

YUKON ENERGY 2013 Business Plan

December 2012



**YUKON
ENERGY**

your needs power what we do

TABLE OF CONTENTS

2012 Review/2013 Preview.....	3-14
Company Profile.....	14
Mandate.....	14
Mission & Values.....	14
Strategic Priorities.....	15-16
Major 2013 Initiatives.....	16-17
Economic Outlook.....	17-18
Planning Assumptions.....	18-20
Annual Sales Volumes by Customer Class.....	21
Customer Class Breakdown 2013.....	21
Annual Generation by Type.....	22
2012 Generation.....	22
Employees by Community.....	23
2013 Capital Budget Breakdown.....	23

2012 REVIEW/2013 PREVIEW

This business plan outlines the goals and strategies for Yukon Energy for 2013 and reflects the Corporation's budgeting to achieve those goals. It also gives a summary of our 2012 major initiatives and a look ahead to 2013.

Yukon Energy's primary focus in 2012 was a continuation of our work of improving system reliability while moving ahead with projects/concepts to ensure there is enough sustainable electricity available to meet the growing demand. There was also an emphasis on engaging with Yukoners to help create a sustainable energy future for the territory.

Reliability

Almost four years ago, Yukon Energy embarked on an aggressive capital maintenance schedule that saw approximately two-thirds 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. Overall, we are seeing positive results.

In 2011 we had 22 controllable outages on our Yukon grid, including three planned outages. In 2012 we had 30 controllable outages on the grid, but 14 of those were planned. That means that the number of outages that were caused by equipment failure or human error has dropped (from 19 in 2011 to 16 in 2012). Of particular note is the decrease in controllable outages on the northern (Mayo-Dawson) portion of our grid, going from 13 in 2011 to seven in 2012.

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

Also of note is the fact that for the second year in a row we did not have a grid-wide black-out. This shows the success of the modifications we have been making to our protection system. As the number of customers affected by an outage decreases, so does the amount of time required to restore power.

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 multi-year basis.

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.

Energy Conservation & Efficiencies 2012

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 energy needs of the territory.

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 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 for the remainder of this winter to determine which will best suit our northern needs.

Early in 2012 we hosted an energy conservation mini-charrette 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.

During the summer Yukon Energy partnered with 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'll engage youth again through our partnership with the Department of Education and Energy Solutions Centre to bring energy dashboards to three Yukon schools. The dashboards will show students, teachers and parents just how much energy is being used by the schools at any given time, and will encourage conservation. Watch for a school energy challenge in 2013.

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 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 an RFP 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'll 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 on line in 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.

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 \$2.5M-\$3.0M 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

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.

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 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 four megawatts.

Liquefied Natural Gas

Yukon Energy is assessing the feasibility of using liquefied natural gas (LNG) as a transition source of energy for power and district heat. LNG is less expensive than diesel and produces fewer greenhouse gas emissions. The idea would be to use LNG in the shorter term while we continue to search for affordable new renewable sources of energy. We will continue to investigate this potential option in 2013.

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 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 clean 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 kW 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.

Stewardship & 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 metre long 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 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.

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 now been given to the Yukon Utilities Board for review.

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 4 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 also 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 which 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 Plain gas development
- Grid connection to B.C. or Alaska – needs commitments by others

Follow-up Workshops

During an energy charrette hosted by Yukon Energy in 2011, stakeholders and the public asked us to do more research into the viability of a number of potential energy options. Along with doing the technical research, 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 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 have a wind workshop planned and possibly a second one on district heating.

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. The increases would impact both Yukon Energy and Yukon Electrical customers.

The YUB is currently reviewing our request; we expect a decision in the first few months of 2013. In the meantime, the utilities board has allowed a 6.4 percent interim rate increase for 2012 and a 3.75 percent interim rate increase starting on January 1, 2013. Once the Utilities Board makes its ruling, these charges will be adjusted based on the final outcome (in other words, customers may be refunded some of the money if the YUB only gives us a portion of the increase we have asked for).

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.

Safety

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 & 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.

Human Resources

Yukon Energy employs approximately 90 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 skill, 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

Board of Directors

Erin Stehelin was appointed to Yukon Energy's Board for a three year term to November 2015. Paul Birckel and Jackie Bazett were reappointed for six months each from May to November 2012. Their two seats are now vacant as of December 2012.

COMPANY PROFILE

Yukon Energy is incorporated under the *Business Corporations Act* and is a wholly-owned subsidiary of Yukon Development Corporation, a crown of the Yukon government. We generate, transmit, and distribute electrical energy in Yukon.

Yukon Energy was established in 1987 and now supports almost 15,000 electricity customers. Distribution to these customers is shared with Yukon Electrical Company Ltd.

Yukon Energy has the capacity to generate approximately 132 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), 39 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 has approximately 90 employees located in Whitehorse, Faro, Mayo and Dawson City.

MANDATE

Yukon Energy plans, generates, transmits and distributes a continuing and adequate supply of cost-effective, sustainable, clean and reliable energy for customers in Yukon.

VISION

Yukon Energy has a vision for Yukon's energy future that embraces the social, economic and environmental needs of all Yukoners. Every decision we make is driven by that vision.

VALUES

- Respect – we will operate with respect for one another
- Team Work – we will foster a team based approach to all of our challenges
- Integrity – we will act with integrity at all times
- Safety – we will prioritize safety and employee wellness in all our actions
- Transparency – We will operate in a manner that ensures we are transparent and accountable to all our customers and Yukon residents

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 systems 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 financing 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 partnership and investment plan to build new energy projects with Yukon First Nation partners.
- 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 IPP 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 complimentary to energy conservation
- Lead by example through internal energy conservation/efficiencies at Yukon Energy

MAJOR 2013 INITIATIVES

Based on the four strategic priorities, Yukon Energy's major projects for 2013 are as follows:

- Various equipment and system improvements/replacements including:
 - Whistle Bend subdivision supply/Takhini substation upgrades
 - Refurbishment of one Aishihik hydro unit/various upgrades at Aishihik plant
 - Refurbishment of one Whitehorse hydro unit
 - Refurbishment of one Dawson diesel generator
 - Refurbishment of the spillway gates and structures at the Whitehorse dam
 - Refurbishment of the spillway gates at the Mayo dam
 - Marsh Lake control structure upgrade
 - Various transmission line upgrades
 - Upgrades to Faro diesel plant
 - Vehicle purchases
 - Financial Information System/Maintenance System enhancements
- Ongoing system protection upgrades
- Planning for new generation – hydro, wind, LNG, biomass and district heat
- Energy conservation/efficiency program
- General Rate Application

As part of our commitment to provide safe, reliable service, Yukon Energy will once again in 2013 make the maintenance, improvement, or replacement of our existing infrastructure and equipment a high priority. Plans for 2013 include upgrades to both our generation and transmission assets and include such things as improvements to our Mayo

headgate, Whitehorse spillway, and overhauls to two of our hydro units and one of our diesel generators.

One of our largest capital projects in 2013 will involve making upgrades at our existing Takhini substation so that we can supply power to the soon to be built Whistle Bend subdivision. This is both a customer driven project and a reliability one, as the initiative will allow us to make some improvements to our protection system, which will limit outages to smaller areas and permit more rapid restoration times.

Yukon Energy is looking at all possible options to ensure there is enough reliable, affordable and sustainable electricity available to meet the growing demand. Our work in 2013 will focus on energy conservation and efficiencies, hydro (enhancements and new), wind, biomass and liquefied natural gas. We will continue engaging governments, stakeholders and the public as we work to determine the most viable options for Yukon's energy future.

Yukon Energy was in front of the Yukon Utilities Board (YUB) in 2012 for a General Rate Application. We will cover some of the costs of that process in 2013. We will also be submitting to the YUB an Energy Conservation Plan.

Also on our list for 2013 is the continued implementation of a new Financial Information System and a Computerized Maintenance Management System. Along with providing us with improved financial, inventory, and procurement functions, it will also give us a computerized maintenance management tool. This will insure that our assets receive the appropriate maintenance at the appropriate time.

ECONOMIC OUTLOOK

The world in 2012 continues to struggle with a number of fiscal challenges: European debt crisis, lagging Chinese growth and the pending US fiscal cliff are weighing heavily on markets and economic outlooks across the globe.

While these factors are certainly restraining confidence in the future some positive indicators are noted as well – the US economy is out of recession, albeit at subpar levels – 2.3 percent growth is forecast for 2012, assuming a Eurozone break up is averted. As well China has reduced lending rates in order for domestic consumer spending to make up for shortfalls in industrial production. At home, the Bank of Canada continues to maintain low rates to protect the dollar and consequently keep support up for exports that are just now bouncing back from recessionary levels.

At a territorial level, the uncertain global economy and volatile commodity markets have introduced some caution into investment markets. This reduced confidence has tempered medium to long term forecasts, however the overall outlook is still positive. In Yukon, growth in 2012 is lower than recent years but still favorable when compared nationally -

3.7 percent versus 2.2 percent. Similarly, local unemployment rates are well below national averages (6.3 percent versus 7.4 percent).

Looking forward, the Conference Board of Canada predicts robust growth for the territory based largely on the potential development of up to three new mines. The largest sector of the economy continues to be the public sector (31 percent of total employment); the positive news in this important area is a forecast surplus for fiscal year 2012/13 – the territory’s third straight.

PLANNING ASSUMPTIONS

Impact of 2012/13 General Rate Application - In April 2012, Yukon Energy filed with the Yukon Utilities Board an application for, among other things, rate increases for 2012 (6.4 percent) and 2013 (6.5 percent). An oral hearing was held in early November and a decision is expected by late Q1 2013. For budgeting purposes, management has assumed the application will be generally accepted as proposed. In summary, this decision will affect a number of budget items:

- Revenues – the business plan assumes the YUB will approve rate increases as applied for. Any reduction in the applied for rates will appear as a negative variance in this area (all other factors being constant). The business plan includes a provision for recovery of full 2012 shortfall – this item is not included in the determination of 2013 return on equity;
- Depreciation – assumes depreciation rates as applied for will be granted; as the rates applied for generally extend lives and consequently reduce revenue requirement and therefore rates, management believes this item has a high probability of approval;
- Amortization – assumes YUB approval of new planning cost accounting policy and RFID policy;
- Fuel – assumes approval of re-activated Diesel Contingency Fund and related mechanism for basing fuel on percentage long term average hydro generation; and
- Return on equity – business plan assumes the regulator approves the applied for ROE of 8.77 percent.

The following sections summarize management’s planning assumptions by major budget category:

I. Revenues

Forecasting revenue from electricity sales requires different techniques depending on the type of sales. For example, native loads (i.e. wholesale, residential, commercial, street lights) are fairly predictable with annual increases in a narrow range generally between one percent and three percent. The greatest factor affecting the variability of these classes of revenue is weather. Industrial sales generally relate to the activities of a few customers so forecasting is done at the individual level (there are currently two customers in this class: Minto and Alexco). Secondary sales is determined based on availability of surplus hydro (service to secondary sales customers is interruptible when generation by surplus hydro is not available). Service to this class of customers

has been terminated effective September 1, 2010 due to low reservoir levels. Reservoir levels are not forecast to recover sufficiently to permit resumption of secondary sales electricity deliveries in 2013¹.

a) Firm Wholesale Sales

Our largest category of sales representing about 58 percent of total revenue dollars (80 percent of sales volumes). This category is expected to contribute 310 GWh to sales in 2013, which is about five GWh or 2.5 percent higher than the 2012 forecast sales.

b) Industrial Sales

For 2013, this class includes three customers: the Capstone Mining Corporation's copper mine at Minto, Alexco Resource Corp operating in the Keno silver district and a new customer in the Whitehorse area Whitehorse Copper Tailings (aka Eagle Minerals; "WHCT"). For 2013, Minto is forecasting to consume 26 GWh of electricity. This estimate is significantly lower than 2012 and reflects mine management's delayed expansion to underground mining operations as well as corrections to key process consumption. Alexco Resource Corp. 2013 forecast sales are 15.8 GWh, up from 2012 forecast consumption of 12.5 GWh. WHCT is a new customer in 2013; this customer has requested service in the Whitehorse area; the load will be primarily in the summertime and involves extraction of magnetite from the Whitehorse Copper Tailings area. Yukon Energy plans to deliver power to this customer via YECL's distribution system, so power purchases have been increased to reflect this. Note that YECL has indicated they are interested to serve this customer directly. Management expects the YUB will issue an order as part of the GRA 2012/13 decision. In the event the YUB agrees with YECL, Industrial sales and purchased power will be reduced. Total forecast sales for 2013 are 4.8 GWh.

c) Residential/General Service/Streetlights

Yukon Energy has firm retail customers in Faro, Mayo and Dawson as well as a number of smaller communities on the Whitehorse-Aishihik-Faro portion of our grid. Retail customer sales are expected to remain fairly flat for 2013.

d) Secondary Sales

No secondary sales are forecast for 2013. In the event hydro conditions warrant offering these sales, the revenue accrued will be credited to the Diesel Contingency Fund (as per YEC 2012/13 General Rate Application)

II) Expenses

a) Fuel

Total fuel expense for 2013 is forecast at \$2.76 million. In prior years, this budget item was set based on short term forecasts for the year in question. As continued

¹ Note that, subject to YUB approval in the 2012/13 GRA, any future revenues from secondary sales customers will be credited to the Diesel Contingency Fund (low water reserve).

growth on the system depletes available hydro capacity, the utility is once again approaching diesel on the margin. This in turn will see the reactivation of the Diesel Contingency Fund and requires Yukon Energy to adopt a longer term view of fuel expense. As a transition move, the 2012 fuel budget is set at about 59 percent of long term average fuel expense.

b) Labour

Labour expense for 2013 is expected to increase about \$0.6 million over 2012 budgets. The budget assumes 2.25 percent economic increase; as well management is proposing to increase the employee complement in the 2012 fiscal year to include the following positions:

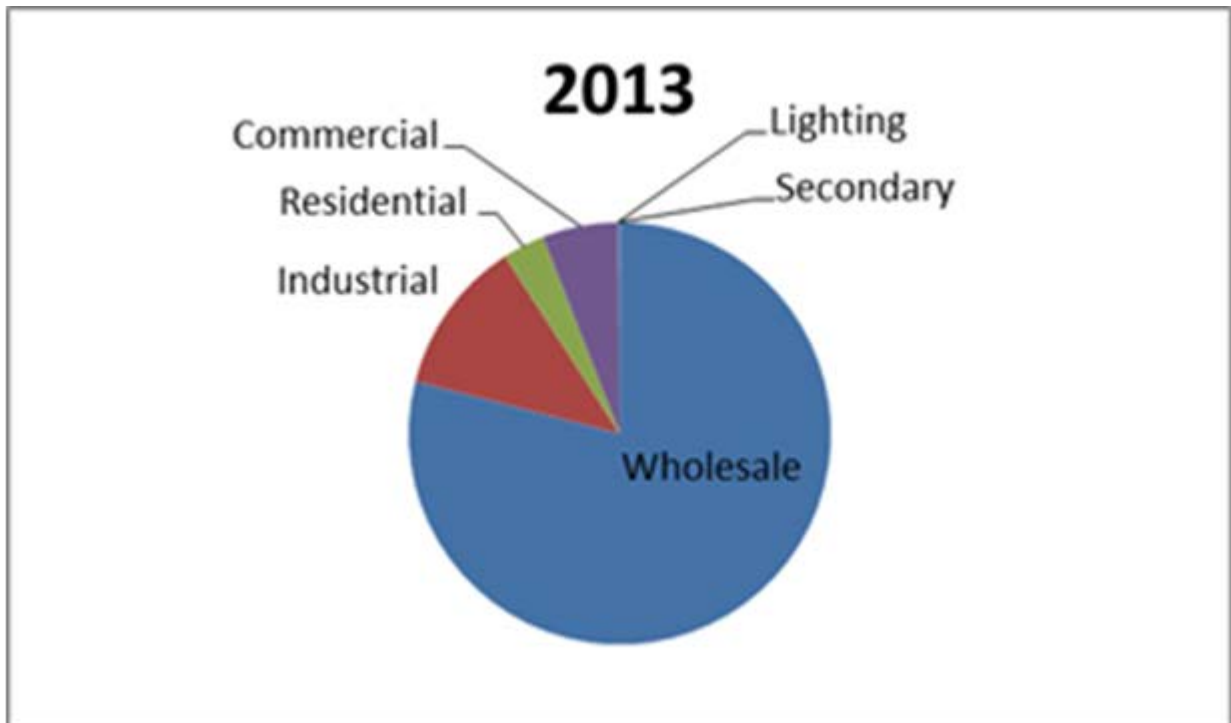
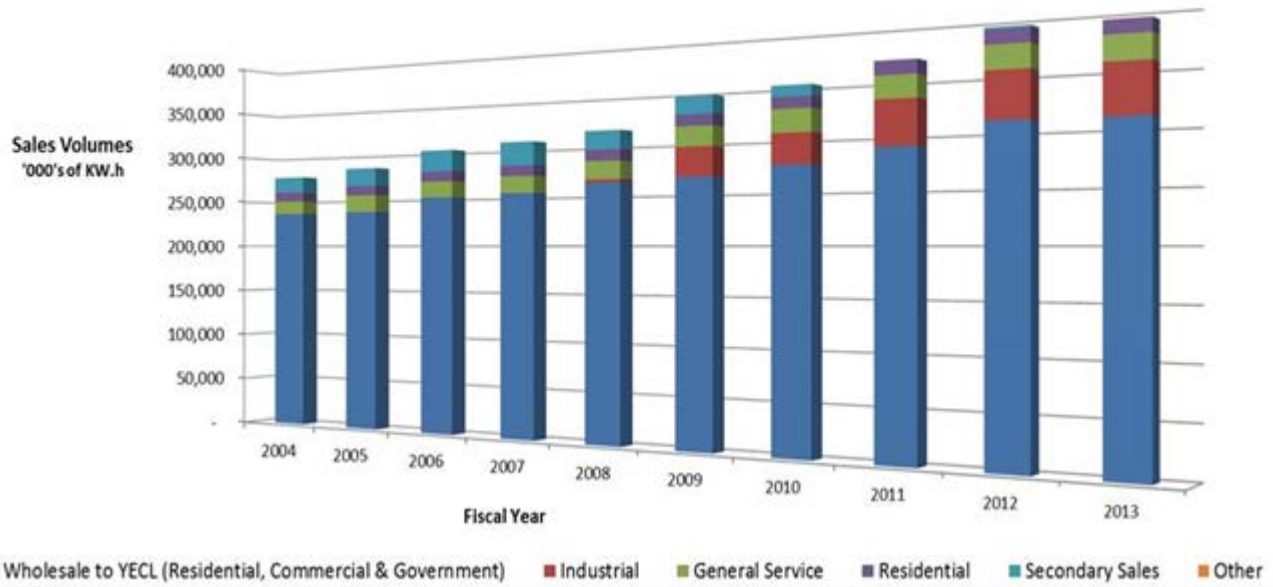
Administration Assistant – Operations	1 FTE
Operator Whitehorse	0.25 FTE

The Administration Assistant is a necessary requirement to assist operations staff with maintaining accurate and complete records of maintenance activities, as well as data entry services for procurement and finance related functions (contracting, time sheets, expense claims etc). The Operator was a 0.75 position in Faro; due to re-assignment of permanent resources to Aishihik, management deemed this location to be better served on rotational basis from Whitehorse. The Faro operator was transferred to Whitehorse and increased to a full time position.

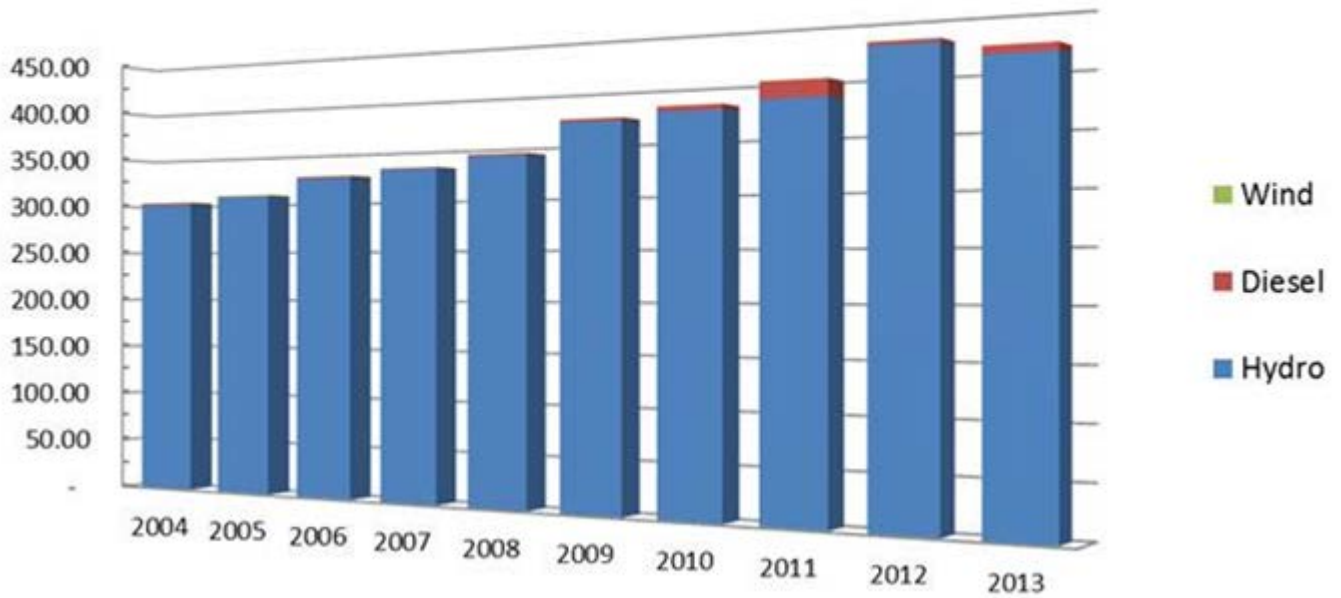
c) Non-labour

Non-labour operations and maintenance expense increases are largely attributed to increased reliability-related costs as well as regulatory requirements. The budget values as presented are below applied-for GRA amounts.

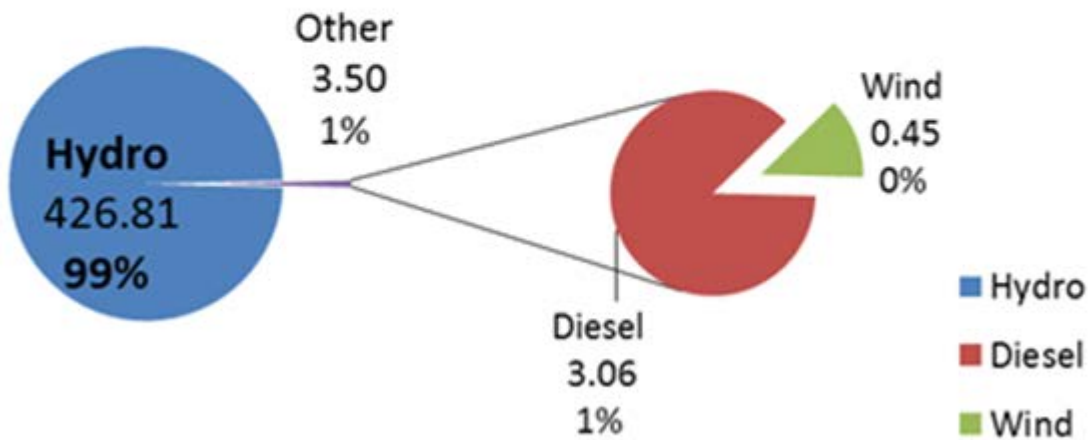
ANNUAL SALES VOLUMES by Customer Class



ANNUAL GENERATION GWh by Type

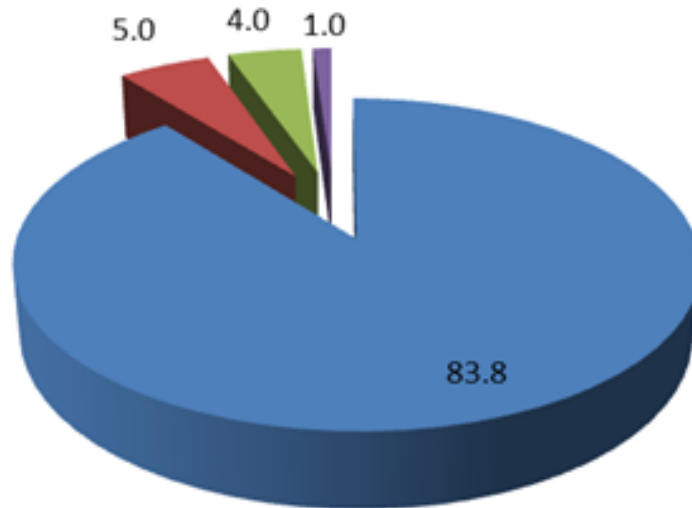


2012 Generation (GWh)



EMPLOYEES by Community

■ Whitehorse ■ Dawson ■ Mayo ■ Aishihik



2013 Capital Budget

