

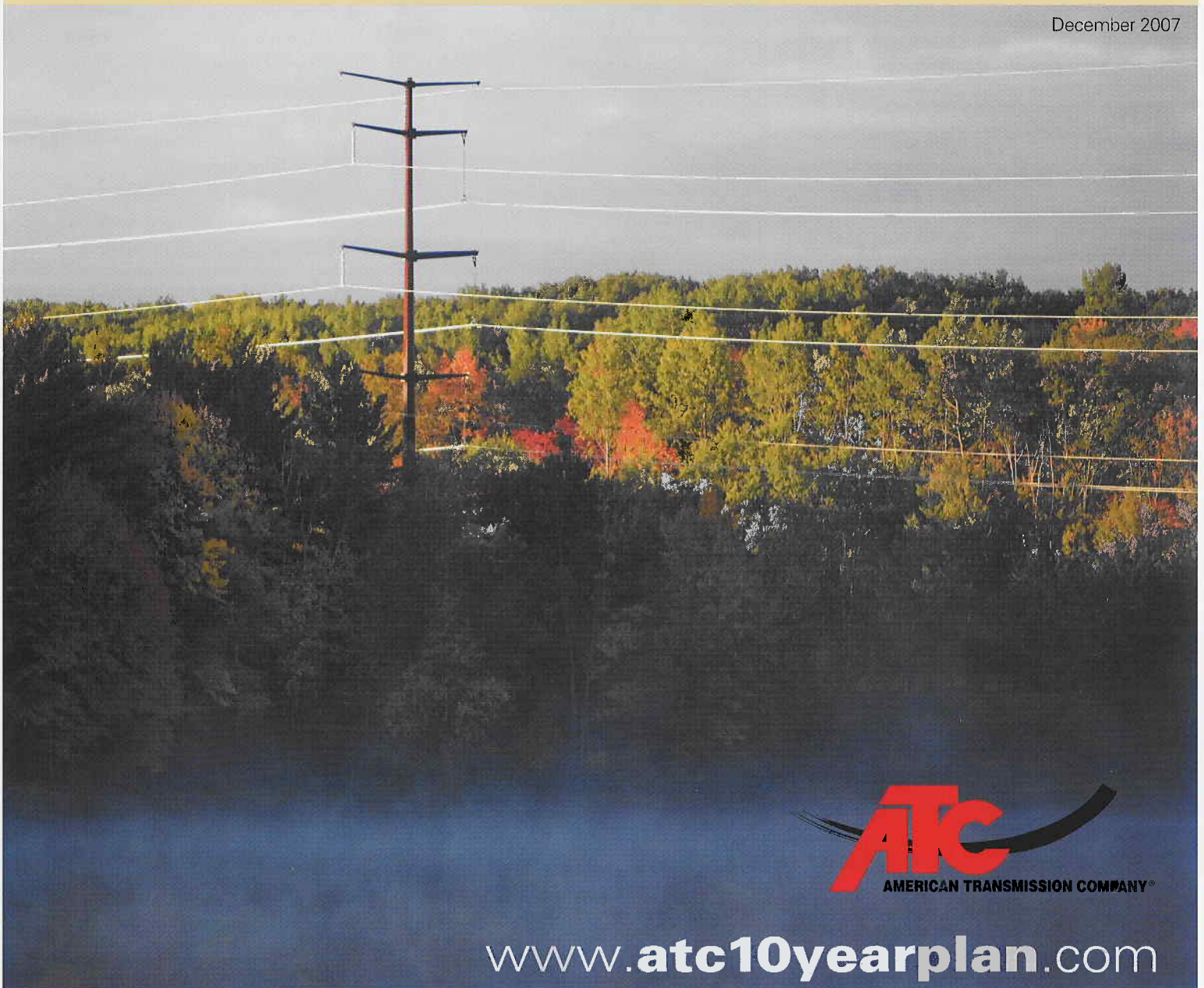


Michigan's Upper Peninsula and Northern Wisconsin

2007 10-Year Transmission System Assessment **Update**

A look at electric transmission system limitations and proposed solutions for improving electric system reliability

December 2007



www.atc10yearplan.com

Looking at tomorrow's electric needs today

Advances in technology powered by electricity are improving our quality of life. At the same time, they've created a dependence on and expectation for an uninterrupted supply of electricity. However, the age of the transmission system and changes in the regional wholesale electricity market are impacting the reliability of the electric system upon which people and businesses have become so dependent.

American Transmission Co. was formed in 2001 to plan, permit, build, own, operate and maintain a transmission system that meets the reliability, economic and adequacy needs of our customers. Our planners continually conduct engineering studies on the electric transmission system looking for potential problems that may affect the future performance of the system. Since 2001, ATC has produced annual assessments of the transmission system, identifying areas of need on the system and proposing solutions to those needs.

This document represents an update to our 2006 10-Year Assessment information based on further development of specific needs and projects during the past year. We did not undertake a complete set of new transmission system studies but used information from the 2006 10-Year Assessment to develop projects that will be put into service. These project changes are reflected in this summary.

As part of our technical studies, we take a comprehensive look at various factors affecting electricity utilization in the region, such as business development, employment trends, projected growth in population and electricity usage and savings from energy efficiency efforts.

We look 10 years into the future because it can take up to eight years to plan, study route options, get approvals and build new transmission lines.

Federal oversight increases

In recent years, the federal government has taken additional steps to ensure that transmission-owning utilities, like ATC, have produced and shared planning information with the public and local stakeholders. Since 2001, we have engaged in open and collaborative efforts to share information and solicit input on our plans. We believe that in making our planning efforts transparent and available to the public, the proposals for needed facilities can be more readily understood and accepted by communities that stand to benefit from them. The underlying principles of this approach are now required from utilities that own and plan for new transmission lines. An overview of our planning process is available at www.atc10yearplan.com.



In the years 2008 and beyond, ATC will be conducting additional public outreach, gathering input from our stakeholders early in the 10-Year Assessment process to include in our assumptions and models. We will also meet with interested stakeholders in the middle of the process to review interim results. This process is intended to provide even more openness and

transparency and result in better planning.

Studies indicate need for \$2.8 billion investment over 10 years

In our assessment of the electric transmission system needs through 2016, we estimate \$2.8 billion in system improvements including 353 miles of new transmission lines and upgrades to 652 miles of existing lines across our service area.

The details of our studies can be found at www.atc10yearplan.com.

Transmission is the vital link in bringing power to

Transmission lines move electricity at high voltages over long distances – from power plants to communities where local utilities deliver power to homes and businesses via local electric distribution lines. A reliable transmission network provides access to many sources of power, whether they are local or regional. Having multiple paths



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Electric System Overview

Population, employment increasing

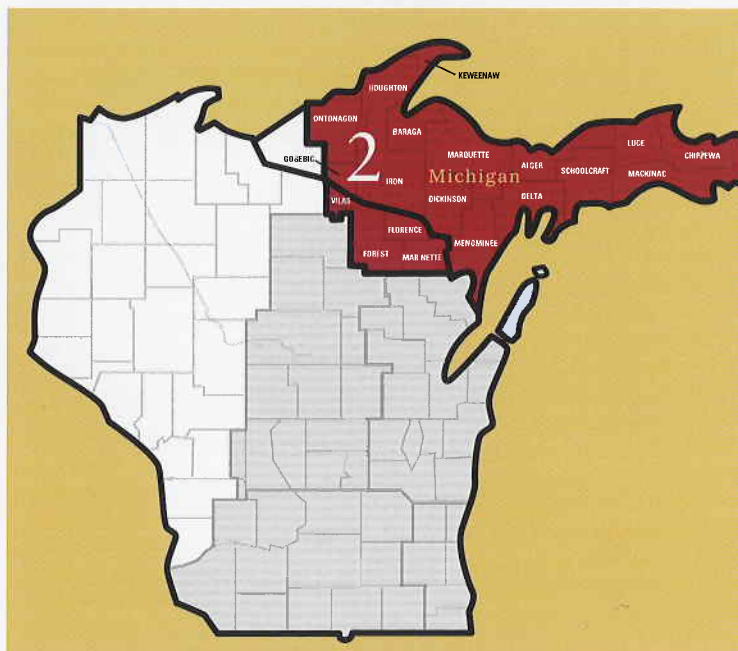
- Population in Zone 2 is projected to grow 0.3 percent annually through 2011. From 2001 to 2006, Vilas County realized the largest increase in population and the highest growth rate.
- Employment in Zone 2 is projected to grow 1.4 percent annually through 2011. From 2001 to 2006, Marquette County realized the largest increase in employment, while Forest County had the highest growth rate.

Electricity usage growing

- Zone 2 typically experiences peak electric demands during the winter months. Ore mining and paper mills are the largest electricity users in the zone.
- As depicted in the 2006 Assessment, electric load is projected to grow 0.4 percent annually through 2015.

Transmission projects completed or under way address electric needs

- **Cranberry-Conover new 115-kilovolt line** – The PSCW approved our application to construct this new 115-kilovolt transmission line from the southern boundary of Eagle River to just east of Conover. This project is currently under construction.
- **Conover-Plains transmission line rebuild** – In conjunction with the Cranberry-Conover project outlined above, rebuilding this 69-kilovolt line for 138-kilovolt operation improves the voltage profile in the western Upper Peninsula and addresses aging facilities with condition issues.



Our 2007 10-Year Transmission System Assessment Update outlines more than 30 additional projects to ensure electric system reliability in Michigan's Upper Peninsula and Northern Wisconsin. The following pages describe the system limitations in Michigan's Upper Peninsula and Northern Wisconsin, and our planned, proposed and provisional projects to address those limitations.

communities

to get power from producers to consumers lessens the chance that they will experience service interruptions. Multiple major transmission lines also give power generators and local utilities the flexibility to access regions where they can sell and buy electricity to control overall costs for everyone.