OUR COMPANY STARTED MORE THAN A CENTURY AGO BY HARNESSING HYDROPOWER AND DELIVERING ELECTRICITY TO BUSINESSES AND RESIDENTS IN NORTHERN MINNESOTA. TODAY, ALLETE IS REFOCUSING ON ITS CORE STRENGTHS – ENERGY IN ALL ITS FORMS – TO CREATE AND BUILD UPON A SUSTAINABLE ENERGY FUTURE OF UNLIMITED POTENTIAL.

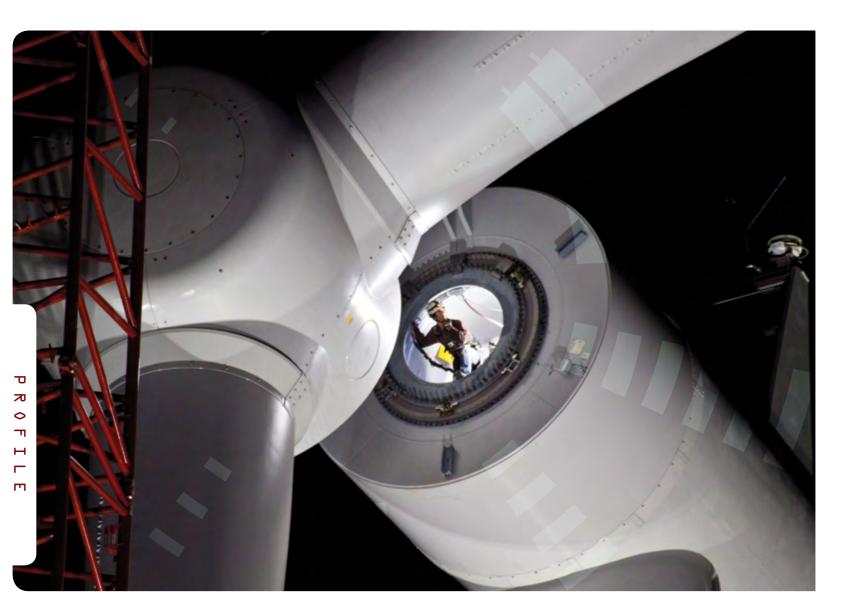
INVESTING IN

# BOUNDLESS

NEW CHErgy







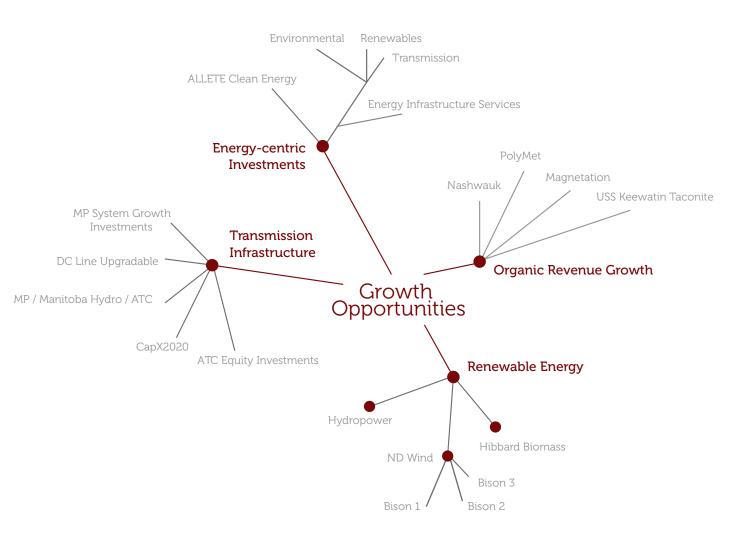
ON THE COVER AND ABOVE: A SIEMENS WIND TURBINE TECHNICIAN LEANS OUT THE NACELLE HATCH ATOP A NORTH DAKOTA WIND TOWER AS A ROTOR IS HOISTED INTO POSITION LAST DECEMBER CONTRACTORS AND MINNESOTA POWER PERSONNEL ELECTED TO "FLY" SOME OF THE ROTORS BY CRANE DURING NIGHTTIME HOURS LAST WINTER BECAUSE NORTH DAKOTA WINDS ARE USUALLY CALMER AT NIGHT. WORK PROCEEDED UNDER FLOODLIGHTS DURING A NINE-DAY CONSTRUCTION PERIOD WHEN WIND CHILLS AT TIMES DROPPED TO 40 BELOW ZERO.

## **ALLETE:** multifaceted, innovative, evolutionary

What better illustration of "investing in boundless new energy" can there be?

A corporation identified for nearly a century as Minnesota Power changes its name to ALLETE, leverages its coal mining experience and local knowledge in North Dakota to develop wind farms, buys a transmission line built decades before to bring coal-based electricity eastward, and proceeds to create a new company called ALLETE Clean Energy to explore lower-carbon energy sources even further.

ALLETE is acting on its strategy to pursue energy development in its many forms. That's why the corporation's BNI Coal operation in Center, N.D., remains a solid and viable source of corporate earnings, coexisting with the expanding Bison wind farms just a few miles away. It makes sense for a company whose 105-year-old hydropower dam on the St. Louis River near Duluth, Minn., is still generating energy to sign a unique long-term deal to import more hydroelectricity from Canada.





## Providing the power to deliver Iron Range deposits to market



ALLETE CHAIRMAN, PRESIDENT AND CEO AL HODNIK, LEFT, TALKS WITH MADHU VUPPULURI, CHIEF EXECUTIVE OF ESSAR STEEL MINNESOTA, AT ESSAR'S TACONITE FACILITY UNDER CONSTRUCTION IN NASHWAUK, MINN. The natural components of paper, wood products and steel remain plentiful in the region served by ALLETE's Minnesota Power division. The large industrial companies we serve have enjoyed a resurgence since the economic downturn that began in 2008.

Beyond the uptick in production from Minnesota Power's industrial customers -Essar Steel's global footprint covers India, the industrial electric sales increased 8.2 percent in Middle East, Asia, Canada and the U.S. It's a 2011 over 2010 – the company is making plans fully integrated manufacturer of flat carbon to provide up to 600 additional megawatts steel whose Minnesota division plans to of power to accommodate new customers, become the first fully-integrated mine through business expansions and evolving industrial steel-making facility in North America. The new wholesale electric sales agreement calls processes. for Minnesota Power to serve all of Nashwauk's Several companies in northeastern Minnesota electric requirements from May 1, 2012 are progressing toward development of new through April 30, 2022.

Several companies in northeastern Minnesota are progressing toward development of new natural resource-based projects with longterm growth potential and sizable electric loads. These potential projects, in various stages of planning and permitting, range from the construction of a new Magnetation plant to process iron ore concentrate from tailings basins and mineral stockpiles, to the building of a new mine and taconite processing facility by a Minnesota subsidiary of India-based Essar Steel Holdings Ltd.

Essar Steel Minnesota's (ESM) facilities, now under construction, are situated on the western end of the Mesabi Iron Range in Nashwauk, Minn. With no electric generation of its own, Nashwauk is a municipal electric



customer of Minnesota Power. When the company agreed to provide all the city's electric requirements through April 30, 2022, ALLETE Chairman, President and CEO Al Hodnik went to Nashwauk for the contract signing last February with Madhu Vuppuluri, ESM's chief executive.

Last July, Nashwauk agreed to provide Essar, beginning in 2013, with all the electric service needed for the company's proposed taconite facility now under construction. Essar will require electric loads of from 70 to 110 megawatts (MW). Essar recently received a statement of adequacy from the Minnesota Department of Natural Resources to allow an expansion of its production capability to 7 million tons of pellets annually. Essar is also considering the construction of a direct reduced iron and steelmaking facility, which could require an additional 300 MW of electric power. Continued strength in the worldwide steel market may well lead to expanded production in the more traditional taconite pellet industry. Right down the road from Nashwauk, U.S. Steel's Keewatin Taconite processing plant has obtained permits necessary to restart a pellet line that has been idle since 1980. If the line starts processing taconite again, it could result in another 60 MW of Minnesota Power electric load.

PolyMet Mining is another start-up operation with which Minnesota Power has already executed a long-term electric service contract. PolyMet is a publicly-traded (AMEX: PLM) mine development company that controls the NorthMet copper-nickel-precious metals ore body near Hoyt Lakes and owns the Erie processing facility about six miles from the ore body on the Mesabi Range. The company has spent more than six years in an effort to obtain the mining permits required of what would be the first non-ferrous mining operation in Minnesota.

The metals that will be mined by PolyMet are in demand for use in electric cars, catalytic converters, medical devices and many other high-tech products. PolyMet expects that a Supplemental Draft Environmental Impact Statement on the project will be released in late 2012, followed by a public review and comment period. Assuming successful completion of the regulatory process and subsequent issuance of permits, Minnesota Power could begin to supply PolyMet between 45 and 70 MW of power in approximately 2014 through a 10-year power supply contract.

In December 2011, the Minnesota Public Utilities Commission approved Minnesota Power's electric service agreement with Magnetation, a company that will produce iron ore concentrate from low-grade natural ore tailing basins, previously mined stockpiles and newly mined iron formations. A plant near Taconite, Minn., is expected to begin operation in the spring of 2012, resulting in up to 7 MW of electric load.

Magnetation and integrated steelmaker AK Steel Corp. in October of 2011 announced a joint venture that could lead to the construction of two facilities near Calumet and Coleraine, Minn., with potentially 15 MW of additional load for Minnesota Power. Magnetation and AK Steel have also indicated the potential for a three million ton pellet plant near the Coleraine facility that could result in 15 to 25 MW of additional load in 2016.

Late in 2011, Minnesota Power signed an electric service agreement with Mining Resources, a joint venture between Magnetation and Steel Dynamics. Mining Resources has begun construction of a \$50 million plant near Chisholm, Minn., that will supply iron ore concentrate to Mesabi Nugget until it begins its own mining operations. Operations at Mining Resources, expected to begin in late 2012, would result in five to seven MW of additional Minnesota Power electric load.

Steel Dynamics is the majority owner of Mesabi Nugget, another Minnesota Power customer, which built a \$260 million commercial iron nugget plant near Hoyt Lakes, Minn., in 2009. The first commercially-produced high-content iron nuggets in the world were made there in January of 2010, and ramp-up continued through 2011 and early 2012.

Mesabi Nugget is pursuing permits for taconite mining and concentrating activities on property formerly mined by Erie Mining Co. and LTV Steel Mining Co. If expected mining permits are secured by the end of 2013, mining activities could begin the following year, which could result in increased electrical loads above the current 19 MW power supply contract between Mesabi Nugget and Minnesota Power that runs through 2017.

### Superior Water, Light & Power preparing for customer growth

Superior Water, Light & Power Co. may be smaller in terms of electric customers compared to ALLETE's other utility, Minnesota Power. But the Wisconsin-based subsidiary shares many key attributes, including competitive rates, a long history of service to northern communities and a near-term outlook for significant customer growth.

SWL&P, which has served northwest Wisconsin since 1889, provides electricity to about 15,000 customers, natural gas to approximately 12,000 customers and water service to 10,000 customers in Superior and adjacent areas.

Exodus Machines, a heavy equipment The utility constructed a a new water storage manufacturer founded in Superior three years tower in 2008 and a 1.5 million gallon water ago, announced in February that it would reservoir in 2010. SWL&P's natural gas utility is add additional jobs to its workforce after connected to two interstate gas transmission forming an alliance with Caterpillar, Inc. The pipelines, providing for competitive customer Superior-based company builds wheeled rates and enhanced system reliability. Like material handling machines unlike anything Minnesota Power, SWL&P delivers a high in the product lineup of Caterpillar, the word's percentage of its electricity to large customers, leading manufacturer of construction and including the Calumet Superior refinery and mining equipment. the Enbridge Energy pipeline. The Exodus machines are available through Just as its sister company Minnesota Power is Caterpillar dealers in North America, and over anticipating customer growth in the coming the next 18 months, the Superior-built material handlers will transition to the Cat brand. An

years, SWL&P is also witnessing economic development growth that could add to increased sales of power, water and natural gas in northwest Wisconsin.

Early this year, the Kestrel Aircraft Company announced plans to build manufacturing facilities near the Superior airport that would produce turbo-prop planes for the general aviation market. Kestral, whose CEO, Alan Klapmeier, co-founded the Cirrus Aircraft manufacturing plant in Duluth, plans to employ 600 people in two Superior facilities by 2016.



#### SUPERIOR WATER, LIGHT & POWER CO. LINE WORKER DAVIN SHERWOOD

innovative product in a new niche, combined with the distribution power of a worldwide equipment manufacturing company, has Exodus officials planning new facilities and workforce additions in Superior.

Other economic development projects centered in the Superior market are in the planning stages. Reliable and cost-competitive utility services from SWL&P are helping to pave the way for potential future growth.

5





A RELATIVELY SNOW-FREE WINTER IN SOUTH-CENTRAL NORTH DAKOTA ALLOWED MUCH PROGRESS ON THE ACCELERATED SECOND AND THIRD PHASES OF THE BISON WIND ENERGY CENTER. BY THE END OF 2011, MORE THAN HALF THE TURBINE AND SUBSTATION FOUNDATIONS WERE COMPLETED ON BISON 2, WITH NEARLY ALL TURBINE ACCESS ROADS FINISHED. THE WIND FARM WILL GROW FROM 31 TURBINES TO 101 TURBINES IN 2012.

# Bison wind project accelerates into another gear

This promises to be a very busy year for Minnesota Power's Bison wind project in North Dakota.

Fresh from completing the 82-megawatt (MW) Bison 1 Wind Energy Center near New Salem, N.D., early this year, the company and its prime contractor, Siemens AG, are working hard to commission Bison 2 and 3 by the end of 2012.

The second and third phases of the Bison project, located near Bison 1 in Oliver and Morton Counties, will each consist of 35 Siemens 3MW direct-drive turbines generating a total of 210MW of renewable energy. While it took two full construction seasons to install the 31 turbines that make up Bison 1, this year's plan call for erecting 70 towers supporting new Siemens turbines.

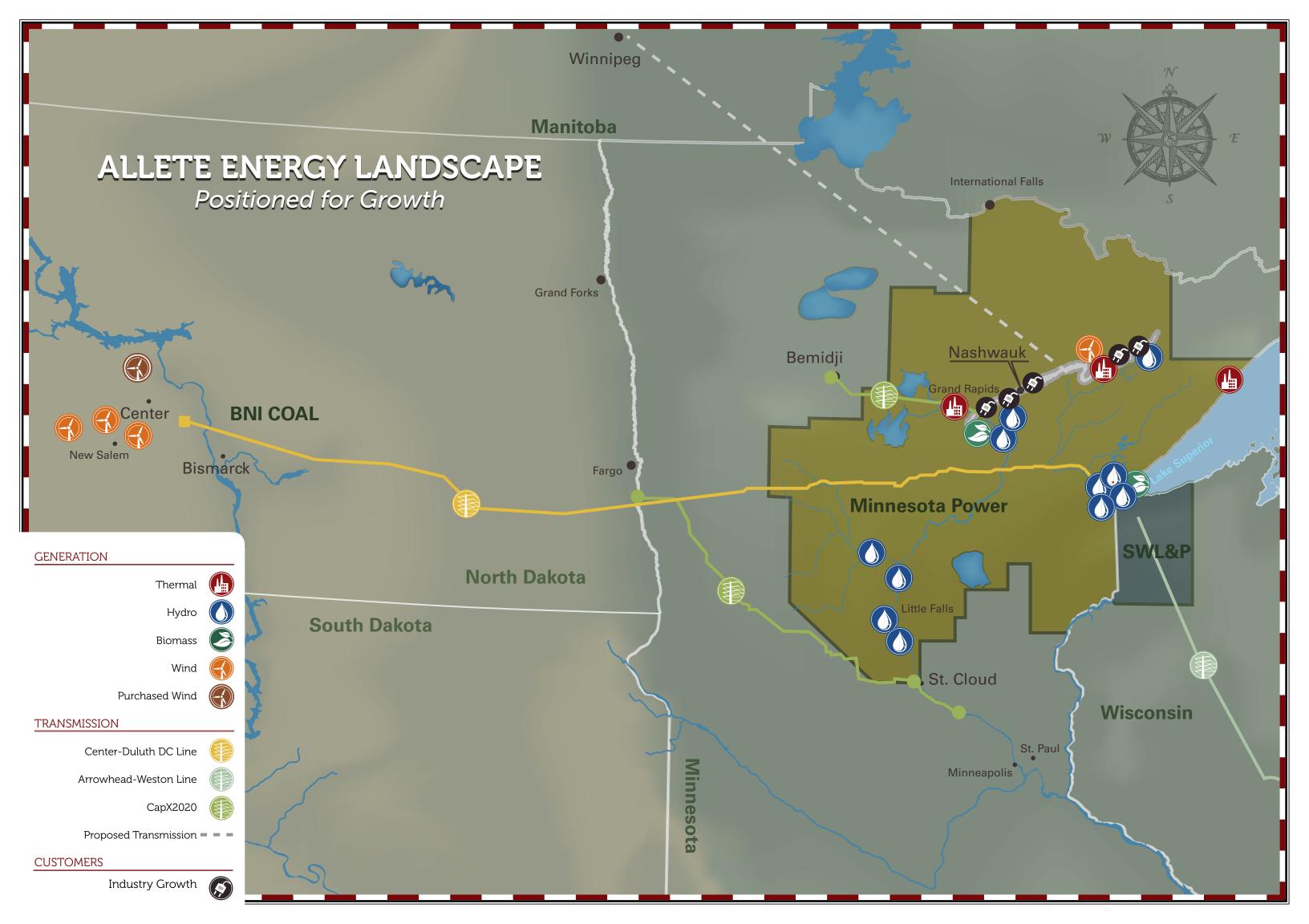
Several factors led to ALLETE "doubling down" on this major renewable energy installation, including reduced costs, an available tax credit and a strong push from regulators in St. Paul, Minn.

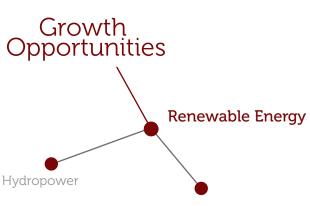
Not only were costs coming down as the Bison The Bison project was inspired by a Minnesota project proceeded, the technology behind the law mandating electric utilities to generate wind energy was becoming more efficient. 25 percent of their power by renewable energy Midway through construction of Bison 1A, by 2025 and by transmission availability Minnesota Power decided to deploy upgraded leveraged by Minnesota Power's purchase of 3MW Siemens turbines featuring direct drive a 465-mile direct current transmission line in power units for subsequent installations. 2009. In May of 2011, the Minnesota Public Bison 1B will deliver more wind energy for Utilities Commission (MPUC) directed Minnesota approximately the same cost as Bison 1A, with Power to give strong consideration to adding an one less turbine. additional 100 megawatts of wind generation



beyond what it had planned for Bison 2. With a production tax credit for wind equipment set to expire at the end of 2012 and turbine prices dropping, the commission's recommendation made perfect sense to ALLETE.

- So while wind towers were being assembled for Bison 1B and nacelles and rotors were
  shipped to North Dakota last fall, the company received expedited approval from the MPUC for the investments and expenditures for Bison 2 and 3. These approvals cleared the way for the company to recover costs for the wind farms through renewable energy riders on customer bills.
- r's In documents filed with the commission for Bison 3, the Minnesota Department of Commerce concluded that the cost of the project was significantly lower than all the comparable projects it had reviewed. It placed the Bison 3 megawatt-hour cost about 57 percent lower than the \$51 per megawatt-hour average cost for other recent wind projects.







## Renewable hydropower a boundless - and timeless - resource for **Minnesota Power and ALLETE**

Minnesota Power got its start in 1906 by harnessing the energy of the St. Louis River near Duluth, Minn.

In 2011, when ALLETE's largest utility company signed a major long-term agreement to purchase more renewable hydropower from Canada beginning in 2020, it also rehabilitated three hydroelectric plants built in its northern Minnesota service territory decades ago.

Last May, Minnesota Power signed a long-term power purchase agreement with Manitoba Hydro that will reduce carbon emissions, provide the lowest-cost energy resource for consumers and introduce a unique way to "store" premier wind energy.

Manitoba Hydro, based in Winnipeg, produces most of its power from hydroelectric stations. For Minnesota Power, the hydropower purchase fits ALLETE's strategy of lessening its dependence on carbon-based generation. Buying hydroelectric power from Manitoba Hydro is the lowest-cost option for meeting the electric demands of customers in the 2020 time frame.

The agreement calls for Manitoba Hydro to sell 250 megawatts (MW) of electricity to Minnesota Power for 15 years beginning in 2020. A unique aspect of the agreement is the inclusion of a "wind storage" provision that entitles Minnesota Power to transmit electric energy northward from its wind farms in North Dakota when

wind production is high or electric loads are low. Minnesota Power, in essence, will use the Manitoba system as a rechargeable battery, thereby balancing its energy position and maximizing the value of the Bison wind farms under construction near New Salem, N.D.

The agreement calls for the construction of additional transmission capacity between Manitoba and the U.S. (see page 12). Discussions on various transmission configurations are underway between the two utilities and the Midwest Independent System Operator (MISO).

While these transmission discussions continued, Minnesota Power was busy rehabilitating three hydropower stations within the boundaries of its Minnesota service territory. Its Fond du Lac station, constructed in 1923, underwent extensive rehabilitation during the summer and fall of 2011, financed in part through a Department of Energy stimulus grant of \$800,000. The original cast iron "runner" (or waterwheel) was replaced, which will increase the output of the unit.

The Prairie River Hydro facility was rebuilt last fall and winter nearly three years after it was destroyed by fire. Built in 1919 by a paper company, it was one of Itasca County's first renewable energy resources and purchased by Minnesota Power in 1982. Considerable renovations were also done at the company's Little Falls hydro station in 2011.



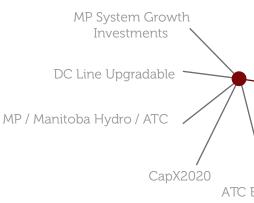
MINNESOTA POWER'S HYDRO FACILITY ON THE PRAIRIE RIVER, PICTURED ABOVE IN MARCH OF THIS YEAR, WAS REBUILT IN 2011, THREE YEARS AFTER IT WAS DESTROYED BY FIRE. ORIGINALLY BUILT IN 1919 BY A PAPER COMPANY, THE FACILITY WAS PURCHASED BY MINNESOTA POWER IN 1982. THE COMPANY'S LITTLE FALLS AND FOND DU LAC HYDROELECTRIC PLANTS ALSO UNDERWENT EXTENSIVE RENOVATION IN 2011. AT THE SAME TIME, MINNESOTA POWER WAS EXECUTING A MAJOR HYDROPOWER PURCHASE FROM MANITOBA THAT WILL BEGIN IN 2020. RENEWABLE ENERGY FROM WATER IS A FUNDAMENTAL PART OF ALLETE'S PAST, PRESENT AND FUTURE.



Hibbard Biomass



## ALLETE and Minnesota Power pursuing multifaceted transmission investments for renewable transport, reliability



Investing in transmission is a cornerstone of ALLETE's growth strategy, and much of the transmission growth contemplated by the company extends beyond the boundaries of Minnesota Power's service area in northeast Minnesota.

Electric transmission growth has everything to do with connecting power sources and end users while insuring the reliability of the grid. ALLETE and Minnesota Power are well positioned to take advantage of these fundamentals.

Minnesota Power is gearing up to serve new customer load growth on the mineral-rich Mesabi Iron Range. At the same time, the company is in the midst of building a major addition to its wind energy center near the terminus of the 465-mile direct current transmission line it purchased in 2009.

Studies have shown that the electric transmission system in the Upper Midwest will require major upgrades and expansion to accommodate increased electricity demand and to support renewable energy expansion. ALLETE and Minnesota Power have engaged with American Transmission Company and the CapX2020 consortium to bolster the electric grid in the region.

In announcing a major initiative earlier this year to bring a 500-kilovolt transmission line from Winnipeg, Canada, to Minnesota's Mesabi Iron Range, the company plans to move even further beyond traditional boundaries to invest in transmission infrastructure.

#### American Transmission Co. investment

In 2006, ALLETE began investing in ATC, one of the nation's first for-profit electric transmission companies when it was founded in 2001. ALLETE's investment in this Wisconsin-based public utility has grown to \$98.9 million (as of Jan. 1, 2012), representing an approximate eight percent ownership interest. In September of 2011, ATC updated its 10-year transmission assessment by identifying transmission system improvements between \$3.8 and \$4.4 billion. In addition, last year, ATC and Duke Energy Corp. announced the creation of a joint venture that has proposed to build, own and operate new electric transmission projects with a total cost of approximately \$4 billion.

These improvements are expected to be funded by ATC through a combination of internally generated cash, debt and investor contributions. As opportunities arise, ALLETE plans to make additional investments in ATC through general capital calls based upon our pro-rata ownership interest in ATC.

#### CapX2020

Minnesota Power is a participant in the CapX2020 initiative, a collaboration consisting of Minnesota's largest transmission owners as well as electric cooperatives, municipals



MINNESOTA POWER HAS PROPOSED THE CONSTRUCTION OF A 500-KILOVOLT TRANSMISSION LINE TO BRING HYDROELECTRIC POWER FROM MANITOBA TO MINNESOTA'S MESABI IRON RANGE.



#### Transmission Infrastructure



ATC Equity Investments



ALLETE PLANS TO MAKE ADDITIONAL INVESTMENTS IN ATC.

and investor-owned utilities. Its mission is to ensure electric transmission and distribution reliability in Minnesota and the surrounding region for the future.

Minnesota Power is participating in three CapX2020 transmission line construction projects: the Monticello-St. Cloud line, the extension of the line to Fargo, N.D., and a new 230-kilovolt line between Bemidji and a Minnesota Power substation at its Boswell Energy Center near Grand Rapids.

Based on the projected costs of the three transmission lines and the percentage agreements among participating utilities, Minnesota Power plans to invest between \$100 million and \$125 million in the CapX2020 initiative through 2015, of which \$27.8 million was spent through December 31, 2011. As future CapX2020 projects are identified, Minnesota Power may elect to participate on a project-by-project basis.

#### Winnipeg-Iron Range line

In February of 2012, Minnesota Power filed its intent to pursue construction of new transmission from Winnipeg, Manitoba, to the Mesabi Iron Range and eventually into Duluth, Minn., in order to bring renewable energy from Canada and to upgrade the Upper Midwest's electric system.

The company filed its intent to pursue the project through the transmission expansion planning process of MISO, which manages grid reliability and electricity markets across 11 northern tier states and Manitoba. The proposed transmission build is linked to Minnesota Power's long-term 250-megawatt purchase of hydropower from Manitoba Hydro that begins in 2020.

New transmission infrastructure to carry the energy from Manitoba is an essential component of that power purchase agreement, first announced last June. Manitoba Hydro, a Crown Corporation based in Winnipeg and the province of Manitoba's major energy utility, generates energy by way of hydroelectric dams in the northern part of the province.

After months of study and evaluation, planners at Minnesota Power and Manitoba Hydro are proposing construction of a 500 kV line, which would strengthen the electric grid, enhance regional reliability and promote a greater exchange of sustainable energy.

That 500 kV circuit is expected to extend southward from Winnipeg and connect to a substation on the Mesabi Iron Range, where several Minnesota Power industrial customers process taconite and manufacture paper. The Winnipeg-Iron Range transmission build is expected to be in service in 2020. Total project costs, ownership shares and cost allocation are still to be determined

In activity separate from the Winnipeg-Iron Range project, Minnesota Power and ATC are evaluating the joint development of a doublecircuit 345 kV line from the Iron Range to Duluth for service in approximately 2020. The two companies are also assessing transmission alternatives in Wisconsin that would allow for the movement of more renewable energy in the Upper Midwest while at the same time strengthening electric reliability in the region.

Minnesota Power, Manitoba Hydro and ATC are all members of MISO, which plans regional transmission projects through the MISO Transmission Expansion Planning process.

### BNI working toward its largest expansion of Center Mine

BNI Coal's Center Mine in North Dakota sold approximately 4.3 million tons of lignite coal in 2011, virtually all of it to two electric generating cooperatives. The mining process annually disturbs and reclaims approximately 210 acres



A WHOLLY-OWNED SUBSIDIARY OF ALLETE, BNI SUPPLIES LIGNITE TO FUEL THE NEARBY YOUNG GENERATING STATION, SEEN ON THE DISTANT HORIZON IN THE PHOTO ABOVE. A SURFACE MINE PERMIT FOR THE MINE EXPANSION WAS SUBMITTED IN DECEMBER OF 2011 AND THE COMPANY IS ON TRACK TO HAVE THIS PERMIT APPLICATION APPROVED IN THE FIRST QUARTER OF 2013. IN GEARING UP FOR THE EXPANSION, BNI PURCHASED AND COMMISSIONED TRUCK AND EXCAVATOR FLEETS EARLY THIS YEAR. A NEW WASH BAY AND EXPANDED SHOP ARE NEARING COMPLETION.

	per year. BNI is working toward the regulatory
in	approvals needed to begin a 9,000-acre
ng	expansion of the surface mine $-$ the largest
	expansion since its opening in 1970.



Energy-centric Investments



### **ALLETE Clean Energy aim:** explore new markets for growth

In August of 2011, ALLETE established a new, wholly-owned subsidiary to develop or acquire capital projects aimed at creating energy solutionsvia wind, solar, biomass, hydro, natural gas/liquids, shale resources, clean coal, and other clean energy innovations.

The new subsidiary, ALLETE Clean Energy, operates independently of utility division Minnesota Power in pursuit of new projects. ALLETE Clean Energy intends to market to electric utilities, cooperatives, municipalities, independent power marketers and large end-users across North America with a goal of securing long-term power purchase agreements.

The new company enters a growing market for cleaner, more sustainable energy with a team of experienced energy developers and a solid base from which to develop renewable energy in North Dakota.

ALLETE is seeking approval from the Minnesota Public Utilities Commission to transfer transmission and wind development rights in North Dakota to ALLETE Clean Energy. These rights are separate and distinct from

those needed by Minnesota Power to meet the state of Minnesota's renewable energy standard requirements. The company is also seeking approval for certain affiliated interest agreements between ALLETE and ALLETE Clean Energy related to shared services.

Beyond the development of projects in wind-rich North Dakota, where Minnesota Power is developing its Bison wind energy center, ALLETE Clean Energy is looking at capital projects in other locations and energy segments.

The new company is exploring participation in the rapidly expanding natural gas and oil shale industry, initially focusing on midstream development in the North Dakota region. Solar energy projects in the western U.S. are also a target of ALLETE Clean Energy, as are hydropower and biomass developments.

ALLETE management believes strongly that issues such as U.S. energy independence, regulatory pressures on coal and an aging electric generation fleet will drive a need for cleaner energy sources in the future.



ALLETE CLEAN ENERGY WILL DEVELOP OR ACQUIRE PROJECTS AIMED AT DELIVERING ENERGY SOURCES WITH MINIMAL ENVIRONMENTAL IMPACT, INCLUDING WIND, HYDRO AND SOLAR.

ц Т

U

entı

g ∠

**U** 

Transmission

Energy Infrastructure Services



## Growth Opportunities



30 West Superior Street Duluth, MN 55802-2093

Shareholder Services 1-800-535-3056 or 218-723-3974 www.allete.com

Listed on the NYSE: ALE