ITC: Connecting Energy Infrastructure

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A FORTIS COMPANY

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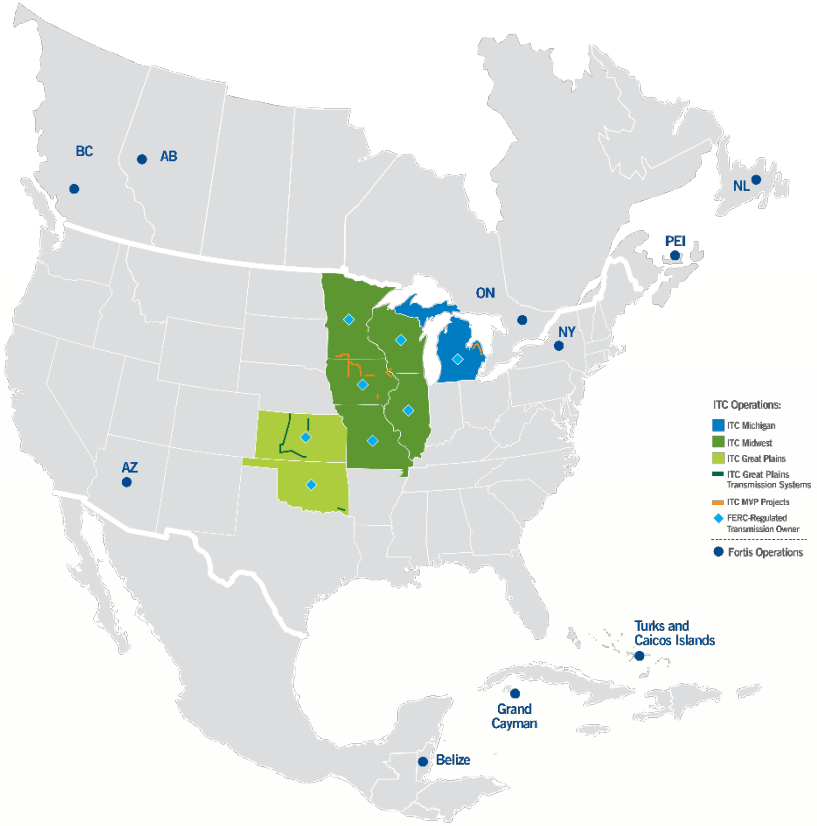
About ITC



- Largest independent electricity transmission company in U.S.
- Headquartered in Novi, Mich.
- 4 Subsidiaries in 8 states
- 16,000 Circuit miles
- 90,000 Square mile service territory
- 700 Employees
- Member of 4 RTOs:
  - MISO, SPP, PJM, NYISO
- Geographically flexible business model
- A Fortis company

ITC in Michigan

Two Operating Companies:

- ITC*Transmission*
- Michigan Electric Transmission Company (METC)
- Combined:
  - Transmission Lines – 8,700 circuit miles
  - Transmission Towers and Poles – 55,600
  - Substations – 283
  - Voltage Levels: 120kV to 345kV
  - Capital Investment: ~$4.2B since 2003
  - Jobs: 570 employees; 500 contractors

Emerging Energy Landscape

- New era dawning for how electricity is created, delivered and consumed
- Collaborative grid planning can help address important state issues
- Backbone transmission grid is the platform for all vital infrastructure and new energy technologies

Storage: Issue Summary

- Growth in renewables driving increased attention to storage technology to meet challenges of energy supply and grid stability
- **ITC position:** Energy storage, working in concert with transmission infrastructure, facilitates integration of renewables by keeping supply and demand balanced at all times

ITC Storage Activities

- Long-term outlook study
- Submitted storage solutions into separate RTO Order 1000 planning processes
- ITC continues to evaluate storage as part of its reliability planning process
- Involved in regional/national discussions regarding use of storage

ITC View of Future Storage Activities

- **Vast majority of battery storage projects to date – certainly at grid scale – have been undertaken for policy reasons rather than economic reasons**
  - Economic value difficult to demonstrate in near-term
- **ITC believes that storage will play some role in our future grid**
  - Extent of storage role dependent on factors including technology development
  - The more energy supply is decarbonized, the more storage likely needed
  - Applications exist for storage as a transmission-level asset

ITC View of Future Storage Activities (continued)

- **ITC believes that placing some storage on the transmission grid will benefit customers**
  - Aggregates benefits, reduces overall “installed plant”
  - Diversify storage technology: Other technologies exist that will be more beneficial than lithium ion
- **Still much work to be done by RTOs to effectively integrate and compensate storage**
  - Progress made varies by RTO
  - MISO and CAISO have made most progress in treating storage as a transmission asset
  - PJM farthest along in storage participation in markets

Working toward a better, stronger grid

Utilities | Regulators | Communities | Planners | Customers | Stakeholders

Common Purpose: Ensuring the connection between consumers and the energy they need is efficient, reliable and cost-effective

Common Issues: Evolving energy landscape. Transmission's backbone role in electricity delivery must be factored into planning the grid of the future

ITC's commitment:

- Good stewards of the grid
- Respect for the environment
- Perspective: What is good for customers and the grid?

Thank You

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