



Maintaining Adequate Electric Transmission Infrastructure

Doug Collins, Executive Director – ITC Midwest

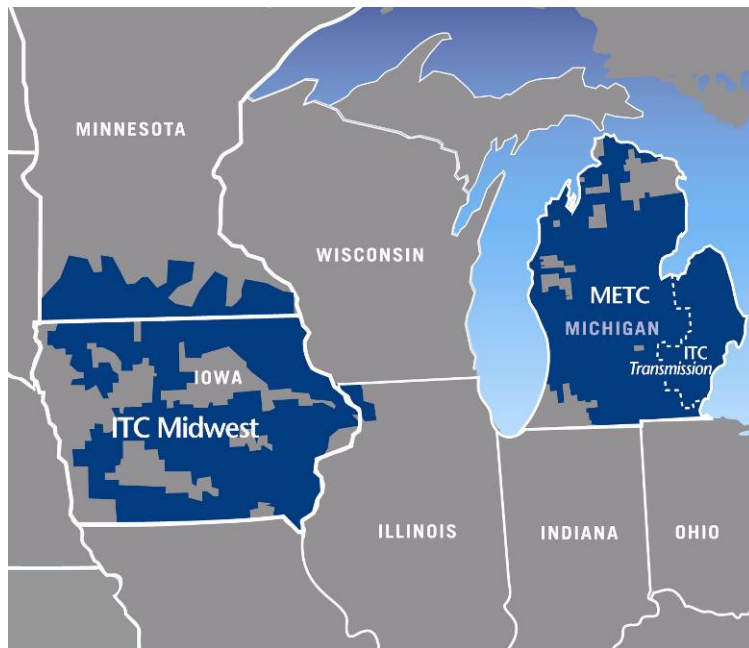
The Institute for Regulatory Policy Studies

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Introduction to ITC



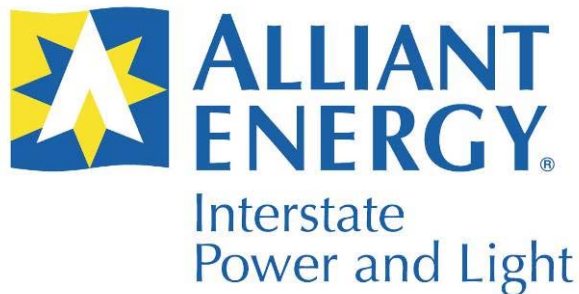
Service Territory Map



- ◆ ITC established in March 2003 when DTE Energy sold transmission subsidiary ITC *Transmission*.
- ◆ In October 2006 ITC closed on acquisition of Michigan Electric Transmission Company, LLC (METC).
 - METC system covers bulk of remainder of Michigan's Lower Peninsula.
- ◆ In December 2007 ITC Midwest LLC acquired the transmission assets of Interstate Power & Light Company (IPL).
- ◆ Also actively seeking opportunities to build, own, operate and maintain transmission in Kansas, Oklahoma and Texas.

ITC is committed to investing in the electricity transmission grid in an effort to improve reliability, reduce congestion and lower the overall cost of delivered energy

ITC Midwest



- ◆ ITC Midwest LLC, a subsidiary of ITC Holdings Corp. (NYSE: ITC), on December 20, 2007, acquired the transmission assets of Interstate Power and Light Company (IP&L), a subsidiary of Alliant Energy.
 - Nearly 7,000 miles of lines were transferred

34,500 volt (34.5 kV) lines:	2,270 miles
69,000 volt (69 kV) lines:	2,563 miles
115,000 volt (115 kV) lines:	371 miles
161,000 volt (161 kV) lines:	1,401 miles
345,000 volt (345 kV) lines:	195 miles
Substations:	170
- ◆ Transaction valued at approximately \$783 million
- ◆ Required approvals from FERC, Iowa, Minnesota, Illinois and Missouri commissions, and anti-trust review.
- ◆ *Created a new energy partner for Iowa, Minnesota, Illinois, Missouri and the Midwest: A truly independent electric transmission company*

ITC's Series of Firsts



- ◆ First company to gain FERC approval for operation of an independent transmission company under an RTO (Regional Transmission Organization)
- ◆ First truly independent transmission company
- ◆ First (and still only) electric independent transmission company to go public
 - Went public in July 2005.
 - Listed on the New York Stock Exchange under ticker symbol “ITC.”

Today, ITC is the largest independent transmission company and currently 6th largest transmission company overall in the U.S. in terms of transmission load served

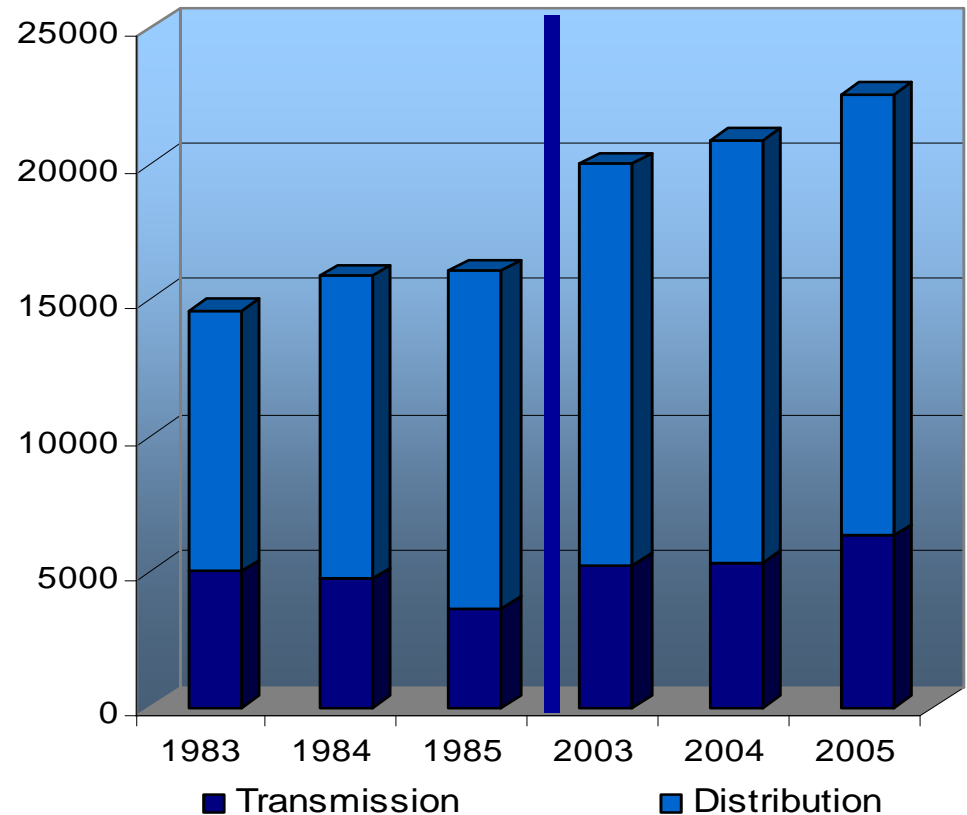
Based on transmission load served (annual electric retail sales in the service territory)

Current Transmission Issues

Legacy of Under-Investment



In real dollar terms, investment in transmission is essentially unchanged from the levels of 20 years ago, while investment in distribution has grown to meet growing demand

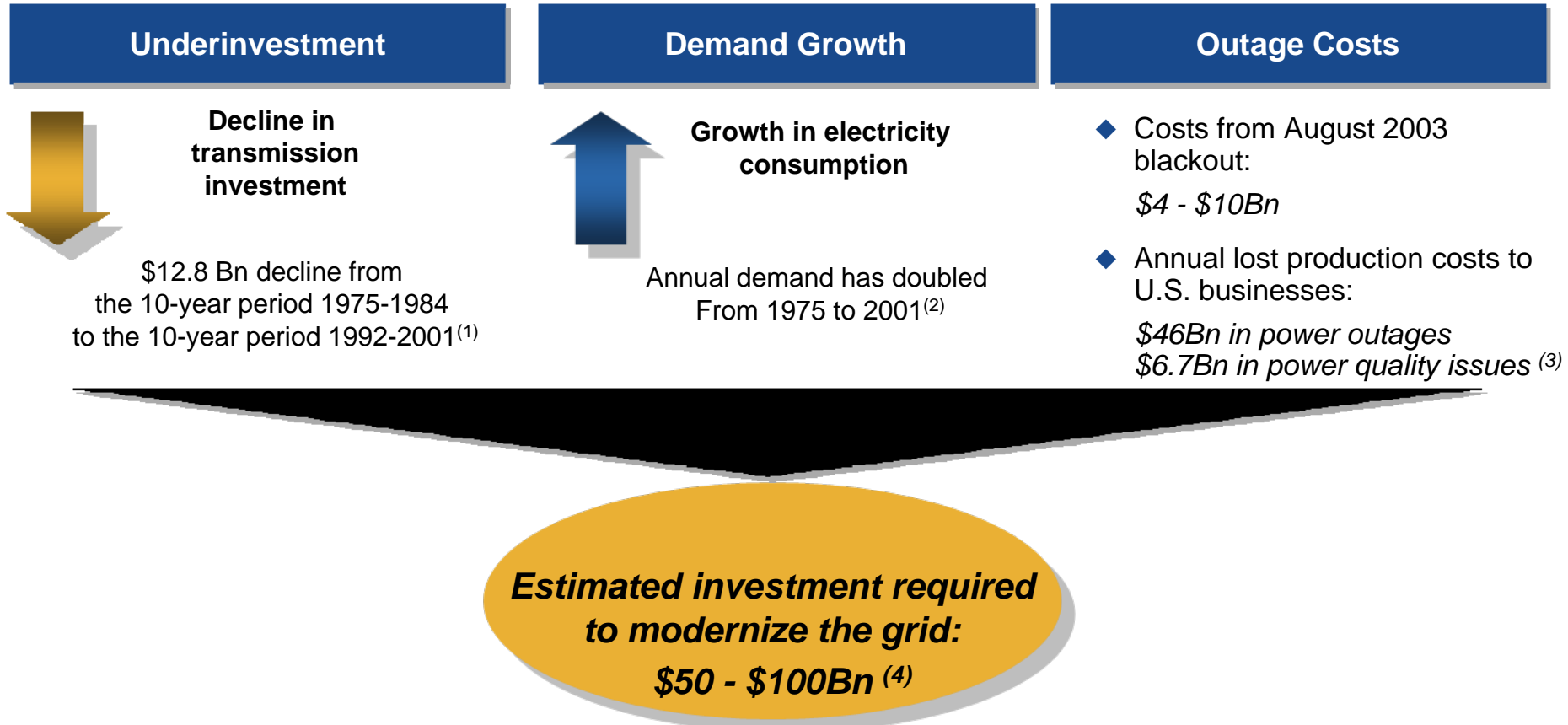


Source: EEI Statistical Yearbook/2006 data. Note: Real dollar amounts are shown using the Handy-Whitman Index of Public Construction Costs to adjust for inflation from year to year. Represents 65 shareholder-owned electric companies (both vertically integrated and stand-alone transmission companies).

Legacy of Under-Investment



Transmission investment has lagged in the last 30 years, while need for transmission continues to grow



(1) According to the Edison Electric Institute (EEI). Figures are quoted in 2003 dollars.

(2) According to Department of Energy (DOE), annual electricity consumption more than doubled from 1975 to 2001.

(3) According to Electric Power Research Institute (EPRI).

(4) According to a September 2004 DOE study regarding cost of power interruptions to U.S. electricity customers.

Legacy of Under-Investment



Rusted cathodic protection device
insecurely mounted on a jack stand



Breakers coated in rust



Cotter pin
holding up a
shield wire that
is ready to give
way



Vegetation growing into the lines

Transmission is Our Only Business



- ◆ ITC focuses on ownership, operation, maintenance, and construction of transmission facilities as a single line of business.
 - There is no internal competition for capital – it is dedicated for prudent transmission investment.
- ◆ Because of our singular business focus, we are aligned with customers.
 - Customers benefit from transmission investment by:
 - Improved reliability
 - Reduced congestion
 - Increased access to generation, including renewable resources
 - Lower cost of delivered energy

Best-in-Class



ITC aims to be a best-in-class transmission provider as measured by operations, maintenance, customer service and safety.

ITC's Report Card



Accomplishments Since Becoming an Independent Company in 2003

Capital Program

- ✓ Increased investments in the Michigan grid from a \$8-10 million a year to an average of \$125mm per year.
- ✓ The preliminary five-year plan for Iowa and Minnesota calls for multi-million dollars of investments to improve reliability and assure customers have access to low cost power.

Continued Operational Excellence

- ✓ Achieved best in class system performance decreasing system outages by 40%
- ✓ Reduced the backlog of system maintenance of 15 years to 4 years by the end of 2006

Strong Financial Profile

- ✓ Investment-grade ratings
- ✓ S&P Business Risk Rating of 2 (Business Risk Rating is a qualitative measure of non-financial business risk)
- ✓ Conservative management and proven track records allow ITC strong access to capital markets

Regulatory Leadership

- ✓ Remain closely aligned with policy objectives to rebuild electricity transmission system in the U.S.

Future Transmission Needs

Transmission plays a critical role



Regardless of the generation source or energy policy that states are pursuing, transmission plays a critical role in allowing it to happen

Lines lacking to transmit wind energy

By Paul Davidson
USA TODAY

As wind farms sprout across the country, they're kicking up a new quandary: how to zap the electricity to homes and businesses that need it.

The USA's wind-power boom, especially in rural parts of Texas, the Midwest and California, is poised to outstrip the capacity of high-voltage lines to send the electricity hundreds of miles to population centers such as Dallas, Chicago and Los Angeles.

The transmission-line shortage is threatening to slow wind energy's breakneck growth and could prevent some states from meeting renewable energy mandates.

Energy

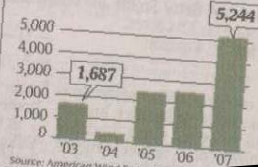
gybacked on existing wires, says analyst Stow Walker of Cambridge Energy Research Associates. But after wind energy soared 45% last year, spare transmission capacity is depleted. Wind power generates more than 1% of U.S. electricity.

Stringing new wires is easier said than done. Wind developers won't go ahead with projects until transmission lines are in place, and utilities are loath to build the lines until they're sure the developers won't back out. Also, the first wind developer in an area is often asked to shoulder much of the \$1.5 million-per-mile cost of a high-voltage line.

In Texas, which has about 25% of U.S. wind power, more eye-popping

Gathering winds

Amount of wind-generating capacity, in megawatts, added in the USA each year:



Source: American Wind Energy Association

Similar bottlenecks are stalling wind farms in the Midwest, Southwest and California. Compounding the standoff: Some states don't want residents paying for lines that will largely benefit neighboring states. As a result, utilities in several Midwestern states may not meet mandates for clean energy to make up about 20% of their energy mix by 2020, says Clair Moeller, an executive for the Midwest grid operator.

Xcel Energy, a Midwest utility, says it can't raise money for transmission lines any juice. "You're billion in capital in the recovery will come, and proposition," says Paul Xcel's utilities group.

Illam, officials in Texas, Minnesota and California transmission-line wind developers won't offer near-term can be built in transmission line bars.

Nuclear plant applications increase concerns over transmission system adequacy

by Wayne Barber

With the NRC expecting to receive more than 30 applications for new nuclear power reactors in the next several years, FERC hopes that electric transmission infrastructure will be prepared to handle the additional load.

The two agencies met jointly April 8 in Washington, D.C., to discuss transmission issues concerning the growth of nuclear power. This was the third meeting of the two commissions since the August 2003 blackout.

"If our country is going to build large numbers of new nuclear power plants, we

will need a bulk power system that can move that power to where it is needed," said FERC Chairman Joseph Kelliher. "It is also important for FERC to understand the timing of nuclear power plant additions.

"Widespread cancellations of coal plants have created a situation where the U.S. may rely largely on natural gas generation for incremental electricity supply until additional nuclear plants are operational," Kelliher said. "So, the timing of nuclear plant licensing and construction is of importance to FERC."

Renewable Resources

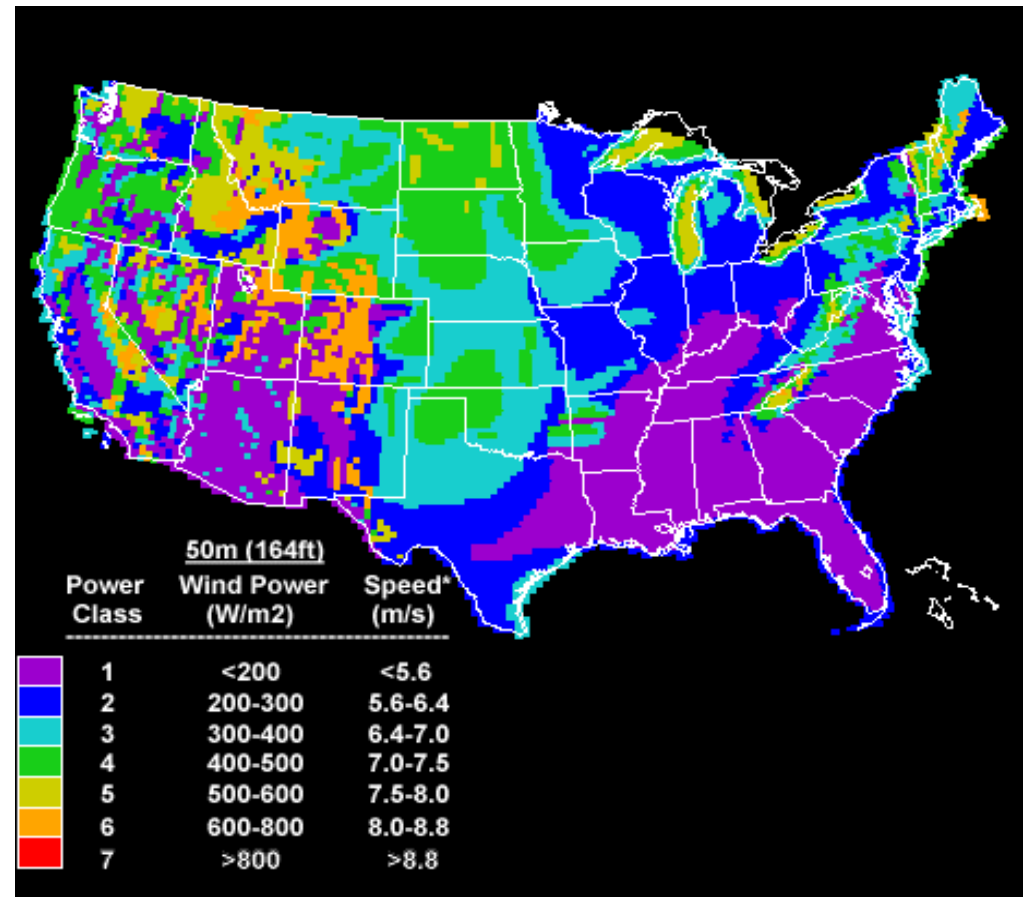
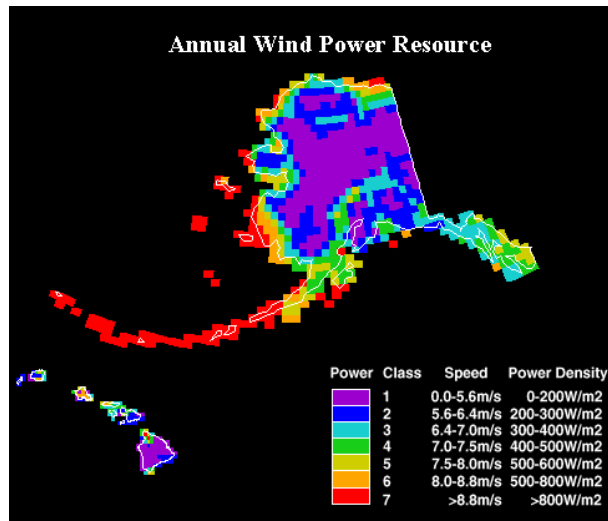


- ◆ Renewable resources are good public policy; however, many impediments still exist:
 - Cost
 - Location—not located at or near load centers
 - Size and scale
- ◆ Growing interest in Renewable Portfolio Standards (RPS) within the states.
 - Some states have more wind potential than the total load in the state.
 - States need a robust grid to support renewable resources.
 - Some will need to export while others will need to import.

Abundance of Wind in Central/Western U.S.



U.S. Annual Wind Power Resource and Wind Power Classes



Source: U.S. Dept. of Energy

ITC's Role in Achieving State's RPS

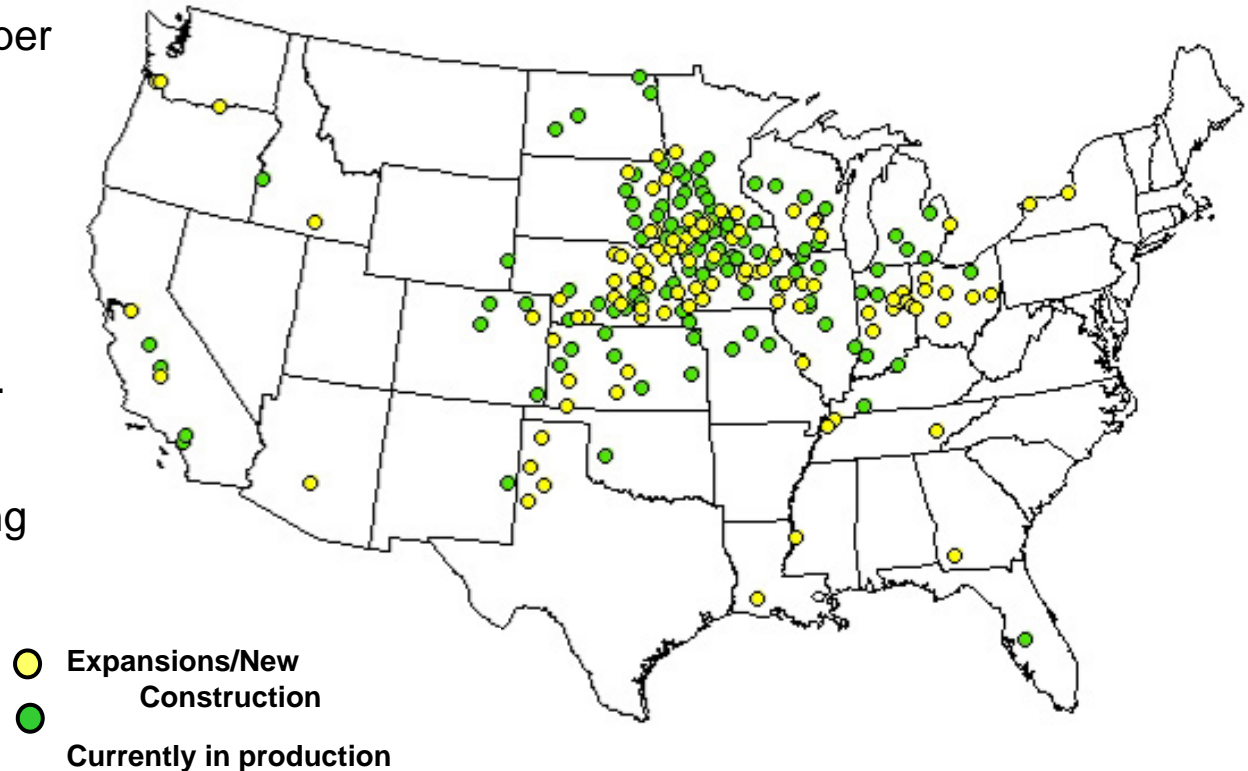


- ◆ A robust transmission system will enable a renewable resources market.
- ◆ As an independent transmission company, ITC does not care whose electrons travel over our wires.
- ◆ ITC believes it is good public policy to promote renewable resources.
- ◆ As such, ITC promotes renewable resources by:
 - Constructing energy “highways” to connect renewable resource abundant regions with load centers.
 - Promoting fair interconnection policies that remove barriers to entry for renewable resources.

Ethanol Production



- The Upper Midwest has been the leading developer of ethanol production facilities
- Ethanol facilities require approximately one megawatt for each 10 million gallons produced.
- A robust transmission system is key to providing those facilities with the electricity they need to operate

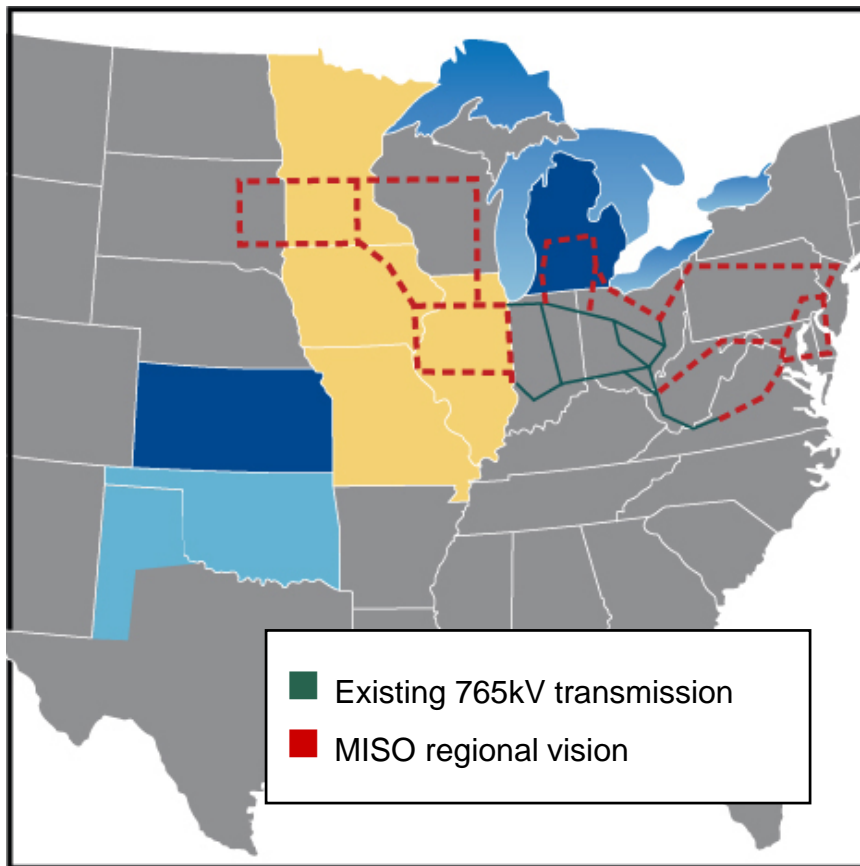


Source: <http://www.card.iastate.edu/research/bio/tools/ethanol.aspx>

Regional Transmission Vision



765 kV transmission infrastructure is part of a larger vision plan



- ◆ Major transmission investment is needed to facilitate:
 - Competitive energy markets
 - Enhanced reliability
 - Renewable resources
- ◆ Benefits to upgrading to higher voltage
 - Availability is greater than 98% of the time
 - 765 kV reduces line losses, which means less burning of fuel and reduced air emissions
 - 765 kV provides greatest capacity increases with least land impact
 - Reduced right-of-way need lowers cost as well as impacts to consumers and to environment

Questions?