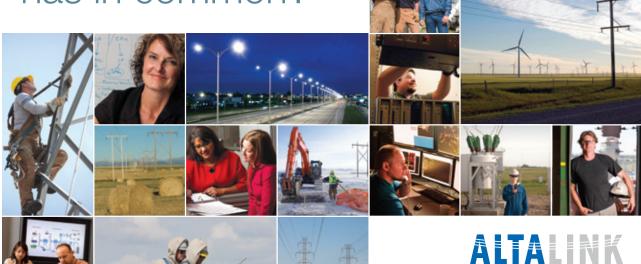


What is one thing every Albertan has in common?







# Electricity.

We all use electricity to make our lives better. More efficient. More enjoyable.

Here's how we are delivering on our commitment to provide you with safe, reliable and reasonably priced electrical transmission service.

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# Message from Scott Thon

When you flip on the light switch, what do you think about? You're probably not worried about whether or not the lights will come on. That's the beauty of Alberta's electricity system. It's reliable. Behind the switch there is an intricate system of transmission towers and wires that moves electricity across the province and delivers it to your community.

What you might think about is the cost of electricity. Or you might consider how the transmission system coexists with the environment.

AltaLink is dedicated to carefully managing the cost of the transmission projects we build to serve your community. It's one of our priorities to ensure the cost of transmitting electricity is reasonable.

And whether these projects are connecting you to low-cost electricity generated in central and northern Alberta or renewable wind energy in southern Alberta, we understand that people are concerned about the environment. And quite frankly, so am I.

I can, however, come to work each day knowing that our employees are finding new ways to reduce the impact that our facilities have on the environment. From our bird protection plan, the first of its kind in Canada, to our leadership in deploying wildlife protection covers in substations – everyone on AltaLink's team is committed to innovations that protect our environment and improve your reliability.

At AltaLink, we are focused on three key areas:

Listening to our stakeholders. We know that we have to listen and act on your feedback to build and operate the best transmission system that meets Albertans' electricity needs.

Respecting the environment. Alberta's natural environment is one of the most unique in the world. It is our responsibility to make sure that our operations have minimal impact on the land and wildlife.

Providing reliable, low-cost electricity. A reliable electricity system powers the economy, creates jobs and gives Albertans access to low-cost electricity, regardless of where the energy is generated in the province. We understand the responsibility of providing an essential service to Albertans by keeping the lights on. All of us at AltaLink are proud of this responsibility.

Through this *Report to Communities*, I'd like to show you some of AltaLink's values at work, give you insight into the issues facing Alberta's electricity industry and how the people at AltaLink are focused on addressing them.

Scott Thon

President & Chief Executive Officer



# Spotlight on AltaLink

#### **Our Business**

AltaLink is Alberta's largest electrical transmission company. We build and operate transmission lines that move electricity from where it is generated to where it is used. Our transmission system is the vital link that connects power to people.

And when we say we connect power to people, we are talking about 85 per cent of Alberta's population that receives electricity through our transmission system.

With more than 12,000 kilometres of transmission lines and 270 substations, our service territory covers 212,000 square kilometres that includes major urban centres, large industrial plants, farms and small communities.

#### Our History

In 2002, AltaLink purchased Alberta's largest transmission system. This marked the beginning of a new era in Alberta's electricity industry as we became the first company to focus solely on maximizing the value of transmission. Our mission was then and still is today to provide Albertans with access to safe, reliable and reasonably priced electricity. While AltaLink is an investor-owned company, our activities are 100 per cent regulated by the Alberta Utilities Commission (AUC).

#### Our Activities

- We maintain and operate the transmission system that serves 85 per cent of Albertans.
- We invest in new transmission lines and substations to replace aging infrastructure and to connect new sources of electricity to consumers. In 2010, we invested \$500 million in transmission projects.
- We operate a high-speed telecommunications system that protects and controls the electrical grid. This equipment allows us to operate the transmission system safely and reliably.
- We monitor and operate our transmission facilities through our 24 hours a day, seven days a week control centre that coordinates the flow of electricity with the Alberta Electric System Operator (AESO) and other transmission facility owners.

#### Our Stakeholders

You. Before electricity is delivered to your house or business, it moves across our high voltage transmission lines to reach your community.

As a stakeholder, it is important for us to keep you informed of Alberta's electricity industry, issues facing our industry and how we are working to deliver you safe, reliable and reasonably priced electricity.

#### Our Projects

AltaLink is working on more than 600 projects to ensure Albertans receive safe and reliable electricity.

#### **Connecting wind power**

Albertans now have access to twice as much wind power as a result of AltaLink's Southwest 240 kV Project. Energized in October 2010, this 90-kilometre transmission line between Pincher Creek and Lethbridge allows for 1,000 megawatts of wind-generated electricity to reach homes and businesses throughout the province. That's equal to powering 1,600 homes each month.

Participation of the local First Nations communities, the Piikani and Blood, was essential to the success of the project. Significant employment was created by this project and more than 80 Alberta businesses supplied services or materials.

#### Improving system reliability

AltaLink's Western Alberta Transmission Line Project is a 500 kV direct current transmission line between the Edmonton and Calgary areas. This line will improve the reliability and efficiency of the electrical system. AltaLink began consulting with stakeholders about this project in early 2010. We filed an application with our preferred and alternate route with the AUC in March 2011. If the line is approved, construction will begin in 2012 and will be in service by 2014.

#### Powering our industrial heartland

The Heartland Transmission Project involves the construction of a double-circuit 500 kV transmission line which will connect the Heartland region (northeast of Fort Saskatchewan) to existing 500 kV transmission facilities. AltaLink and EPCOR jointly submitted their preferred and alternate route to the AUC in September 2010. The AUC hearing is scheduled to begin in April 2011.

#### Meeting demand for renewable electricity

Alberta's electrical system needs more capacity to deliver electricity generated from wind farm projects proposed in southern Alberta. To support this growth, AltaLink is working on a series of projects called the Southern Alberta Transmission Reinforcement (SATR). The projects that make up SATR are in different stages from conceptual design to consultation with stakeholders and the filling of facility applications.

#### **Upgrading the transmission highway**

In 2010, AltaLink submitted more than 100 facility applications to the AUC for important transmission system upgrades to support growing communities and industry throughout central and southern Alberta.

#### **AltaLink's Service Territory**





Learn more about our projects at albertaelectricityfuture.ca



## Electricity 101

#### History

When electricity first reached the homes of Albertans, it was usually provided by the same company who generated it, delivered it and sold it to the consumer.

This system was in place for decades until 1995 when the Government of Alberta passed the Electric Utilities Act (EUA). The EUA deregulated Alberta's electricity industry and separated the business of power generation from the regulated businesses of transmission and distribution.

In 2002, AltaLink purchased the transmission assets of TransAlta and became the first investor-owned transmission company in Canada. Today, Alberta's electricity system is owned and operated by a mix of investor-owned and municipally-owned companies.

## The Who's Who of Alberta's Electricity Industry

Generating and delivering electricity to you in a safe and reliable manner involves many organizations:

### The Planner Alberta Electric System Operator (AESO)

The AESO is an independent, not-for-profit organization that is responsible for planning Alberta's transmission system. The AESO develops Alberta's long-term plans to deliver electricity and identifies areas that require new or enhanced transmission lines to meet the growing needs of the province.

### The Regulator Alberta Utilities Commission (AUC)

The AUC is an independent agency of the Government of Alberta that ensures the services provided by Alberta's utilities takes place in a fair and responsible manner and that it is in the public's interest. Before AltaLink can begin construction on a project, the AUC must approve our facilities application, which includes the location of the transmission route or facilities. The AUC also approves the rate of return that we receive on our assets.

### The Power Creators Generators

Power generators use a fuel source such as coal, natural gas, wind, hydro or solar, to create mechanical energy that is transformed into electrical energy. For example, to create wind-generated electricity, the wind must blow and rotate the blades of a turbine. The mechanical energy that is created is then changed into electrical energy.

### The Transporters Transmission Facility Owners (TFOs)

As a TFO, AltaLink owns and operates high voltage transmission lines that form the backbone of the electrical system. We move electricity from where it is generated, across long distances, to where it is needed. We also own substations that increase or reduce the voltage of electricity so it can be carried efficiently on the electrical system.

#### **Distribution Facility Owners**

The distribution system carries electricity over shorter distances, at a lower voltage, so it can be delivered to consumers. A distribution line is used to connect your house to the electrical system.

### The Sales Folks Retailers

Retailers buy electricity in large volumes from the wholesale market and then sell it in smaller packages to their customers. Albertans can choose from different retail companies that sell electricity through the regulated rate or under contracted terms.

### Breaking Down an Average Electricity Bill

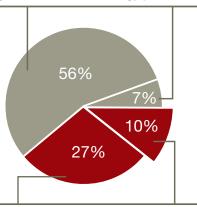
#### Generation

The cost you pay for the electric energy you have used in a given time period.

#### Administration

Cost that you pay for administration charges such as fees related to billing and customer service.

1 Charges related to the energy you consume



Charges related to delivering the energy to you

#### Distribution

The cost your distribution company charges to build, operate and maintain the local distribution system.

#### **Transmission**

Cost that TFOs, such as AltaLink, charge to build, operate and maintain the provincial power system.

## Demystifying the Price of Electricity

Each month Albertans pay for the electricity they use in their households, businesses or farms. Here's how the cost of electricity and the role AltaLink plays come together:

Our province's deregulated electricity market has provided the opportunity for companies that make electricity (generators) to invest in power generation in Alberta. This investment can benefit consumers as the competition from new generators means Albertans will have access to competitively priced power.

Since electricity is produced in real-time, prices are based on supply and demand and fluctuate according to consumer needs. The lowest-cost generators are turned on first and when electricity demand increases, the higher-priced generators come online as needed. Electricity prices are set when generators offer to sell their electricity to buyers (energy retailers).

When your retailer charges for the electricity you use, there are normally two components on the bill:

- 1 Charges related to the energy you consume.
- 2 Charges related to delivering the energy to you.

The delivery charge is the regulated cost of delivering electricity to consumers. The cost of distribution and transmission is included in this delivery charge.

Transmission accounts for only 10 per cent of the average bill. While transmission plays a small part in your monthly bill, it plays a key role in connecting new generation sources that form the basis of a competitively priced electricity market.



# The value of transmission

## What value does Alberta's transmission system bring you?

Every day we use electricity to power our lives. Along with our daily household tasks, electricity also sustains our economy. How would a business run without electricity to power machines or computers? Every industry in Alberta relies on electricity and without industry there would be no jobs.

The transmission system plays an important role in delivering electricity to your home by transporting it at high voltages, across long distances from where it is generated to where it is used. Without transmission, we'd only have access to power located close to our homes. And while local generation is playing an increasingly important role in building a more

diverse electricity industry, Alberta's energy resources are spread across the province requiring transmission lines to connect the energy to communities.

## How AltaLink is creating value for Albertans:

#### By creating jobs.

Construction of AltaLink's Southwest 240 kV Project provided employment for First Nations people and more than 80 Alberta businesses supplied services or materials. Between 2010 and 2015, AltaLink expects to create more than 37,000 person-years of employment related to construction and local support services.

#### By carefully managing costs.

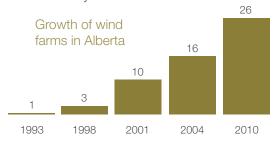
In 2009, we completed our projects approximately 15 per cent under budget, saving Albertans more than \$17 million dollars on their electricity bills.

### By providing access to low-cost, cleaner electricity.

AltaLink's transmission lines connect electricity from a variety of fuel sources. In 2010, coal-fired generation provided Albertans with more than 50 per cent of their electricity and played a key role in keeping electricity bills low. AltaLink's transmission lines also connect high-efficient, clean burning natural gas co-generation facilities that are built with state-of-the-art technologies to reduce carbon emissions.

#### By connecting renewable electricity.

Hydro and wind energy are clean and sustainable. These renewable power sources are delivered to communities through AltaLink's transmission lines. Today, AltaLink connects 13 wind farms to Alberta consumers. More than 30 wind farm projects are in various stages of development within AltaLink's service territory.



### Andy Shaw

Work Leader, South Transmission Line Crew

I've rock climbed all over the world. I love adventure, experiencing what life has to offer. As a lineman, I get that same feeling of enjoyment and dedication to the challenge at hand.

Our crews keep the lights on, no matter what time of day it is. Last April, a major snowstorm hit southern Alberta and when we got the call, everyone jumped into action. More than 50,000 households, farms and businesses were without power. It was our job to get the lights back on. We were there for 77 days, repairing 18 steel towers and 60 wood poles. It was hard for the guys to be away from their families but at the end of the day, it was worth it because we got everything back up and running.

I stand behind AltaLink when we say we provide reliable electricity. We're out there every day, maintaining the transmission system to ensure it operates reliably.

Everyone deserves to do what gives them enjoyment in life and I know electricity plays a part in making that happen.





# Environmental balance

## Why protecting the environment is important to AltaLink:

AltaLink builds transmission structures in the natural environment. We have an obligation and a responsibility to preserve the beauty and integrity of these natural areas for people today and in the future.

On one hand, AltaLink has to protect the environment because it's the law. Our operations must be in compliance with environmental regulations. But where AltaLink stands out is our commitment to mitigate the impact of our facilities on the environment.

Environmental sustainability is a core value at AltaLink. We will continue to improve our environmental performance and act as a responsible corporate citizen.

## How AltaLink is addressing its impact on the environment:

#### By not being afraid to be first.

AltaLink is the first Canadian utility to develop an Avian Protection Plan (APP). Our APP is a management system designed to reduce the impact that our substations, power poles and power lines can have on birds.

#### By putting on a jacket.

We install covers, called GREENJACKET™, to protect wildlife from contacting electrical equipment in our substations and causing power outages. We have retrofitted 43 substations with GREENJACKET™ covers.

#### By building a home for birds.

Where they once had a strong presence in southern Alberta's grasslands, ferruginous hawks are now an endangered species. Safe nesting sites are essential to supporting a strong population. To aid in this recovery, AltaLink has installed five nesting platforms for ferruginous hawks.

#### By leaving a nest where it is.

When birds nest on power poles, we accommodate the nests whenever possible. A nest is only removed and relocated if it poses a risk to the safety of the bird or the reliability of the transmission system. AltaLink has successfully relocated 10 osprey nests.

#### By identifying bird collision zones.

AltaLink has an avian safe standard that requires all projects to be reviewed for potential bird collision sites. If there is potential for collision, it must be mitigated or avoided. As an example, we install bird markers (as shown on opposite page) which make the line more visible and help to reduce collisions between 60 and 90 per cent.

#### By avoiding sensitive environmental areas.

Whether it is an important water body or bird watching site, AltaLink strives to avoid sensitive areas when siting a new transmission line.

#### By measuring up.

We use an environmental management system to identify, manage and mitigate risks such as chemicals, spills and other waste.

#### Nikki Heck Environmental Advisor

One of my top concerns is protecting wildlife, especially birds, from being impacted by AltaLink's facilities. Growing up I thought that as a wildlife biologist I would work in a zoo or conservation centre. I was idealistic and thought that was the best way to make a difference. Working at AltaLink I realized I could take that idealism and effectively protect wildlife and birds by directly influencing AltaLink's policies and programs.

The truth is that we do have an impact on birds and I have a good opportunity to make a difference. In a lot of ways, protecting the environment has even more meaning to me now as a first-time mom. I want to make sure that my daughter always gets to enjoy Alberta's wildlife and natural places.













# Community conversations

# Why an open and honest stakeholder engagement process is important to AltaLink:

When we build a transmission line, the route's towers and wires are hosted by landowners. Because landowners host transmission facilities on their property, we have to work together to find the route with the lowest overall impact.

Identifying the route with the lowest impact is a detailed process that considers the effects a new transmission line may have on residents, the environment, agriculture, visual impacts and cost. During our planning process we gather data on potential route options. While this data is essential to identifying routes, the most important component is the feedback we receive from stakeholders. Stakeholders live on the land and know it better than any map or computer.

This feedback is then used to confirm, modify or eliminate route options.

We value our stakeholders and are committed to following an open and honest engagement process. A transparent process where Albertans are listened to and their feedback makes a difference.

## How AltaLink is listening to you:

In the past five years, AltaLink's consultation practices have changed. We have created a new program that is focused on engaging stakeholders in a meaningful conversation that requires a lot of listening.

Project consultation is a primary focus that involves a large number of employees and takes a significant amount of time to complete. We want to hear from all stakeholders and we want to make sure we take the time to get it right.

Here are some examples of how AltaLink's consultation program has grown and improved:

- AltaLink's consultation team has grown from five employees in 2008 to 35 in 2010.
   This team is staffed by employees certified by the International Association of Public Participation – an organization dedicated to promoting and improving the practice of public participation throughout the world.
- Since January 2010, AltaLink has had more than 4,500 conversations with stakeholders about our Western Alberta Transmission Line Project through 23 open houses, 15 information centres and one-on-one conversations. This input was used to determine preferred and alternate routes.
- Consultation work on the Heartland Transmission Project with our partner, EPCOR, was one of the largest public consultations held in Alberta. As a result of stakeholder feedback, we've included an underground transmission line option in our application to the AUC.

#### Kevin Strangway Manager, Municipal Relations

People sometimes ask me why I've chosen to work in the electricity industry for 36 years. I've always been proud of my contribution in delivering an essential service that has allowed the people in this province to progress and maintain one of the best standards of living in the world.

As the Manager of Municipal Relations, I meet with municipalities to discuss AltaLink's new projects and how they will provide this valuable electricity transmission service. It is critical for us talk to people and understand their issues so that we can address their concerns and build a transmission system that benefits all Albertans.

Our cities and towns will continue to grow and our province will continue to be successful because that's the Alberta advantage. We are forward-thinking, innovative and dynamic.

Later this year, I will retire knowing that transmission has helped our communities grow and will continue to sustain our quality of life for generations to come.





# In your community

A commitment to supporting Alberta's next generation of leaders

In more than 350 communities there is a 4-H club that supports young people in developing life skills, leadership and learning to do by doing. Communication skills are an essential component of a 4-H member's development and AltaLink is proud to be the presenting partner of Alberta 4-H's communications program.

## A lasting partnership with the Piikani and Blood tribes.

In October 2010, AltaLink energized a 90-kilometre transmission line that runs through land of the Piikani and Blood First Nations in southern Alberta.

Together, we have formed a long-term partnership that gives these nations the option to receive continued economic return as a partial owner of the transmission line.

#### A helping hand in our community.

Each year AltaLink employees unite to make a difference in our larger community. Through personal donations and a matching contribution from AltaLink, we contributed \$370,000 to the United Way in Alberta during 2010.

## A contribution to post-secondary education.

Six students in Alberta's rural colleges and four Aboriginal students receive \$2,000 scholarships from AltaLink each year.

## An active voice in the environmental community.

AltaLink is a member of the Alberta Ferruginous Hawk Recovery team, the Raptor Research Foundation and the Avian Power Line Interaction Committee. Membership allows us to stay up-to-date with industry best practices and provide leadership to other companies who may be struggling with their standards.

#### A stance on wildlife conservation.

AltaLink has made contributions to the Alberta Birds of Prey Foundation, Operation Grasslands Community and initiatives to support the recovery of the ferruginous hawk.

#### A message to stay 7 metres safe.

Seven metres is the safe distance when working near power lines. AltaLink is the chair and member of the Joint Utility Safety Team (JUST) which is working to increase Albertans' awareness of power line safety. Through radio and TV campaigns, JUST is helping to foster a culture of power line safety. **Learn more about electrical safety at wherestheline.ca** 





What value does Alberta's transmission system bring you?

Now that we've told you about our values, we want to hear what's important to you. Not only will we use your feedback, but we'll also enter you to win \$1,000 cash and a \$1,000 donation to the charity of your choice.

Visit us at report2011.altalink.ca to enter.\*

Online questionnaire and contest closes December 31, 2011.

\* Contest details and rules can be found online at report2011.altalink.ca

Bill Wray works in AltaLink's transformer shop as a technologist. Transformers change the voltage of electricity so it can be transported onto the high voltage transmission system or the low voltage distribution system. Since 2005, AltaLink has recycled 470,000 litres of transformer oil.

We are the first company in Alberta to put recycled oil back in our own system. Of the 470,000 recycled litres, 400,000 litres were put back into our transformers.



Mixed Sources
Product group from well-managed forests, controlled sources and recycled wood or fiber.

forests, controlled sources and recycled wood or fiber www.fsc.org Cert no. sw-coc-002550 ©1996 Forest Stewardship Council





