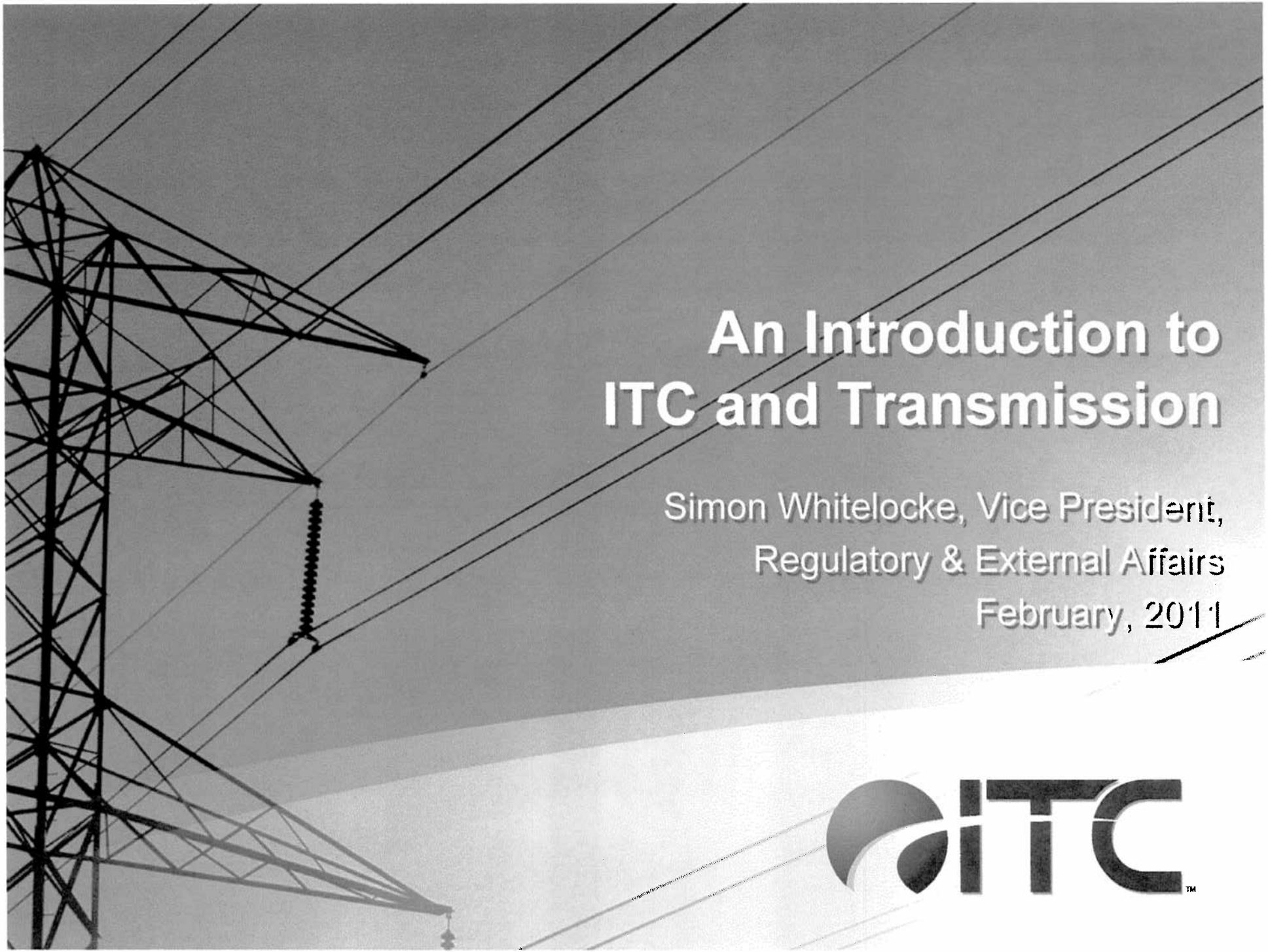

An Introduction to ITC and Transmission

Simon Whitelocke, Vice President,
Regulatory & External Affairs

February, 2011

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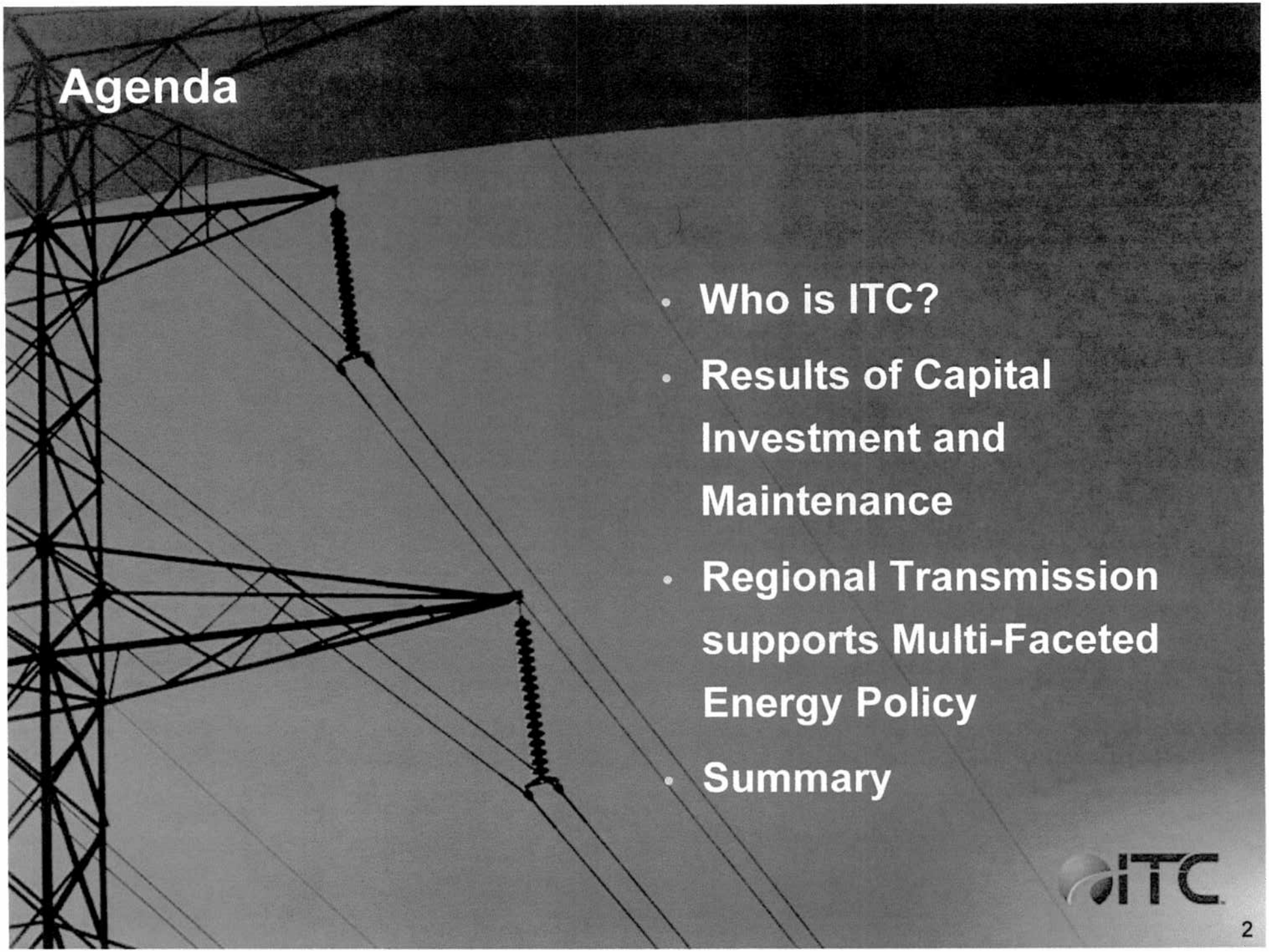
Agenda



- Who is ITC?
- Results of Capital Investment and Maintenance
- Regional Transmission supports Multi-Faceted Energy Policy
- Summary

Who is ITC?
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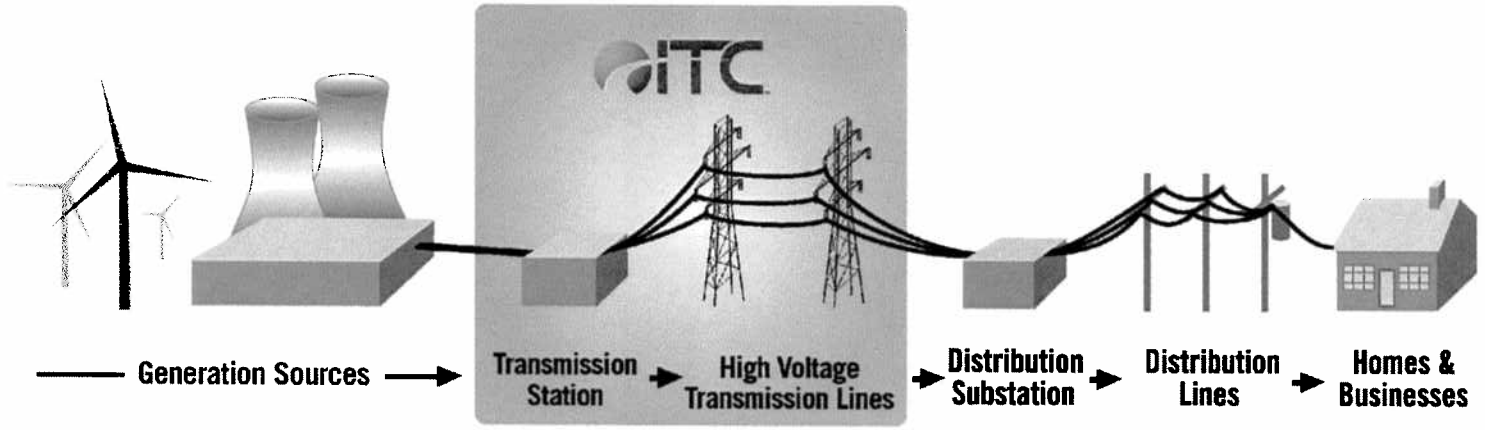
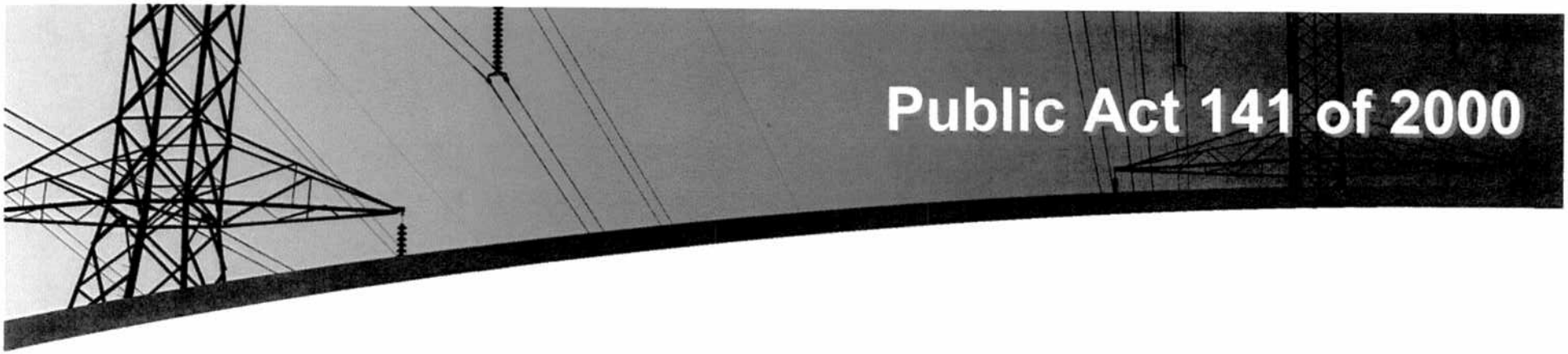
Who is ITC?



- ITC is the first and largest fully independent transmission company in the U.S.
- ITC is the eighth largest transmission-owning company in the U.S.
- ITC has no affiliation or connection with generation or distribution facilities.



Public Act 141 of 2000

- **Michigan PA 141 of 2000 provided the opportunity for the state's utilities to sell their transmission assets**

  Sec. 10w (1) Each investor-owned electric utility in this state shall, at the utility's option, either join a FERC approved multistate regional transmission system organization or other FERC approved multistate independent transmission organization or divest its interest in its transmission facilities to an independent transmission owner.

- **CE divested its transmission assets in 2002**
- **DTE divested its transmission assets in 2003**
- **In addition, both utilities joined the MISO Regional Transmission Organization so that the scheduling of the transmission system is no longer performed by market participants.**

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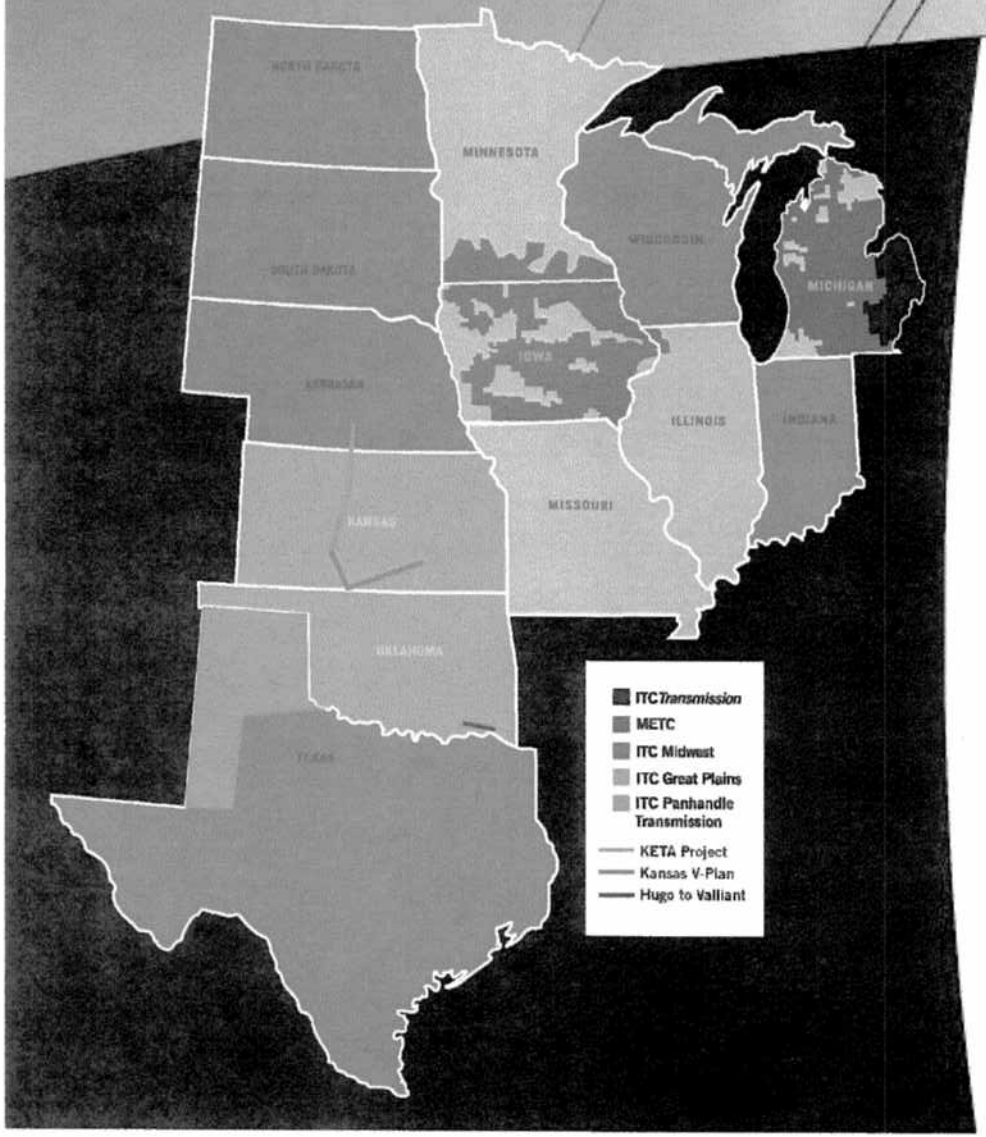
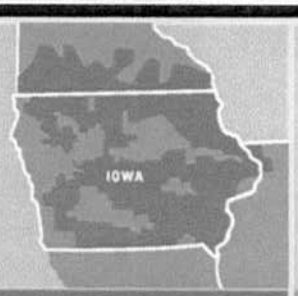
Overview of ITC

Ninth-largest transmission-owning company in the U.S.

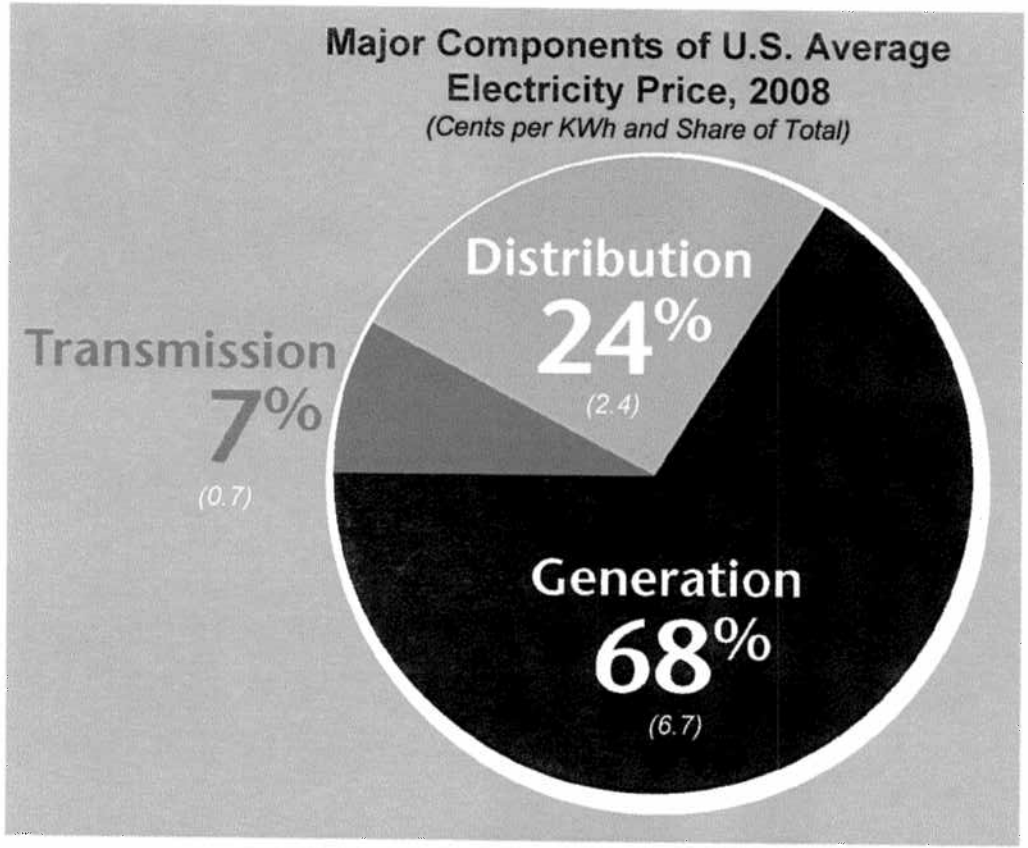


- Only **fully independent** transmission owner
- Serve combined peak load in excess of 25,000 megawatts (MW) with **15,000 miles** of transmission lines
- Since 2003, ITC has invested more than **$1.8 billion** in transmission system upgrades to improve reliability, reduce system congestion, and facilitate the non-discriminatory interconnection of new generating assets
- Actively seeking opportunities to build, own, operate and maintain transmission in SPP region, including Kansas and Oklahoma

ITC System Statistics

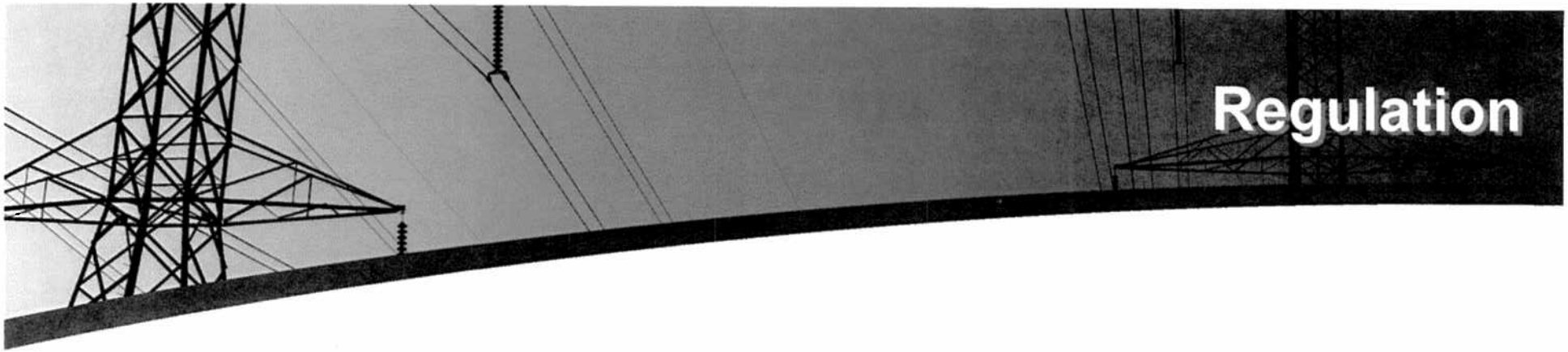
				
Service Area	ITC*Transmission*	METC	ITC Midwest	ITC Great Plains
Approx. Total System Peak Load	12,700 MW	9,400 MW	3,500 MW	1,100 MW
Approx. Total Transmission Miles	2,800	5,500	6,800	310
RTO Membership	Midwest ISO	Midwest ISO	Midwest ISO	SPP
Assets Acquired	March 1, 2003	Oct. 10, 2006	Dec. 20, 2007	Aug. 18, 2009

Transmission as Component of Bill



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2010*, Reference Case, Table A8: Electrical Supply, Disposition, Prices, and Emissions, Prices by Service Category (2009).

All of this work is accomplished while having transmission currently representing only approximately **7%** of the electricity bill



Regulation

- **ITC operating subsidiaries are regulated by the Federal Energy Regulatory Commission (FERC) for purposes of establishing rates, terms and conditions of service.**
  - Regulated by FERC because transmission is considered interstate commerce.

- **Michigan Public Service Commission maintains jurisdiction over siting of transmission projects**
  - MPSC approval required for siting of transmission projects that are 345kV and above, and over 5 miles in length (PA 30)

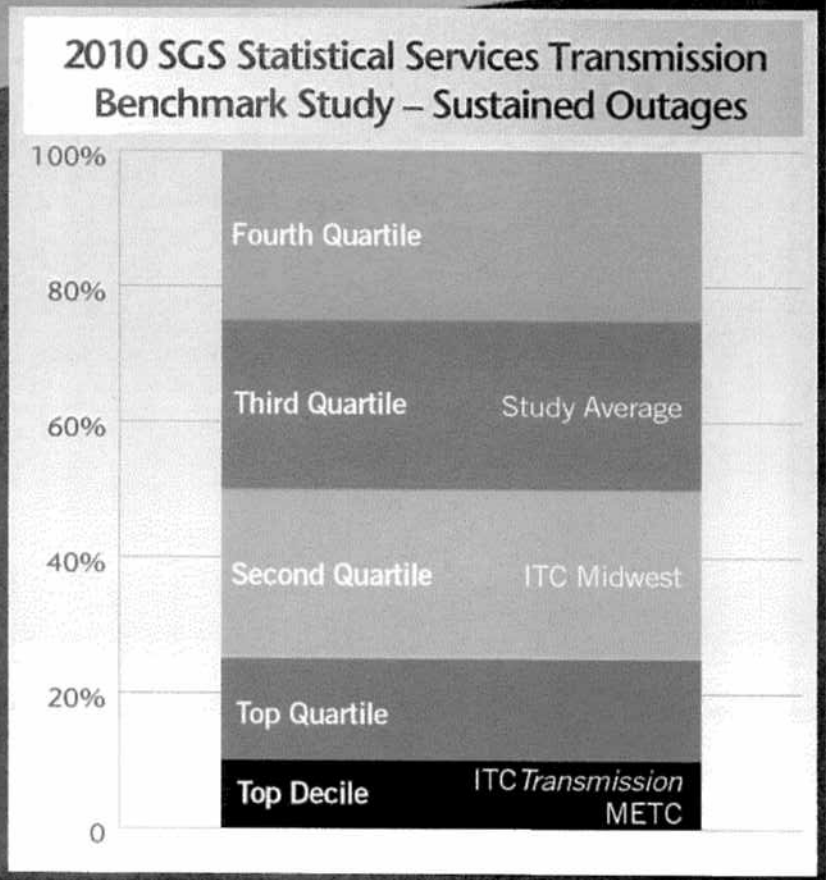
- **ITC operating subsidiaries belong to the Midwest Independent Transmission System Operator (MISO) and Southwest Power Pool (SPP), which are regional transmission organizations (RTO).**

Aligned Interests of All Stakeholders

Results of
Capital Investment and
Maintenance
ITC
™

Operational Excellence

Best-in-Class



- Best-in-class system operations and performance, including system security and safety
- ITC's operating companies consistently rank strongly in the 2010 SGS Statistical Services Transmission Reliability Benchmarking program
- ITC's security operations recognized as an "Example of Excellence" for our Reliability Readiness Evaluation and Improvement Program
- Control room is staffed with operators qualified at the highest level under the federal Operator Certification Program

Aging Infrastructure

- **Nationally, there has been a 30-year trend of underinvestment**
  - 70% of transmission lines are 25 years or older
  - 70% of power transformers are 25 years or older
  - 60% of circuit breakers are more than 30 years
- **Pro-active system maintenance and capital investment are cornerstones of ITC, as an independent transmission company**

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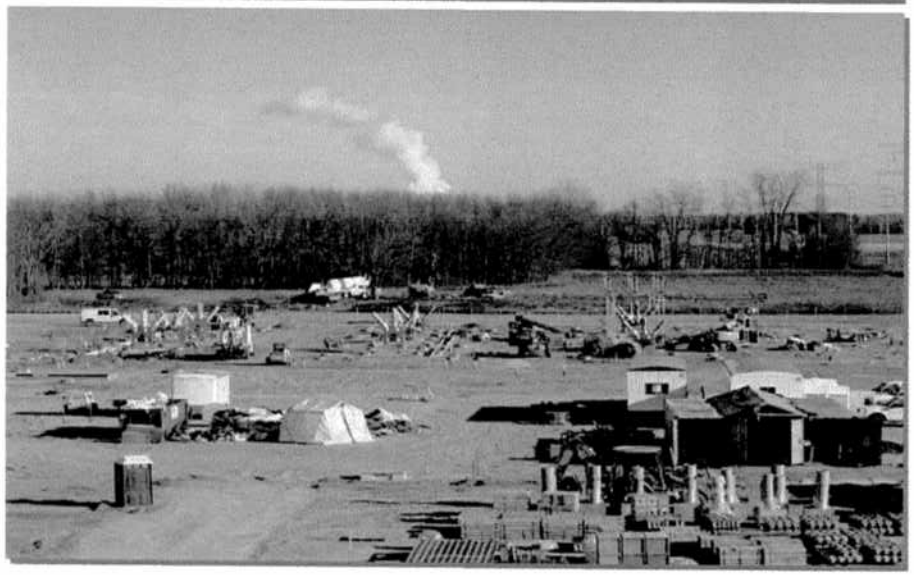
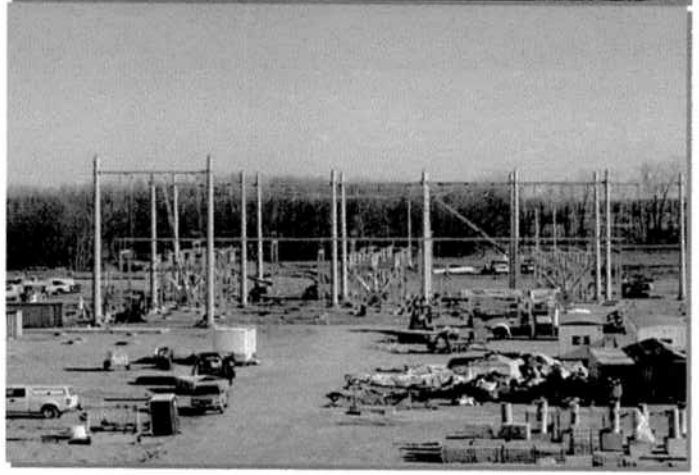
Capital Projects – Murphy Substation 2009

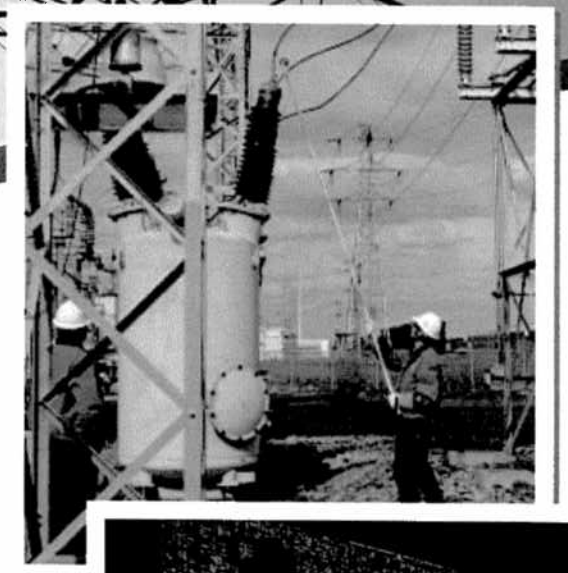




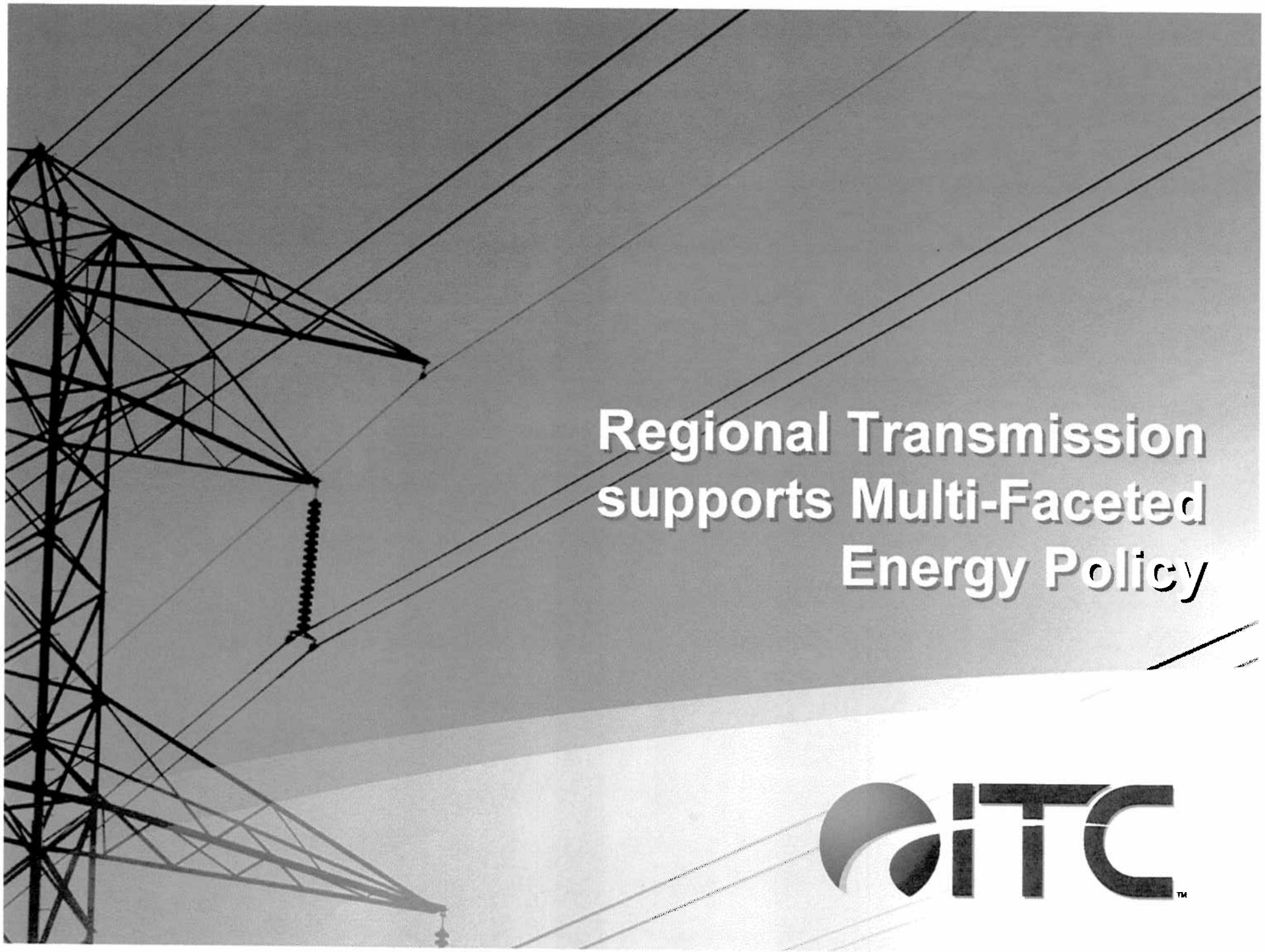
Other Noteworthy Michigan Investments

- **Examples of key projects:**
  - Saginaw / Almeda 138 kV
  - Orr Road – New 138kV Substation
  - Tittabawassee - HSC 138kV Line Rebuild
  - Keystone-Clearwater 138kV Line Rebuild
  - Bard Road, Croton and Orr Road: 138kV Capacitors
  - METC-CE Interconnection: Ten New 138kV / Distribution Substation Connections
  - Cobb Swamp

Creation of Highly-Skilled Jobs



- ITC's efforts to rebuild the transmission system provides benefits beyond improved reliability: it also creates high-quality jobs.
- Additionally, ITC has established training programs with 11 junior colleges in Michigan and Iowa in order to train new electrical maintenance personnel to work on the equipment.
- Hundreds of people have enrolled in the program.
- ITC continues to successfully train and certify individuals as NERC-certified operators; comprising more than 50% of our total operator work force.


Regional Transmission
supports Multi-Faceted
Energy Policy
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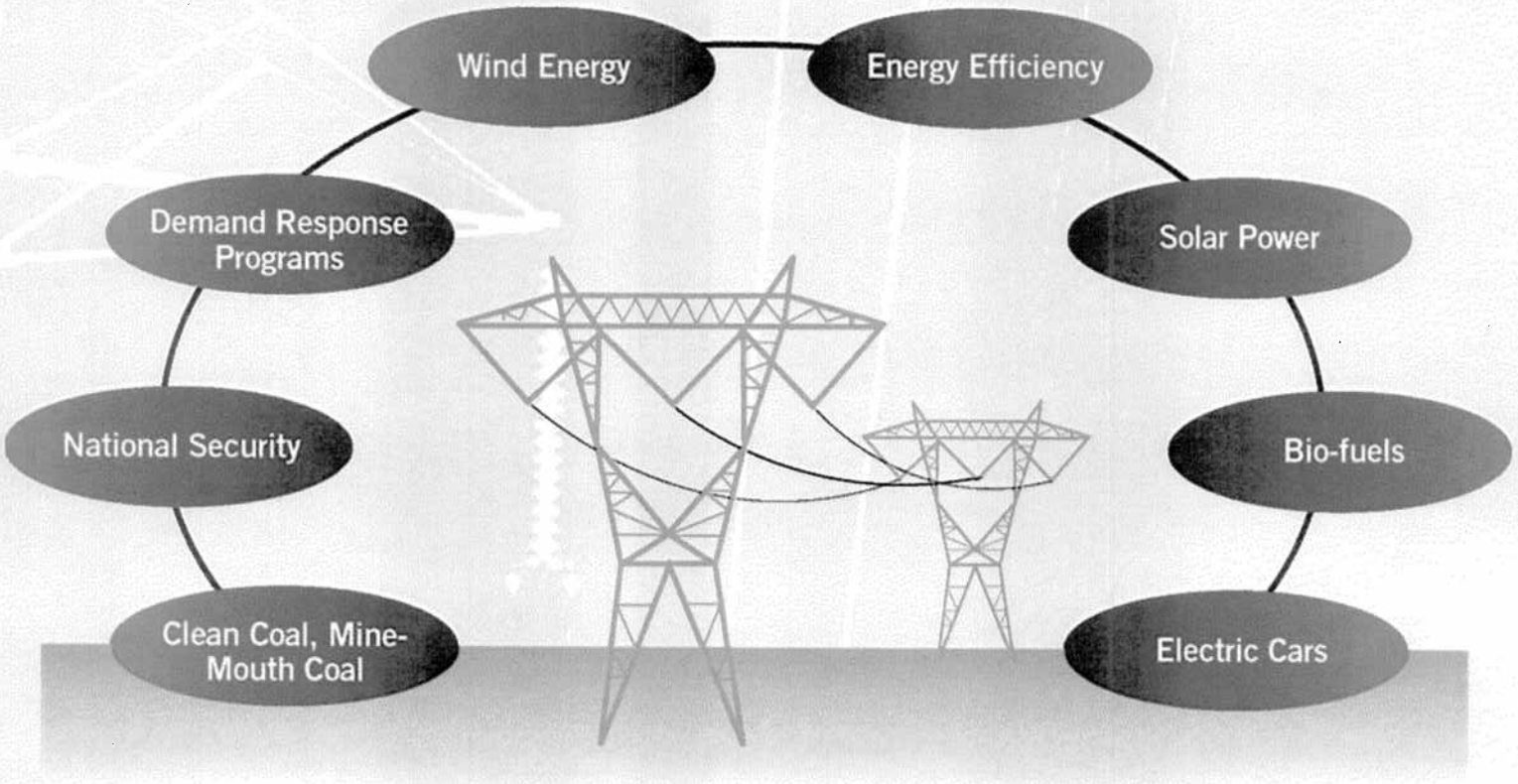
Transmission is a Critical Link



Transmission is at the center of the energy debate; it is the critical link to many of the energy policy visions.

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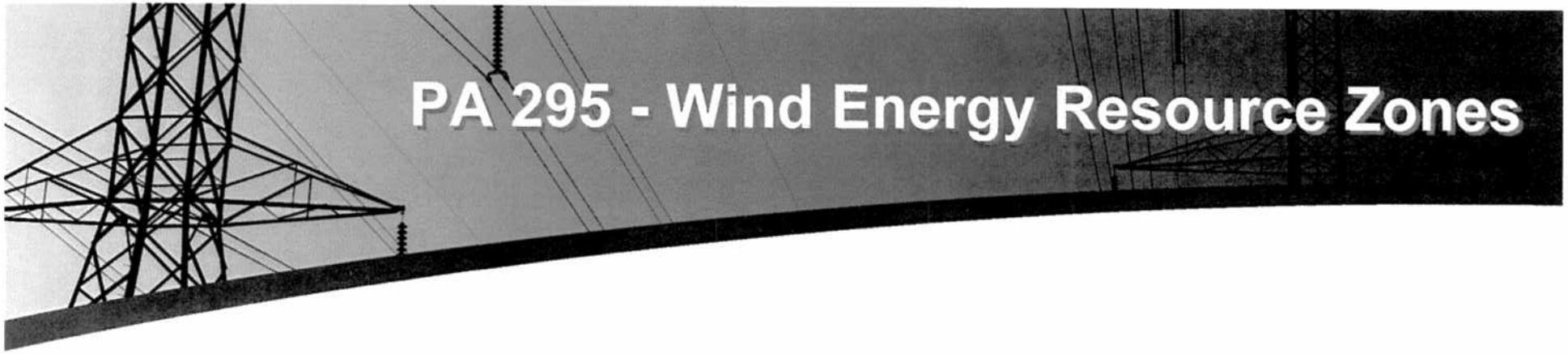

PA 295 - Wind Energy Resource Zones

- **Purpose of Language**
  - Identify optimal areas in the state for wind.
  - Define the wind potential within identified zones.
  - Identify the transmission necessary to facilitate the wind potential.
  - Provides expedited transmission siting process for interconnecting wind zones.

- **Benefits of Language**
  - Avoids the "chicken and egg" problem with the MISO queue
  - Should significantly reduce the wait time of the MISO queue as transmission gets planned for the zone, not on a project by project basis.
  - Most efficient and effective transmission will get built in the zone.
  - Because this is a state policy, it should facilitate both the transmission planning and queue process at MISO.

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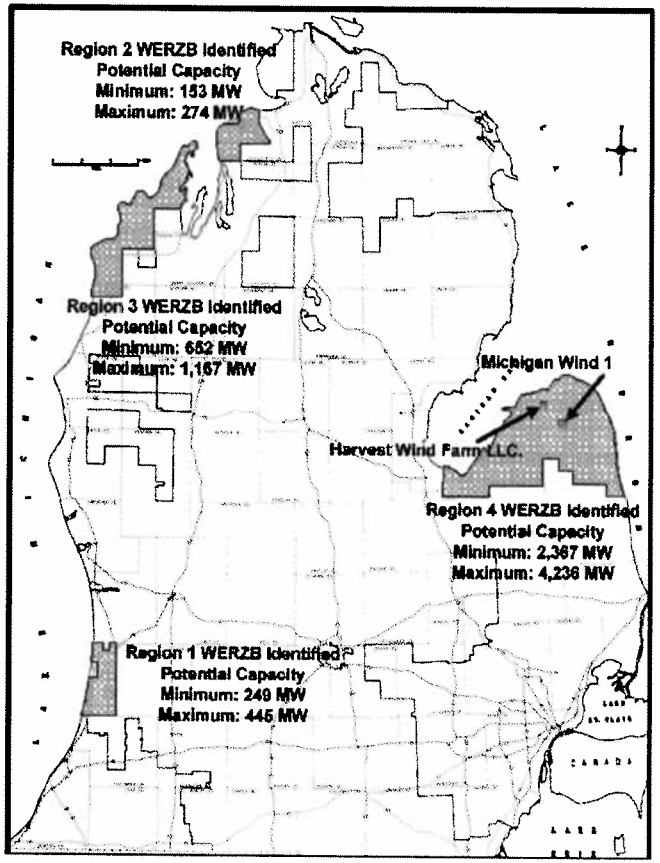
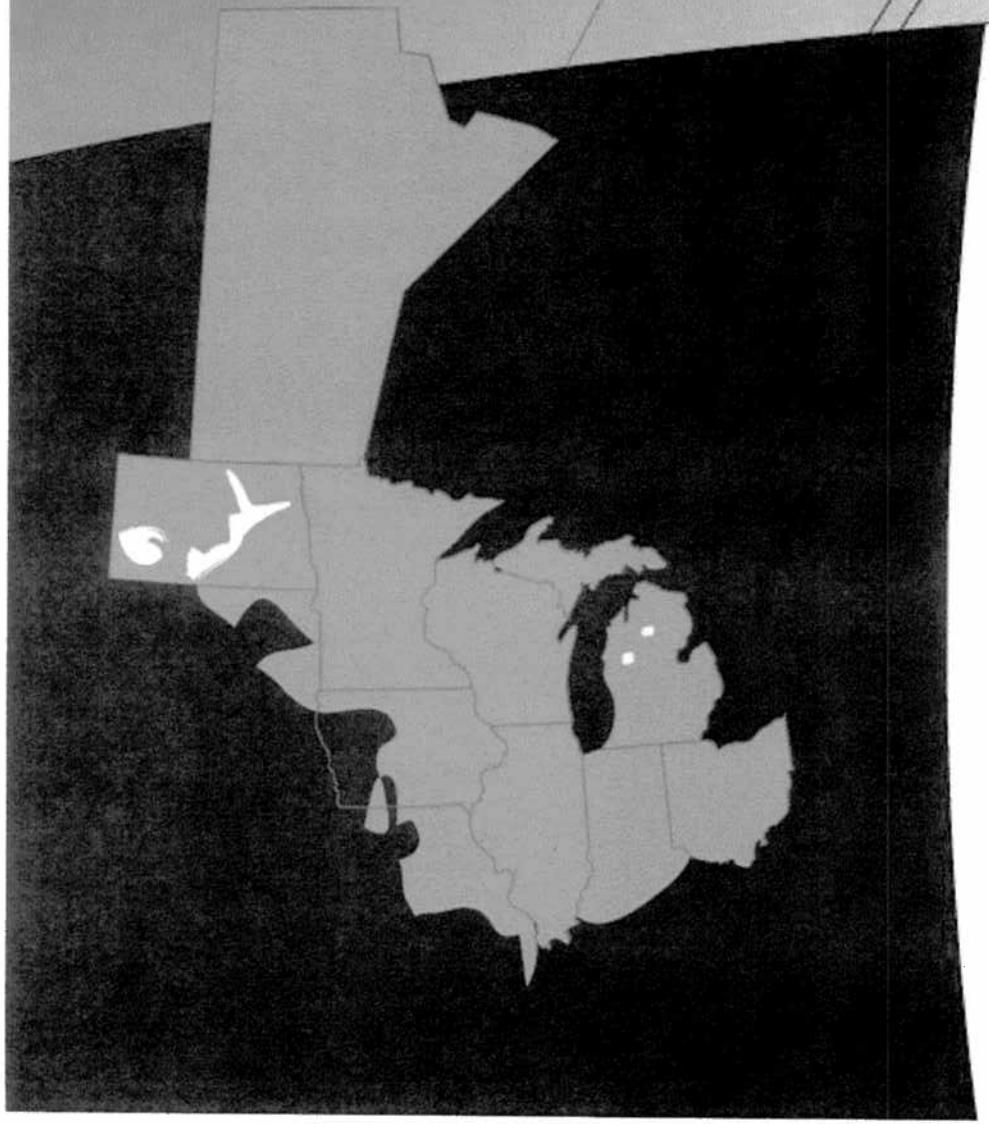
Recap of Wind Energy Activities

- PA 295 is an innovative model for forward-thinking planning as it relates to developing renewable energy.
  - Efficiently identifies where it makes sense to locate wind resources, guiding transmission planning and expediting the transmission siting process.
- On October 15, 2009, the Michigan Wind Energy Resource Zone (WERZ) Board issued its Final Report naming four regions with the highest level of wind energy potential following more than one year of stakeholder engagement and studies
- ITC and Wolverine Power submitted transmission plan 11/30/09 detailing the transmission needed to achieve the maximum and minimum wind potential from the WERZ Regions
- The MPSC issued an order on 1/27/10 naming Region 4 (Thumb) a primary zone and Region 1 (Allegan County) as another zone. This designation allows the expedited siting process to be used in the areas.
- ITC submitted to the MPSC on August 30th, 2010 an expedited siting certificate case(U-16200) for the agency's review.
- ITC presented two routes that would facilitate extracting the wind potential of Region 4 (Thumb Region).
- Order in the case is due by the end of February 2011



The Role of the RTO

Regional Level



- **On July 15th, Midwest ISO (MISO) advanced a cost allocation proposal to FERC**

- **FERC issued order in December 2010**
  - Creates a new category of projects - multi value projects (MVPs) - and provides for regional allocation of these projects
  - MVPs have a regional impact and are part of a regional plan, also intended to facilitate state and federal legislative, regulatory and policy mandates
  - Thumb Loop has been designated an MVP project

Summary
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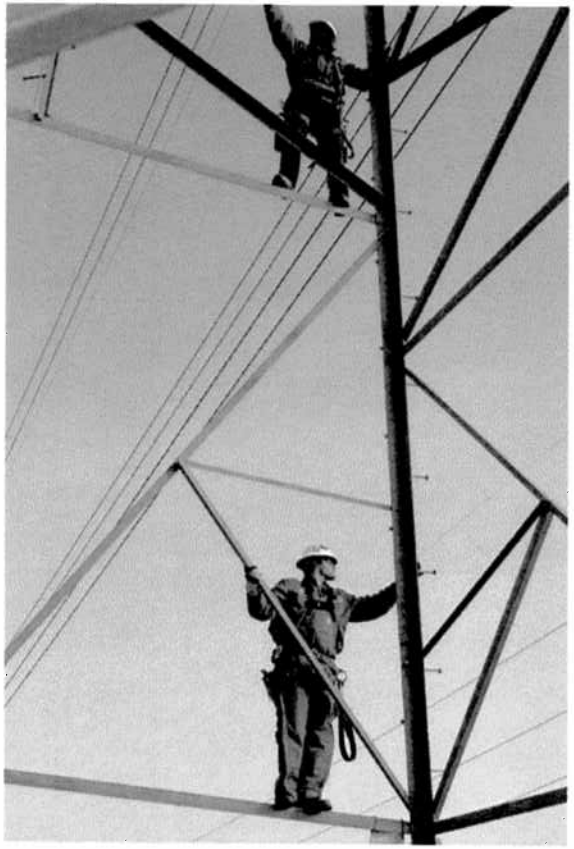
Summary



- ITC remains committed to its goals of
  - increased reliability,
  - improved efficiency,
  - increased access to generation, and
  - lower delivered cost of energy to the end user.
- ITC's capital and maintenance programs seek to make measured investments to achieve a more robust and reliable system over the long term.
- ITC has already made significant improvements to Michigan's transmission system through planned capital investments and improved maintenance activities.
- A robust transmission system is critical to bringing the benefits of all generation sources including wind, solar, and other renewables to customers.

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