukon Energy contributed financially to the organization.

This year we invited members of the public to "like" our Facebook page. For every new "like" we promised to donate two dollars to the food bank. Our list of Facebook friends grew from about 1,500 to more than 2,250 and in the process we were able to provide some much needed assistance to the agency.

### Young Women Exploring Trades Career Fair

Trades and technologies are crucial to our business. That's why we are happy to support this annual event hosted by Yukon Women in Trades and Technology. It's a one-day conference/ workshop that gives about 120 teenage girls from around the territory a chance to get hands-on experience in a variety of trades. Not only do we provide financial support for this conference, but some of our female employees volunteer their time as well.

# Available Light Film Festival and the Dawson City International Short Film Festival

These two winter film festivals are very popular events; thousands of people turn out each year to view quality movies from all over the world. For the past few years Yukon Energy has been the co-presenter of both festivals, along with the Yukon Film Society (Available Light Film Festival) and the Klondike Institute of Art and Culture (Dawson City International Short Film Festival).

# Yukon Energy Klondike Heat Battle

Once again in 2012 Yukon Energy was the presenting sponsor for this annual event organized and hosted by Breakdancing Yukon. This dance competition drew some of the best b-boys and b-girls from Yukon and across Canada. The weekend included demonstrations, competitions (battles) and dance challenges. It was pure fun and entertainment for both the participants and audience members.

# **Scholarships**

Again this year Yukon Energy offered several scholarships for pre-apprenticeship as well as post-secondary programs. In total, scholarships were given to four deserving post-secondary students in 2012.

# School/Public Tours

Yukon Energy believes in the importance of educating tomorrow's generation about electrical production, energy conservation and electrical safety. To this end we offered numerous school tours in 2012 of our Whitehorse hydro plant, wind energy production site, and fishladder. We also provided public tours of our Whitehorse hydro facilities in connection with this year's World Water Day.

# Yukon Sustainable Community Award

Several years ago, Yukon Energy entered into a partnership with the Association of Yukon Communities to recognize leadership in sustainable community development. Each year we present an award to an individual or group for a project that demonstrates environmental sustainability. In 2012 the award went to the City of Whitehorse, for developing an energy monitoring database that will allow the city to better plan future energy upgrades, reduce its energy costs and decrease its greenhouse gas emissions.

# Swan Cam/Fish Cam

One of the first signs of spring in the Yukon is the return of the swans and other waterfowl, as they head to their nesting grounds further north. The birds gather by the hundreds at M'Clintock Bay on Marsh Lake in the southern Yukon. The bay is the first open water in the region and offers the birds easy access to food.

Each spring Yukon Energy sets up a webcam so that people can view the waterfowl in real time via their computers. The public response has been very favourable, with people from all over the world going online to see the swans.

Later in the season the web cam is moved to our Whitehorse Rapids Fishladder so that people can view the migrating Chinook salmon as well as the various species of freshwater fish that travel up and down the ladder.



# Board of Directors and Corporate Governance

The Board of Directors at Yukon Energy oversees the conduct of business and supervises the President and Chief Executive Officer, who is in turn responsible for the day-to-day operations at Yukon Energy along with his Senior Management team.

The Board models its approach to corporate governance on best practices in Canada and abroad, as reflected in the advice and recommendations of bodies such as the Conference Board of Canada.

# Board of Directors' Appointments

Section 3(1) of the Yukon Development Corporation Act Regulations (OIC 1993/108) sets out the process for being appointed to the Yukon Energy board. The Board of the Yukon Development Corporation (YDC) is appointed by the Yukon government and in turn the YDC board appoints the board of Yukon Energy.

As of December 31, 2012, our Board of Directors include:

Chair, Piers McDonald	Pat Irvin
Jason Bilsky	Diane Lister
Justin Ferbey	Erin Stehelin
Judy Gingell	

# Remuneration

Remuneration for Yukon Energy board members has been benchmarked against two Conference Board of Canada reports entitled "Compensation of Boards of Directors 2003" and "Compensation of Board of Directors 2005." Yukon Energy's board remuneration has also been benchmarked against the Conference Board's report "Board Practices in Crown Corporations 2008."

The Board Chair is paid \$400 per half-day meeting (four hours or less) and \$800 for a full-day meeting (more than four hours). In addition, he is paid for a full day (\$800) to prepare for each board meeting.

Board members receive \$200 per half-day meeting, and \$400 per full-day meeting, plus they receive a full day's remuneration (\$400) for meeting prep time.

There are three committees that fall under Yukon Energy's board: the Audit, Governance, and the Human Resources committees. Committee Chairs are paid \$300 per half-day meeting and \$600 per full-day meeting, with one day (\$600) of prep time per committee meeting.

Committee Members receive \$200 per half-day meeting and \$400 per full-day meeting. They do not receive remuneration for prep time.

# Code of Conduct

Yukon Energy has a Code of Conduct to which all Board members are expected to adhere. A copy of the policy can be found on our website at **yukonenergy.ca/about/profile/board/**.

# **ATIPP Legislation**

Yukon Energy is subject to the Yukon government's Access to Information and Protection of Privacy Act. The legislation is intended to protect the privacy of individuals who provide information to government. It also offers the public a formal method for requesting information if they are denied access to it by an organization and, as such, is a method used once other informal avenues have been exhausted.

Openness and transparency are important to Yukon Energy and as a result, we already provide a great deal of information on our website. More information about the Corporation can be found on the Yukon Utilities Board, Yukon Environmental and Socio-economic Assessment Board and the Yukon Water Board websites.

Aggressive investment in capital maintenance bas improved grid reliability while making the most of our existing assets.

Multiple cables at Mayo B. Yukon Energy

# **Senior Management**

David Morrison President and C.E.O.

Michael Brandt Vice-President

Hector Campbell Director, Resource Planning and Regulatory Affairs

Linda Greer Director, Human Resources and Information Management

Lawrence Joudry Director, Engineering Services and Operations

Ed Mollard Chief Financial Officer

Shelley Dixon Corporate Secretary

# **Financial Statements**

December 31, 2012

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# Management's Responsibility for Financial Reporting

Management is responsible for the preparation of the financial statements and all other financial information relating to the Corporation contained in this annual report. The financial statements have been prepared in conformity with Canadian generally accepted accounting principles using methods appropriate for the industry in which the Corporation operates and necessarily include some amounts that are based on informed judgments and best estimates of management. The financial information contained elsewhere in the annual report is consistent with that in the financial statements.

Management has established internal accounting control systems to meet its responsibilities for reliable and accurate reporting. These systems include policies and procedures, the careful selection and training of qualified personnel and an organizational structure that provides for the appropriate delegation of authority and segregation of responsibilities.

The Board of Directors, through its Audit Committee, oversees management's responsibilities for financial reporting. The Audit Committee meets regularly with management and the independent auditor to discuss auditing and financial matters to assure that management is carrying out its responsibilities and to review the financial statements. The auditors have full and free access to the Audit Committee and management.

President and CEO

August 14, 2013

Malls

Ed Mollard Chief Financial Officer



Auditor General of Canada Vérificateur général du Canada

#### INDEPENDENT AUDITOR'S REPORT

#### To the Board of Directors of the Yukon Energy Corporation

#### **Report on the Financial Statements**

I have audited the accompanying financial statements of the Yukon Energy Corporation, which comprise the balance sheet as at 31 December 2012, and the statement of operations, comprehensive income and retained earnings and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

#### Opinion

In my opinion, the financial statements present fairly, in all material respects, the financial position of the Yukon Energy Corporation as at 31 December 2012, and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.



Auditor General of Canada Vérificateur général du Canada

#### **Report on Other Legal and Regulatory Requirements**

In my opinion, the transactions of the Yukon Energy Corporation that have come to my notice during my audit of the financial statements have, in all significant respects, been in accordance with the *Public Utilities Act* and regulations, the *Business Corporations Act* and regulations and the articles and by-laws of the Yukon Energy Corporation.

Jenance Xelfong

Terrance DeJong, CA Assistant Auditor General for the Auditor General of Canada

14 August 2013 Edmonton, Canada Yukon Energy Corporation Balance Sheet

(in thousands of dollars)

10,562 12,721 2,791 553 <b>26,627</b> <b>152</b> <b>389,030</b> <b>27,157</b> <b>442,966</b> - 17,423 18,905 155 5,356 <b>41,839</b> - <b>1,047</b> <b>173,734</b>	\$	8,137 25,577 2,830 614 37,158 576 374,591 24,240 436,565 5,540 27,994 13,905 4,974 52,413 397
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10,562 12,721 2,791 553 <b>26,627</b> <b>152</b> <b>389,030</b> <b>27,157</b> <b>442,966</b> - 17,423 18,905 155 5,356 <b>41,839</b> - <b>1,047</b> <b>173,734</b>	\$	8,137 25,577 2,830 614 37,158 576 374,591 24,240 436,565 5,540 27,994 13,905 4,974 52,413 397
12,721 2,791 553 26,627 152 389,030 27,157 442,966 442,966 442,966 41,839 - 1,047 173,734	\$	25,577 2,830 614 37,158 576 374,591 24,240 436,565 5,540 27,994 13,905 4,974 52,413 397
2,791 553 26,627 152 389,030 27,157 442,966 442,966 442,966 41,839 - 1,047 173,734	\$	2,830 614 37,158 576 374,591 24,240 436,565 5,540 27,994 13,905 4,974 52,413 397
553 26,627 152 389,030 27,157 442,966 442,966 442,966 155 5,356 41,839 - 1,047 173,734	\$	614 37,158 576 374,591 24,240 436,565 5,540 27,994 13,905 4,974 52,413 397
26,627 152 389,030 27,157 442,966 - 17,423 18,905 155 5,356 41,839 - 1,047 173,734	\$	37,158 576 374,591 24,240 436,565 5,540 27,994 13,905 4,974 52,413 397
152 389,030 27,157 442,966 - 17,423 18,905 155 5,356 41,839 - 1,047 173,734	\$	576 374,591 24,240 436,565 5,540 27,994 13,905 4,974 52,413 397
- 17,423 17,423 18,905 155 5,356 41,839 - 1,047 173,734	\$	5,540 27,994 13,905 4,974 52,413 397
- 17,423 18,905 155 5,356 41,839 - 1,047 173,734	\$	5,540 27,994 13,905 4,974 52,413 397
442,966 17,423 18,905 155 5,356 41,839 - 1,047 173,734	\$	5,540 27,994 13,905 4,974 52,413 397
442,966 17,423 18,905 155 5,356 41,839 - 1,047 173,734	\$	436,565 5,540 27,994 13,905 4,974 52,413 397
- 17,423 18,905 155 5,356 <b>41,839</b> - <b>1,047</b> 173 734		5,540 27,994 13,905 - 4,974 52,413 397
- 17,423 18,905 155 5,356 41,839 - 1,047 173,734		5,540 27,994 13,905 - 4,974 52,413 397
- 17,423 18,905 155 5,356 41,839 - 1,047 173,734		5,540 27,994 13,905 - 4,974 52,413 397
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1,047 173 734		
172 731		1.137
1/0//04		173,566
7,233		4,711
4,628		902
125,841		120,227
354,322		353,353
39,000		39,000
14,600		14,600
35,044		29,612
88,644		83,212
442,966	\$	436,565
	39,000 14,600 35,044 88,644 442,966	39,000 14,600 35,044 88,644 442,966 \$

# Statement of Operations, Comprehensive Income and Retained Earnings (in thousands of dollars)

For the year ended December 31,	2012	2011
Revenue		
Sales of power (Note 17)	\$ 36,777	\$ 34,047
Other	 483	 496
	37,260	34,543
Operating expenses		
Operations and maintenance (Note 18)	9.646	10 288
Administration (Note 19)	9.823	8.872
Amortization of property, plant and equipment	6,109	6,260
Amortization of deferred charges	2,706	905
Amortization of intangible assets	 648	528
	28,932	26,853
Income from operations	8,328	7,690
		· · · · · ·
Other income		
Allowance for funds used during construction	802	555
Amonization of capital assistance	1,464	793
	 3/	 309
	 2,303	1,657
Other expenses		
Interest on borrowings	4,818	4,302
Unrealized loss on interest rate swap (Note 25)	155	-
Provision for uninsured losses (Note 6)	 226	 100
	5,199	4,402
Net income	5,432	4,945
Other comprehensive income	-	-
Comprehensive income	5 132	1 015
Retained earnings, beginning of year	29 612	26 720
Dividend		(2,053)
Retained earnings, end of year	\$ 35,044	\$ 29,612

The accompanying notes are an integral part of the financial statements.

Yukon Energy Corporation Statement of Cash Flows (in thousands of dollars)

For the year ended December 31,	2012	2011
Operating activities		
Cash receipts from customers	\$ 37,420	\$ 34,511
Cash paid to employees and suppliers	(19,477)	(17,208)
Interest paid	(5,152)	(3,558)
Interest received	37	309
Cash (used in) provided by operating activities	12,828	14,054
Financing activities		
Receipt of construction financing	10 000	20.000
Repayment of construction financing	(5,000)	20,000
Issuance of long-term debt	11 000	_
Repayment of long-term debt	(5,004)	(21 197)
Contributions in aid of construction	24,138	38,358
Cash provided by financing activities	35,134	37,161
Investing activities		
Additions to property plant and equipment	(24 107)	(06 224)
Additions to deferred charges and intangible assets	(34,127)	(00,334) (6,457)
Repayment of long-term receivable	(3,870)	(0,437)
repayment of long-term receivable		17,424
Cash used in investment activities	(39,997)	(75,367)
Net increase (decrease) in cash	7,965	(24,152)
Cash, beginning of year	2,597	26,749
Cash end of year	\$ 10,562	\$ 2,597
Cash includes:		
Cash (Note 4)	10,562	8,137
Bank indebtedness		(5,540)
Total	10,562	2,597

The accompanying notes are an integral part of the financial statements.

### Notes to Financial Statements

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 1. NATURE OF OPERATIONS

Yukon Energy Corporation ("the Utility") is incorporated under the Yukon *Business Corporations Act* and is a wholly-owned subsidiary of Yukon Development Corporation (YDC or "the Parent"), a corporation owned by the Yukon Government (YG or "the Government"). Yukon Energy Corporation generates, transmits, distributes and sells electrical energy in the Yukon. The Utility is not subject to income taxes.

The Utility is subject to overall regulation by the Yukon Utilities Board (YUB) and specific regulation by the Yukon Territory Water Board. Both boards are independent from the Utility.

#### **Rate regulation**

The operations of the Utility are regulated by the YUB pursuant to the *Public Utilities Act*. There is no minimum requirement for the Utility to appear before the YUB to review rates. However, the Utility is not permitted to charge any rate for the supply of power that is not approved by an Order of the YUB. The Utility is subject to a cost of service regulatory mechanism under which the YUB establishes the revenues required (i) to recover the forecast operating costs, including depreciation and amortization, of providing the regulated service, and (ii) to provide a fair and reasonable return on utility investment in rate base. As actual operating conditions may vary from forecast, actual returns achieved can differ from approved returns.

The regulatory hearing process used to establish or change rates typically begins when the Utility files a General Rate Application (GRA) for its proposed electricity rate changes over the next one or two forecast years (Note 3). The YUB must ensure that its decision, which fixes electricity rates, complies with appropriate principles of rate making, all relevant legislation including the *Public Utilities Act* and directives issued by the Yukon Government through Orders-In-Council that specify how the interests of the customer and Utility are to be balanced.

The YUB typically follows a two-stage decision process. In the first stage, the total costs that the Utility will incur to provide electricity to its customers over the immediate future are reviewed and approved. The approval of these costs determines the total revenues the Utility is allowed to collect from its customers. It is the responsibility of the YUB to examine the legitimacy of three classes of costs:

- the costs to the Utility to run its operations and maintain its equipment (personnel and materials);
- the cost associated with the amortization of all capital equipment; and
- the return on rate base (the borrowing costs related to borrowing that portion of the rate base which is financed with debt plus the costs to provide a reasonable rate of return on that portion of the rate base which is financed with equity).

The YUB assesses the prudency of costs added to rate base, which includes an allowance for funds used during construction (AFUDC) charged to capital projects. The YUB also reviews the appropriateness of asset depreciation rates, which are periodically updated by the Utility through depreciation studies.

In the second stage, the YUB approves how the revenue will be raised. This stage essentially determines the electricity rates for the various customer classes in the Yukon: residential, government, commercial and industrial. This process is guided mainly by requirements of Yukon Government Order-in-Council 1995/90 and can include a cost-of-service study which allocates the Utility's overall cost of service to the various customer classes on the basis of appropriate costing principles.

#### Water regulation

The Yukon Territory Water Board pursuant to the Yukon Waters Act decides if and for how long the Utility will have a water license for the purposes of operating hydro generation stations in the Yukon. The licenses will also indicate terms and conditions for the operation of these facilities.

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 1. NATURE OF OPERATIONS - continued

#### **Capital structure**

The Utility's policy which has been approved by the YUB is to maintain a capital structure of 60% debt and 40% equity at year end (Note 26). Annual dividends are declared to the Parent and typically loaned back in order to maintain this ratio during normal on-going operations. When large assets are purchased or constructed, the parent may be required to make an equity contribution.

#### 2. SIGNIFICANT ACCOUNTING POLICIES

#### Financial statement presentation

The financial statements of the Utility have been prepared by management. They conform to Canadian generally accepted accounting principles ("GAAP") and take into account generally accepted methods and practices of rate regulated bodies. The regulatory accounting policies adopted by the Utility differ from the accounting policies prescribed by using GAAP. In particular, the timing of the Utility's recognition of certain assets, liabilities, revenues and expenses as a result of regulation differ from that of a non-regulated enterprise. The impact on the financial statements of accounting for rate regulated operations are further described in Note 3. The significant accounting policies have been classified accordingly in the notes below:

#### Rate regulated accounting policies

#### Allowance for funds used during construction

The cost of the Utility's property, plant and equipment and deferred charges includes an allowance for funds used during construction (AFUDC) as allowed by the regulator. The calculation of the estimate is based on the Utility's weighted average cost of debt. The AFUDC rate estimate was 4.237% for 2012 (2011 - 4.483%).

#### Property, plant and equipment

The gain or loss on the disposal or retirement of property, plant and equipment, with the exception of land and vehicles, is deferred and amortized over the remaining expected useful lives of the assets.

#### Faro mine dewatering deferral revenue

Faro mine dewatering deferral revenue represents amounts ordered by the YUB to be held by the Utility on behalf of ratepayers. The YUB has sole discretion to direct disposition of these funds, typically through refunds to customers or applied to ratepayer deficits. As directed by YUB Order 2013-01, the balance in the account as at January 1, 2012 has been transferred to Deferred uninsured losses.

#### **Deferred uninsured losses**

The Utility maintains a regulatory account for recording uninsured losses. An annual provision is approved by the YUB and collected through customer rates. Variances between the approved annual provision and actual costs incurred are deferred until the following general rate application or until a specific application is made to the YUB requesting recovery from or refund to customers.

#### Future removal and site restoration costs

The Utility maintains a provision for the future removal of property, plant and equipment and the costs of site restoration related to those assets. The provision includes a regulatory component as well as a component relating to the future decomissioning of the Minto Mine spur line.

As Per YUB Order 2005-12 no additional provision is permitted to the regulatory component. The provision for the decommissioning of the Minto Mine spur line accrues interest at the rate equal to the three month Canadian dollar LIBOR.

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 2. SIGNIFICANT ACCOUNTING POLICIES - continued

#### Future removal and site restoration costs - continued

This account provides for the costs of demolishing, dismantling, tearing down, or otherwise disposing of an asset and any site restoration costs, net of actual recoveries. This account is not used when the costs relate to an asset retirement obligation.

#### **Deferred charges**

Deferred charges are recorded at cost and include an AFUDC component as allowed by the YUB.

All deferred charges are amortized to earnings on a straight-line basis over terms approved by the YUB.

Costs of feasibility studies and infrastructure planning which did not result in a capital project are amortized over terms ranging between five and ten years.

IFRS planning costs are associated with the accounting conversion from Canadian Generally Accepted Accounting Principles to International Financial Reporting Standards.

Deferred customer service costs are amortized over twelve years.

The deferred hearing cost account is used to record the deferral of costs associated with preparation and defense of applications to the YUB. The period of amortization range from 10 to 45 years.

The periods of amortization range from 10 to 45 years.

#### **Deferred insurance proceeds**

Deferred insurance proceeds represents a gain on fire insurance proceeds received related to a fire at the Whitehorse Rapids Generating Station in 1997. The proceeds are being amortized to income on the same basis as the replacement assets.

#### **Diesel Contingency Fund**

The Diesel Contingency Fund (DCF) was established by YUB Order 1996-6 through the Negotiated settlement process. The DCF is used to reimburse the Utility for costs associated with diesel generation required when there is not sufficient water for hydraulic generation to meet demand. The DCF attracts interest based upon short-term bond rates. Any negative balance attracts interest at the lowest short-term borrowing rate available to the Utility through its line of credit. The Utility is required to file an annual report with the YUB on the DCF's activity. The DCF policy is under review by the YUB. See Note 3 for further explanation.

### **Generally Accepted Accounting Principles**

#### Materials and supplies

Diesel fuel, materials and supplies are recorded at the lesser of average cost and net realizable value. Obsolete materials and supplies are recorded at salvage value in the period when obsolescence is determined. Major spare parts are recorded in the Utility's books as property, plant and equipment.

#### Property, plant and equipment

Property, plant and equipment is stated at cost and includes an AFUDC component which is recorded under rate regulated accounting. Cost includes materials, direct labour, applicable actual directly attributable administration overhead, and, if applicable, direct finance charges capitalized during construction, less accumulated amortization.

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 2. SIGNIFICANT ACCOUNTING POLICIES - continued Property, plant and equipment - continued

Amortization is based on the straight-line method over the estimated economic life of the assets as follows: Generation

Hydro-electric plants 30 to 103 years Diesel plants 25 to 72 years Wind Turbines 30 years Transmission 40 to 65 years Distribution 30 to 55 years **Buildings** 20 to 55 years Transportation 7 to 25 years Other equipment 5 to 20 years

The estimated service lives and removal costs of the assets is based upon depreciation studies conducted periodically by the Utility. A depreciation study was completed in 2012 in which the estimated useful lives of a number of asset classes was extended. This change in estimate was applied prospectively effective January 1, 2012 in accordance with the YUB's decision on the Utility's GRA for 2012 and 2013 (Note 3).

#### Asset retirement obligations

On an annual basis, the Utility identifies legal obligations associated with the retirement of tangible long-lived assets. Where a reasonable estimate of the fair value of these obligations can be determined, the total retirement costs are to be recorded as a liability at fair value, with a corresponding increase to property, plant and equipment. The Utility has determined that it has tangible long-lived assets with associated future legal obligations for retirement. As the Utility anticipates using the assets for an indefinite period, the date of removal of these assets cannot be reasonably determined, and therefore an asset retirement obligation has not been recorded. When the timing and amount of the retirement can be reasonably estimated, an asset retirement obligation and the corresponding increase in property, plant and equipment asset will be recognized.

#### Contributions in aid of construction

Certain property, plant and equipment additions are made with the assistance of cash contributions from customers or capital assistance from the Utility's Parent, the Yukon Government or the Government of Canada. These contributions are deferred upon receipt and amortized to income on the same basis as the assets to which they relate. Amortization of contributions from customers and the Government of Canada is netted on the statement of operations against amortization expense while amortization of capital assistance from the Yukon Government is disclosed separately under Other income.

#### **Deferred licensing costs**

Costs related to obtaining license renewals for hydro and diesel generation facilities are deferred and amortized to earnings on a straight-line basis over the term of the license. The Utility operates its hydro generation facilities under separate licenses, with terms ranging from 17 to 25 years. Diesel generation air emission permits have a term of three years. These costs are treated as intangible assets and are measured at initial cost and amortized over the license.

#### **Environmental liabilities**

Environmental liabilities consist of the estimated costs related to the remediation of environmentally contaminated sites.

#### Notes to Financial Statements

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 2. SIGNIFICANT ACCOUNTING POLICIES - continued Environmental liabilities - continued

The Utility will accrue a liability and record an expense, related to present or past activities of the Utility, when there is a legal obligation to remediate the contamination and the costs can be reasonably estimated. If the likelihood of the Utility's obligation to incur these costs is either not determinable or the costs cannot be reasonably estimated, the contingency is disclosed in the notes to the financial statements. The Utility reviews its estimates of future environmental liabilities on an ongoing basis as described in Note 24.

#### **Financial instruments**

Financial assets and financial liabilities are recognized on the Utility's balance sheet when the Utility becomes party to the contractual provisions of the instrument.

Cash

Cash is comprised of cash on hand and in bank accounts less bank indebtedness.

#### Accounts receivable

Accounts receivable, classified as loans and receivable, are initially measured at fair value. Subsequent to initial recognition, accounts receivable are measured at amortized cost using the effective interest rate method less any impairment.

#### Accounts payable and accrued liabilities

Accounts payable and accrued liabilities, classified as other financial liabilities, are measured at amortized cost using the effective interest rate method.

#### Construction financing and Long term debt

Construction financing and long term debt, classified as other financial liabilities, are initially recognized at fair value. Subsequent to initial recognition, construction financing and long term debt is measured at amortized cost using the effective interest rate method.

#### Transaction costs

Transaction costs are presented as a reduction from the carrying value of the related debt and are amortized using the effective interest rate method over the terms of the debts to which they relate. Transaction costs include fees paid to agents, brokers and advisors but exclude debt discounts and direct financing costs.

#### Derivative financial instruments

Derivative financial instruments are financial contracts that derive their value from changes in an underlying variable. The Utility has entered into interest rate swaps to manage interest rate risk. The Utility's interest rate swaps are designated as held for trading and are thus recognized at fair value on the date the contract has been entered into with any subsequent unrealized gains and losses reported in net income during the period in which the fair value movement occurred.

#### Fair value estimation

The carrying value of the cash, accounts receivable, bank indebtedness, accounts payable and accrued liabilities and construction financing approximate their fair value due to the immediate or short term maturity of these financial instruments. The fair value of the long term debt is estimated by discounting the future cash flows using current rates for debt instruments subject to similar risks and maturities. The fair value of derivative financial instruments is estimated using standard market valuation techniques and is provided to the Utility by the financial institution that is the counterparty to the transactions.

#### Notes to Financial Statements

(tabular amounts in thousands of dollars)

#### December 31, 2012

# 2. SIGNIFICANT ACCOUNTING POLICIES - continued

#### Employee pension plan

The Utility sponsors an employee defined benefit pension plan which provides benefits based on the length of service and average salaries for the five highest-paid consecutive years of service. Employees joining the Utility after January 1, 2002 are not eligible to participate in the defined pension plan.

Effective January 1, 2011, the Utility also sponsors an executive defined benefit pension plan and supplemental executive retirement plan. The Utility contributes amounts to the pension plans as recommended by an independent actuary.

The cost of pension benefits is actuarially determined using the projected benefits method, prorated on service, and reflects management's best estimates of investment returns, wage and salary increases, and age at retirement. Pension costs include the adjustments resulting from the plan enhancements, actuarial gains and losses, and changes in assumptions which are amortized over the expected average remaining service period of active employees. The excess of the net unrecognized actuarial gains and losses over 10% of the greater of the accrued benefit obligation and the fair value of the plan assets is amortized on a straight-line basis over the expected average remaining service period of active employees plan (2011 - 9 years) and 4 years for the executive plan (2011 - 5 years). The transitional asset (liability) arising when these policies are first applied is amortized over the average remaining service period of active employees when the amendment is recognized, which is 18 years for the employee plan and 5 years for the executive plan. The expected return on plan assets is based on the fair value of these assets.

#### **Revenue recognition**

All revenues are recognized in the period earned. Revenue from the sale of power is recognized based on cyclical meter readings. Sales of power includes an accrual for electricity deliveries not yet billed.

#### Measurement uncertainty

The preparation of financial statements in accordance with Canadian GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. This mainly affects revenue, accounts receivable, property, plant and equipment, asset retirement obligations, employee pension obligations and regulated assets and liabilities. Actual results could differ by a significant amount from these estimates.

Management's estimates and assumptions, especially those affecting the reported amounts of regulated assets and the Utility's ability to recover the cost of these assets through future rates, are subject to decisions of the YUB as described in Note 3.

#### **ACCOUNTING CHANGES**

#### **Future Accounting Changes**

Publically accountable enterprises were required to move from Canadian GAAP to International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board (IASB) and adopted by the Canadian Institute of Chartered Accountants (CICA), for years beginning on or after January 1, 2011. IFRS uses a conceptual framework similar to Canadian GAAP, but there are significant differences in recognition, measurement and disclosures. In February 2013, the CICA Accounting Standards Board announced an extension of the existing deferral for qualifying rate regulated entities to January 1, 2015. This further extension is offered in recognition that the IASB is on track to issue an interim standard by the end of the 2013 year. The Utility has chosen to adopt this deferral and continues to monitor the situation.

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 3. FINANCIAL STATEMENT EFFECTS OF RATE REGULATION General Rate Application

In April 2012, the Utility filed a GRA for the years 2012 and 2013 requesting rate increases of 6.4% and 6.5% respectively. After two rounds of interrogatories, an oral public hearing was held in November of 2012. On June 24, 2013, the YUB approved on-going rate riders of 11.01% for non-industrial customers and 7.36% for industrial customers to reflect the cumulative rate increases for 2012 and 2013. In addition, a one year rider of 3.62% was approved to collect the remaining approved net revenue shortfall for 2012 and 2013.

These financial statements reflect the approved rate increase for 2012 and all other directives issued by the YUB which affected the Utility's financial statements for 2012, including the directive issued regarding the DCF and the Energy Reconciliation Adjustment (ERA) (see below).

#### **Diesel Contingency Fund and Energy Reconciliation Adjustment**

As part of the 2012/13 GRA, the Utility filed for changes to the DCF and ERA provisions of the Wholesale Primary rate schedule. The YUB deferred a decision on these two issues pending further consultation with affected utilities and a separate proceeding to review the impacts of proposed changes. Management expects this process will be complete in 2013. In accordance with the YUB's directive, the Utility has deferred the recognition of the additional \$3,716,000 collected from rate payers under the proposed DCF policy (Note 15) and the \$1,1,72,000 in additional revenues under the proposed ERA adjustment (Notes 5 & 10) pending the final resolution of these two matters.

#### **Regulatory Accounts**

Certain items in these financial statements are accounted for differently than they would be in the absence of rate regulation.

Where regulatory decisions dictate, the Utility defers certain costs or revenues as assets or liabilities on the balance sheet and records them as expenses or revenues on the statement of operations as it collects or refunds amounts through future customer rates. Any adjustments to these deferred regulatory accounts are recognized in income in the period that the YUB renders a subsequent decision.

Regulatory assets represent future costs associated with certain revenues, incurred in the current period or in prior periods, which are expected to be recovered from customers in future periods through the rate-setting process. Regulatory liabilities represent future reductions or limitations of increases in revenues associated with amounts that are expected to be refunded to customers as a result of the rate-setting process.

In the absence of rate regulation the Utility's net income would have increased by \$585,000 in 2012 (2011 - decreased by \$4,923,000). The following describes each of the circumstances in which rate regulation affects the accounting for a transaction or event:

	2012	2011	Expected remaining recovery/ settlement (years)	For 2012: In the absence of Rate Regulation the Utility's Net Income would have increased (decreased) by:
Regulatory assets:				
Deferred charges (Note 8), net book value				
Feasibility studies and infrastructure planning	\$ 17,313	\$ 14,885	5 to 10	\$ (2,428)
Deferred customer service costs	507	571	10	64
Hearing costs	2,950	2,376	10 to 45	(574)
Dam safety review	72	95	5	23
IFRS planning	468	566	Indeterminate	98
Deferred uninsured losses (Note 6)	152	178	Indeterminate	26
	21,462	18,671		(2,791)

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 3. FINANCIAL STATEMENT EFFECTS OF RATE REGULATION - continued

Regulatory liabilities: Deferred insurance proceeds (Note 13) Future removal and site restoration costs (Note 14) Diesel contingency fund (Note 15)	6,276 4,711 4,628	6,546 4,711 902	25 Indeterminate Indeterminate	(270) 3,726
	15,615	12,159		\$ 3,456
Net impact of assets and liabilities Impact of other items through Income statement Fuel Price Adjustment	\$ 5,847	\$ 6,512		\$ 665 (80)
Total effect	 			\$ 585

#### **Regulatory assets**

#### (a) Deferred charges

Deferred charges represent incurred costs which have been deferred and are being amortized over various periods. In the absence of rate regulation, GAAP would require such costs to be recognized as expenses in the year incurred.

#### Feasibility studies and infrastructure planning

The Utility undertakes certain projects whose objective is to determine the feasibility of a range of solutions. While in progress, the costs of these feasibility projects are included in these accounts. As well, if the feasibility project determines there is not a viable solution, these projects are closed out and amortized to income over a prescribed number of years. The cost of feasibility projects that result in a capital project are transferred to the cost of the resultant project. In the absence of rate regulation, expenses in 2012 would have been \$2,429,000 higher (2011 - \$3,421,000 higher expenses).

#### Deferred customer service costs

These are costs associated with negotiating terms of service with a new industrial customer. In the absence of rate regulation, expenses in 2012 would have been \$64,000 lower (2011 - \$64,000 lower expenses).

#### **Hearing costs**

These costs are associated with the YUB regulatory proceedings. The costs consist primarily of various rate and project review proceedings. The Utility is directed to defer and amortize the costs over terms at the discretion of the YUB. In the absence of rate regulation, expenses in 2012 would have been \$574,000 higher (2011 - \$741,000 higher expenses).

#### Dam safety review

The Utility has a program of conducting reviews of the safety of its dams in accordance with standards set by the Canadian Dam Association. External consultants are hired every five years with intermittent costs incurred in the interim periods. These costs are amortized over five years as approved by the Utility's 1991/92 General Rate Application and reconfirmed in YUB Order 2005-12 and YUB Order 2009-8. In the absence of rate regulation, expenses in 2012 would have been \$23,000 lower (2011 - \$24,000 lower expenses).

#### IFRS planning

These costs are associated with the accounting conversion from Canadian GAAP to IFRS. In the absence of rate regulation, expenses in 2012 would have been \$98,000 higher (2011 - \$132,000 higher expenses).

### Notes to Financial Statements

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 3. FINANCIAL STATEMENT EFFECTS OF RATE REGULATION - continued (b) Deferred uninsured losses

The YUB has approved the use of a deferral account for uninsured damages and injuries as a means of selfinsurance. The account is maintained through an annual provision approved by the YUB. In order to eliminate the deficit rate payers owed as a result of uninsured losses, the Utility was directed by YUB Order 2013-01 to transfer the balance of \$397,000 in the Faro mine dewatering deferral revenue account as at January 1, 2012 to Deferred uninsured losses and to amortize the remaining negative balance in the account of \$180,000 over a five-year period. In addition, the Utility was directed by YUB Order 2013-01 to record an annual provision of \$190,000 in 2012 and each subsequent year. In the absence of rate regulation, GAAP would require costs to be expensed as incurred and, therefore, expenses in 2012 would have been lower by \$26,000 (2011 - \$144,000 higher expenses). The period over which the provision will be recovered is dependent on the magnitude of future actual losses incurred and cannot be estimated.

#### **Regulatory liabilities**

#### (c) Faro mine dewatering deferral revenue

As directed by YUB Order 1998-5, all revenues, less any incremental costs to provide the service, collected from the Faro Mine under Rate Schedule 34 (Faro Mine Firm Shutdown Power) prior to December 31, 2004, were deferred for the benefit of ratepayers pending direction from the YUB. YUB Order 2005-12 confirmed that effective January 1, 2005 the Faro minesite would be charged the General Service-Government rate so there will be no further increases to Faro mine dewatering deferral revenue account.

As directed by YUB Order 2013-01, the balance in the account of \$397,000 as at January 1, 2012 has been transferred to Deferred uninsured losses.

#### (d) Deferred insurance proceeds

The deferred insurance proceeds relates to a fire at the Whitehorse Rapids Generating Station in 1997 which, pursuant to YUB Order 2000-3, is being amortized to income at the same rate as the replacement assets. In the absence of rate regulation, GAAP would have required the gain to have been completely recognized as income in the year received. As a result, the Utility's net income in 2012 would have been lower by the amount of the amortization of \$270,000 (2011 - \$270,000 lower).

#### (e) Future removal and site restoration costs

Pursuant to amortization rates approved by the YUB in the Utility's previous general rate applications the Utility has maintained a reserve for future removal and site restoration costs. As a result of the YUB Order 2005-12, effective January 1 2005, the Utility is required to maintain this reserve as a regulatory provision in addition to any asset retirement obligations. The provision is not to exceed the cumulative value of the provision at December 31, 2004 of \$5,757,000. YUB Order 2005-12 also directs the Utility to notify interveners and interested parties when the balance of the provision reaches \$2,000,000.

Costs of dismantling capital assets, including site remediation, will be applied to this regulatory liability if they do not otherwise relate to an asset retirement obligation. In a non-regulated industry, future removal and site restoration costs would be limited to asset retirement obligations, and the removal and site restoration costs would be expensed in the year incurred if they did not relate to an asset retirement obligation. In the absence of rate regulation, the Utility's 2012 expense would have been higher by the amount of actual removal and site restoration costs incurred in the year of \$0 (2011 expenses - \$53,000 higher).

The period over which the provision will be settled is dependent on the future costs of demolishing, dismantling, tearing down, or otherwise disposing of the asset, and site restoration net of actual recoveries, and is, therefore, indeterminate.

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 3. FINANCIAL STATEMENT EFFECTS OF RATE REGULATION - continued

#### (f) Diesel contingency fund

In the absence of regulation, GAAP would have required any amounts earned or incurred related to the DCF to be included in the Utility's net income in the year in which they occurred. In the absence of rate regulation, the Utility's net income for 2012 would have been higher by \$3,716,000 (2011 - income higher by \$11,000).

#### (g) Fuel price adjustment

OIC 1998/90 directs the YUB to permit the Utility to adjust electricity rates to reflect fluctuations in the price of diesel fuel. The amount by which actual fuel prices vary from the YUB approved rates is deferred and recovered from or refunded to customers in a future period.

In the absence of rate regulation, GAAP would require that actual diesel fuel expenses be included in the operating result of the year that they are incurred. In 2012, fuel expenses were recovered and consequently higher by \$80,000 (2011 fuel expense higher by \$250,000).

#### Other items affected by rate regulation

It is the Utility's policy to charge to income, in the year of disposal, any gain or loss upon retirement or disposal of land or vehicles. As approved by the YUB, the gain or loss on all other property, plant and equipment is deferred and amortized over the expected life of the remaining pool of similar assets. In the absence of rate regulation, GAAP would require the gain or loss on the disposal or retirement of all property, plant and equipment to be included in income in the period of disposal or retirement.

The Utility's policy of maintaining a constant capital structure of 60% debt and 40% equity is reviewed by the YUB in assessing the amount the Corporation is entitled to as a return on rate base. In the absence of rate regulation, the Utility would determine the appropriate capital structure solely based on decisions by the Board of Directors of the Utility, which may differ from the current policy.

All amounts maintained as regulatory assets and liabilities are expected to be recovered or settled over the periods noted above. However, there are risks and uncertainties associated with the recovery or settlement related to potential future decisions of the YUB which could result in material adjustments to these assets and liabilities.

#### 4. CASH

The cash balance includes an amount of \$1,709,508 (2011 - \$7,235,404) that is restricted for the payment of a contractor holdback and an amount of \$4,628,000 (2011 - \$902,000) which is designated for the purpose of supporting the DCF liability.

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 5. ACCOUNTS RECEIVABLE

· · · · · · · · · · · · · · · · · · ·	 2012	2011
Wholesale energy sales	\$ 5,924	\$ 2,663
Green Infrastructure Funding (Note 14)	2,130	19,724
Retail energy sales	2,192	1,528
Other	2,475	1,662
	\$ 12,721	\$ 25,577

Included in Accounts Receivable - Wholesale energy sales is an amount equal to \$1,172,000 representing ERA revenues deferred by Order of YUB. See Note 3 for further explanation.

#### 6. DEFERRED UNINSURED LOSSES

		2012		2011
Opening balance	\$	576	\$	432
Provision		(226)	Ŧ	(100)
Transfer from Faro mine dewatering deferral revenue (Note 13)		(397)		-
Losses incurred		<b>、</b> ,		
Asset replacements		199		244
Closing balance	\$	152	¢	576
closing balance	Ψ	102	Ψ	010

In order to eliminate the deficit rate payers owed as a result of uninsured losses, the Utility was directed by YUB Order 2013-01 to transfer the balance of \$397,000 in the Faro mine dewatering deferral revenue account as at January 1, 2012 to Deferred uninsured losses and to amortize the remaining negative balance in the account of \$180,000 over a five-year period. In addition, the Utility was directed by YUB Order 2013-01 to record an annual provision of \$190,000 in 2012 and each subsequent year.

### 7. PROPERTY, PLANT AND EQUIPMENT

	\$ 495,796	\$	106,766	\$ 3	89,030	\$	374,591
Construction-in-progress	 3,325	 	-	 	3,325		8,056
Land and land rights	1,112		-		1,112		1,112
Transportation	4,367		1,520		2,847		2,954
Buildings and other equipment	23,838		9,602		14,236		11,871
Distribution	29,142		10,900		18,242		18,666
Transmission	146,680		20,932	1	25,748		115,971
Generation	\$ 287,332	\$	63,812	\$ 2	223,520	\$	215,961
	 Cost	 Acc Am	cumulated	 Ν	2012 Net book Value		2011 Net book Value

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 8. DEFERRED CHARGES AND INTANGIBLE ASSETS

	Cost	Acc Am	cumulated nortization	<b>2012</b> Net book Value	2011 Net book Value
Intangible assets:					
Deferred licensing costs	\$ 11,544	\$	5,697	\$ 5,847	\$ 5,747
Deferred charges:					
Feasibility studies and					
infrastructure planning	21,896		4,583	17,313	14,885
IFRS planning	581		113	468	566
Hearing costs	6,291		3,341	2,950	2,376
Deferred customer service costs	769		262	507	571
Dam safety review	332		260	72	95
	\$ 41,413	\$	14,256	\$ 27,157	\$ 24,240

#### 9. BANK INDEBTEDNESS

The Utility has access to a \$10 million line of credit. The account accrues interest on withdrawals at prime rate minus 0.25% per annum. At December 31, 2012, the balance of this line of credit was \$0 (2011 - \$4,782,352).

#### 10. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	2012				
Trade payables Employee compensation Other	\$	15,055 336 2,032	\$	27,330 219 445	
	\$	17,423	\$	27,994	

Included in Other accounts payable is an amount equal to \$1,172,000 representing ERA revenues deferred by Order of YUB. See Note 3 for further explanation.

#### 11. CONSTRUCTION FINANCING

	2012				
Construction financing	\$	18,905	\$	13,905	
	\$	18,905	\$	13,905	

Construction financing balances are monies advanced from the Parent to assist in the development of Utility infrastructure and are repayable within one year. Interest on the funding agreements ranged from 1.25% to 2.75%. Interest is payable annually at December 31 and at the maturity date.

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

### 12. FARO MINE DEWATERING DEFERRAL REVENUE

	 2012	 2011
Faro mine dewatering deferral revenue account: Opening balance Transfer to deferred uninsured losses (Note 6)	\$ 397 (397)	\$ 397 -
Closing balance	\$ -	\$ 397

As directed by YUB Order 2013-01, the balance in the account as at January 1, 2012 has been transferred to Deferred uninsured losses.

### 13. CONTRIBUTIONS IN AID OF CONSTRUCTION

				2012	2011
	Gross	Acc Am	umulated ortization	Net	Net
	 		0111011011	 	 
Contributions from Canada (Note 5)	\$ 71,000	\$	1,066	\$ 69,934	\$ 67,129
Capital assistance from Parent since 1998	73,312		4,217	69,095	70,290
Contributions from customers since 1998	23,347		5,308	18,039	19,047
Contributions from YG since 1998	10,845		1,032	9,813	9,933
Pre-1998 contributions	1,739		1,162	577	621
Deferred insurance proceeds	 11,602		5,326	6,276	 6,546
	\$ 191,845	\$	18,111	\$ 173,734	\$ 173,566

The Utility has entered into a contribution agreement with the Government of Canada for Green Infrastructure Funding for Stage 2 of the Carmacks to Stewart Crossing Transmission Line and the Mayo B Hydro Enhancement projects. The Utility is entitled to reimbursement of 50% of eligible costs to a maximum of \$71 million during the period May 2009 to March 2014.

The sources of contributions received prior to 1998 were not recorded separately.

### 14. FUTURE REMOVAL AND SITE RESTORATION COSTS

		2012		
Regulatory provision Provision for decommissioning of Minto Mine spur line	\$	4,711 2,522	\$	4,711 -
Closing balance	\$	7,233	\$	4,711

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

### December 31, 2012

#### DIESEL CONTINGENCY FUND 15.

	2012		2011
Opening balance	\$ 902	\$	891
Transfers (Note 3)	3,716		-
Interest	10		11
Closing balance	\$ 4,628	\$	902
		1996-2020/2019-0000-0000-0000-0000-0000-0000-000-00	n an

#### 16. LONG-TERM DEBT

The Utility's long-term debt is summarized as follows:

	2012	2011
Yukon Development Corporation \$81,890,873 term note bearing interest at 4.25% repayable in annual installments of \$3,000,000 principal, plus accrued interest with the balance of \$68,890,873 due December 31, 2015 \$	75,891	\$ 78,891
\$17,095,000 term note bearing interest at 3.69% repayable in annual installments of \$683,800 principal, plus accrued interest, due December 31, 2036	16,411	17,095
\$21,900,000 flexible term note bearing interest at 5.46% repayable in annual installments of \$336,923 principal, plus accrued interest with the balance of \$8,423,078 due December 31, 2051	21,563	21,900
Unsecured advance bearing interest at 3.97%, due one year after demand	2,053	2,053
<b>TD Bank</b> \$12,400,000 term note bearing interest at 4.02% payable in monthly installments of \$94,406 interest and principal, with the balance due September 30, 2016. The note is guaranteed by the Yukon Government. The terms of the note were renewed October 3, 2011	3,939	4,891
The Utility entered into an interest rate swap to convert the interest rate on the Bankers' Acceptances amounts from a variable interest rate based on the Bankers' Acceptances rates to a fixed rate of 2.69% per annum. Principal drawdowns are monthly with the balance due on December 28, 2022	11,000	-
<b>Carmacks Stewart First Nation Liability</b> Long-term liability payable to several First Nations related to the building of the Carmacks Stewart Transmission Line. These are non interest bearing, repayable in varying installments, due in 2028	340	371
Less current portion	<b>131,197</b> 5,356	 125,201 4,974
\$	125,841	\$ 120,227

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 16. LONG-TERM DEBT - continued

#### \$81,890,873 Term note

On January 1, 2011, the Utility entered into an agreement with YDC to renegotiate terms of all outstanding debt, excluding the term note related to the transmission line construction financing, between the two companies in the amount of \$81,890,873.

#### \$17,095,000 Term note

On December 31, 2011, the Utility entered into an agreement with YDC to arrange financing for the purpose of continuing to develop the electrical infrastructure in the Yukon.

#### \$21,900,000 Flexible Term Note

The terms of the flexible term note provide for a maximum amount of interest payable within a calendar year, calculated based on the actual grid generation on the electrical grid system connected with the Mayo Hydro Enhancement Project. The amount of interest payable as a result of the interest rate exceeding the maximum interest payable will abate forever.

#### **Unsecured Advance**

The Utility declared a dividend to YDC in the amount of \$0 (2011 - \$2,053,000).

#### **TD Bank Loan and Interest Rate Swap**

On December 28, 2012, the Utility entered into a loan and interest rate swap with TD Bank to arrange financing for the purpose of continuing to develop the electrical infrastructure in the Yukon.

#### Long-term debt repayment

Scheduled repayments for all long-term debt are as follows:

	\$ 131.197	
Thereafter	44,435	
2017	1,406	
2016	2,232	
2015	72,355	
2014	5,413	
2013	5,356	

#### Fair value

Fair value at December 31, 2012 of \$142 million (2011 - \$135 million) for all long-term debt including current portions was estimated using discounted cash flows based on an estimate of the Utility's current borrowing rate for similar borrowing arrangements.

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

### December 31, 2012

18.

19.

#### 17. SALES OF POWER

		2012		2011
Wholesale	\$	25 875	\$	24 170
Industrial	÷	5.086	Ŷ	4,599
General service		3.627		3.342
Residential		1,930		1.800
Secondary sales		165		46
Sentinal and street lights		94		90
	\$	36,777	\$	34,047
OPERATIONS AND MAINTENANCE EXPENSES		2012		2011
Margan and han afita		4 705		4.005
Maintenance	\$	4,765	\$	4,005
- lines and substations		1 620		898
- hydro, diesel and wind		1,177		1.297
- building and vehicle		1.020		1 205
Fuel and purchased power		827		2,727
Water level measurement		237		156
	\$	9,646	\$	10,288
		2012		2011
Wages and benefits	\$	4,870	\$	4.339
Insurance and taxes		1,193		1,071
General office		1,123		1,281
Regulatory loss		664		248
Information systems		646		583
Environmental		536		325
Training, recruitment and development		344		459
Intercompany services		178		251
Material management and contracting		157		26
Board of Directors	·····	112		289
	\$	9,823	\$	8,872

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 20. RELATED PARTY TRANSACTIONS

The Utility is related in terms of common ownership to all Government of Yukon (YG) departments, agencies and Crown Corporations. Transactions are entered into in the normal course of operations with these entities. All transactions are recorded at the rates approved by the YUB.

Revenue from related parties is included in other revenue on the statement of operations. Interim Electrical Rebate program revenues are received from YDC in accordance with terms established by YG which established the program to protect certain ratepayers by minimizing the impact of rate increases. These revenues are included in the sales of power on the statement of operations.

The following table summarizes the Utility's related party transactions for the year:

	 2012		2011
Revenue			
Sales of service to YDC	\$ 177	\$	231
Program cost reimbursement from YG	100	•	100
Rate subsidy received from YDC	268		262
Operating expenses			
Payment of interest on borrowings from YDC	\$ 4,621	\$	3,961
Other receipts			
Project contribution from YDC	\$ 500	\$	1,300
Construction financing from YDC	10,000	·	20,000
Other payments			
Repayment of principal on borrowings from YDC	\$ 4.021	\$	20.424
Repayment of construction financing from YDC	5,000	•	.,

At the end of the year, the amounts receivable from and due to related entities are as follows:

		 2012		
YDC				
Accou	unts receivable	\$ 342	\$	499
Accou	unts payable	\$ 520	Ŝ	836
Const	truction financing	\$ 18,905	Ś	13,905
Curre	ent portion of long-term debt	\$ 4,021	\$	4.021
Long-	-term debt	\$ 111,897	\$	115,918
YG				,
Αссοι	unts receivable	\$ 502	\$	420
Αссοι	unts payable	175		-

These balances are non-interest bearing and payable on demand except for construction financing and long-term debt.

### Notes to Financial Statements

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 21. PENSION COSTS AND OBLIGATIONS

Assumed rate of salary escalation

An actuarial valuation for funding purposes of the employee defined benefit plan was performed as of January 1, 2012. The next valuation for funding purposes will be conducted as of January 1, 2013. An actuarial valuation for funding purposes of the executive defined benefit plan and supplemental executive retirement plan was performed as of January 1, 2011. The next valuation for funding purposes will be conducted as of January 1, 2014. The pension costs and obligations are based on the data used in these funding valuations and have been projected to December 31, 2012 in accordance with generally accepted actuarial standards.

The fair value of the plan assets is based on market values as reported by the plans' custodians as at December 31, 2012. The distribution of assets by major asset class is as follows:

	December 31, 2012	December 31, 2011
Equities	47.3%	45.9%
Fixed income securities	41.3%	43.5%
Real estate	11.4%	10.6%

Information about the Utility's defined benefit plans as at December 31, in aggregate, is as follows:

		2012		2011
Accrued benefit obligation determined by actuarial valuation Fair value of plan assets	\$	17,490 11,174	\$	13,568 9,665
Funded status - plan deficit Unrecognised amounts:	\$	6,316	\$	3,903
- Transitional asset (liability) - Net accumulated actuarial losses		(132) (5,137)		(192) (2,573)
Accrued benefit liability	\$	1,047	\$	1,137
Pension costs Employer contributions Employee contributions Benefits paid	\$ \$ \$ \$	771 863 119 183	\$ \$ \$ \$ \$	561 596 111 137
Significant assumptions for employee defined benefit plan:		2012		2011
Discount rate - accrued benefit obligation Discount rate - pension costs Expected long-term rate of return on plan assets Assumed rate of salary escalation		4.50% 5.25% 6.25% 3.00%		5.25% 5.75% 6.50% 3.00%
Significant assumptions for executive pension plans: Discount rate - accrued benefit obligation Discount rate - pension costs Expected long-term rate of return on plan assets		4.25% 5.25% 5.50%		4.50% 5.75% 5.50%

The accrued benefit liability has been recorded by the Utility and is separately shown on the balance sheet.

3.50%

3.50%

# Notes to Financial Statements

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 21. PENSION COSTS AND OBLIGATIONS - continued

Employees joining the Utility after January 1, 2002 are not eligible to participate in the employee defined benefit plan. The Utility makes contributions to a Registered Retirement Savings Plan ("RRSP") on behalf of these employees and employees hired before January 1, 2002 who belonged to the employee defined benefit plan and elected to opt out of that plan. The RRSP is a defined contribution plan. The costs recognized for the period are equal to the Utility's contribution to the plan. During 2012, these were \$285,000 (2011 - \$306,000).

Total cash payments for employee future benefits for 2012, consisting of cash contributed by the Utility to its funded defined benefit pension plans and cash contributed directly to the RRSP were \$1,148,000 (2011 - \$902,000).

#### 22. COMMITMENTS

#### Aishihik water licence

The Yukon Territory Water Board issued a water use license in 2002, valid until December 31, 2019, for the Utility's Aishihik Lake facility. In addition to maintaining a minimum and maximum water level, this license commits the Utility to meet a number of future requirements including annual fish monitoring programs.

Fish monitoring programs are also required under an authorization provided by the federal government Department of Fisheries and Oceans, which is valid until December 31, 2019. The costs of meeting these requirements are accounted for as water licence costs in the year they are paid.

#### **Contractual obligations**

The Utility has entered into contracts to purchase products or services for which the liability has not been incurred as at December 31 2012 as the product or service had not been provided. The total commitments at year end are \$6,429,000 (2011 - \$4,356,000).

#### 23. CONTINGENCIES

#### Carmacks to Stewart Crossing Transmission Project

The Utility completed the construction of the Carmacks to Stewart Crossing Transmission Line project during 2011. In April 2011, the line construction contractor notified the Utility of a potential claim under the contract alleging increased costs of \$1,800,000 due to scheduling delays and change in scope caused by the Utility. The outcome of the potential claim is not determinable at this time and no amount has been recognized in the financial statements.

#### Aishihik Third Turbine Project.

This project was commissioned into service in December 2011. On March 2, 2012, the general contractor filed a claim with the Supreme Court of Yukon for \$4,000,000 plus interest and costs alleging the Utility has not paid for work performed. The Utility has informed the contractor of claims for incomplete contract scope, uncorrected deficiencies and other claims. The outcome of the claim is not determinable at this time and no amount has been recognized in the financial statements.

Notes to Financial Statements (tabular amounts in thousands of dollars)

#### December 31, 2012

#### 24. ENVIRONMENTAL LIABILITIES

The Utility's activities are subject to various federal and territorial laws and regulations governing the protection of the environment or to minimize any adverse impact thereon. The Utility conducts its operations so as to protect public health and the environment and believes its operations are materially in compliance with all applicable laws and regulations.

The Utility has conducted environmental site assessments at all its diesel plant sites. At sites where environmental contamination was found and a legal obligation to remediate the site existed, the Utility has conducted a full remediation. As at December 31, 2012 no new environmental liabilities, for which a legal obligation exists to remediate, have been identified by the Utility. The Utility will continue to use its Environmental Management System to monitor and assess previous and potential existing environmental liabilities on an ongoing basis.

#### 25. RISK MANAGEMENT AND FINANCIAL INSTRUMENTS

At December 31, 2012, the Utility's financial instruments included cash, accounts receivable, bank indebtedness, accounts payable and accrued liabilities, construction financing, long term debt and interest rate swaps. The fair value of cash, accounts receivable, bank indebtedness, accounts payable and accrued liabilities and construction financing approximate their carrying value due to the immediate or short-term maturity of these financial instruments.

The long-term debt is accounted for at amortized cost using the effective interest rate method. The fair value of the long-term debt is estimated by discounting the future cash flows using current rates for debt instruments subject to similar risks and maturities as disclosed in Note 16.

Interest rate swaps are financial contracts that derive their value from changes in an underlying variable. The Utility's interest rate swaps are designated as held for trading and are thus recognized at their fair value on the date the contract has been entered into with any subsequent unrealized gains and losses reported in net income during the period in which the fair value movement occurred. The fair value of the interest rate swaps is estimated using standard market valuation techniques and is provided to the Utility by the financial institution that is the counterparty to the transactions.

The Utility did not engage in any other hedging transactions.

#### Interest rate risk

Interest rate risk is the risk that future cash flows or fair value of a financial instrument will fluctuate due to changes in market interest rates. The Utility is not exposed to significant interest rate risk due to its long-term debt having fixed interest rates, with the exception of the interest rate swap.

As at December 31, 2012, the Utility had an interest rate swap agreement in place with a notional principal amount of \$11 million. The agreement effectively changes the Utility's interest rate exposure on this notional amount from a floating rate to a fixed rate of 2.69%.

The fair value of the interest rate swap agreement on December 31, 2012 was a liability of \$155,000. A 100 basis point decrease/increase in the interest rate assumption would have resulted in an increase/decrease in the interest rate swap agreements fair value of \$8,000.

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 25. RISK MANAGEMENT AND FINANCIAL INSTRUMENTS - continued

#### Credit risk

Credit risk is the risk of failure of a debtor or counterparty to honour its contractual obligations resulting in financial loss to the Utility. The Utility's credit risk is minimal in that its primary customer is a regulated utility.

#### Liquidity risk

Liquidity risk is the risk that the Utility will not be able to meet its financial obligations as they fall due. The Utility's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Utility's reputation.

#### Fair values

The following table illustrates the fair value hierarchy of the Corporation's financial instruments as at December 31, 2012:

	Quoted prices in active markets (Level 1)	Other observable inputs (Level 2)	Unobservable inputs (Level 3)	Total
Derivative related liability	-	\$155	-	\$155

#### 26. CAPITAL MANAGEMENT

The Utility's capital is its shareholder's equity which is comprised of share capital, contributed surplus and accumulated funds in the form of retained earnings. The Utility manages its equity by managing revenues, expenses, assets and liabilities to ensure the Utility effectively achieves its objectives while remaining a going concern.

The Utility monitors its capital on the basis of the ratio of total debt to total capitalization. Debt is calculated as total borrowings, which is comprised of long-term debt, including the portion of long-term debt due within one year. Short term debt related to assets under construction at the balance sheet date is excluded from the cost of debt calculation, as the assets are similarly excluded from the determination of rate base. In addition the provision for decommissioning of the Minto Mine spur line has been added. Total capitalization is calculated as total debt plus total shareholder's equity as shown on the balance sheet. The Utility maintains a balance in retained earnings as an indicator of the Utility's equity position.

The Utility has a policy which defines it's capital structure at a ratio of 60% debt and 40% equity. This policy has been reviewed and accepted by the YUB.

#### **Notes to Financial Statements**

(tabular amounts in thousands of dollars)

#### December 31, 2012

#### 26. CAPITAL MANAGEMENT - continued

The table below summarizes the Utility's total debt to total capitalization position:

		2012	 2011
Long-term debt due within one year Long-term debt	\$	5,356 125,841	\$ 4,974 120,227
Total debt Add provision for decommissioning of Minto Mine spur line		131,197 2,522	125,201 -
Total debt to include in the calculation	\$	133,719	\$ 125,201
Share capital Contributed surplus Retained earnings	\$	39,000 14,600 35,044	\$ 39,000 14,600 29,612
Total equity		88,644	83,212
Total capitalization	\$	222,363	\$ 208,413
Total debt to total capitalization 60 %		60 %	60 %

There were no changes in the Utility's approach to capital management during the period.

#### 27. **COMPARATIVE FIGURES**

Certain 2011 figures have been reclassified to conform with the current year's presentation.

# Yukon Energy Transmission and Generation Facilities



Atlin

\*WAF Whitehorse–Aishihik–Faro grid



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Cover: Icefog and the sunrise bathe the Whitehorse dam in a cloud of golden light. Yukon Energy

