



ATC Planning for the Future

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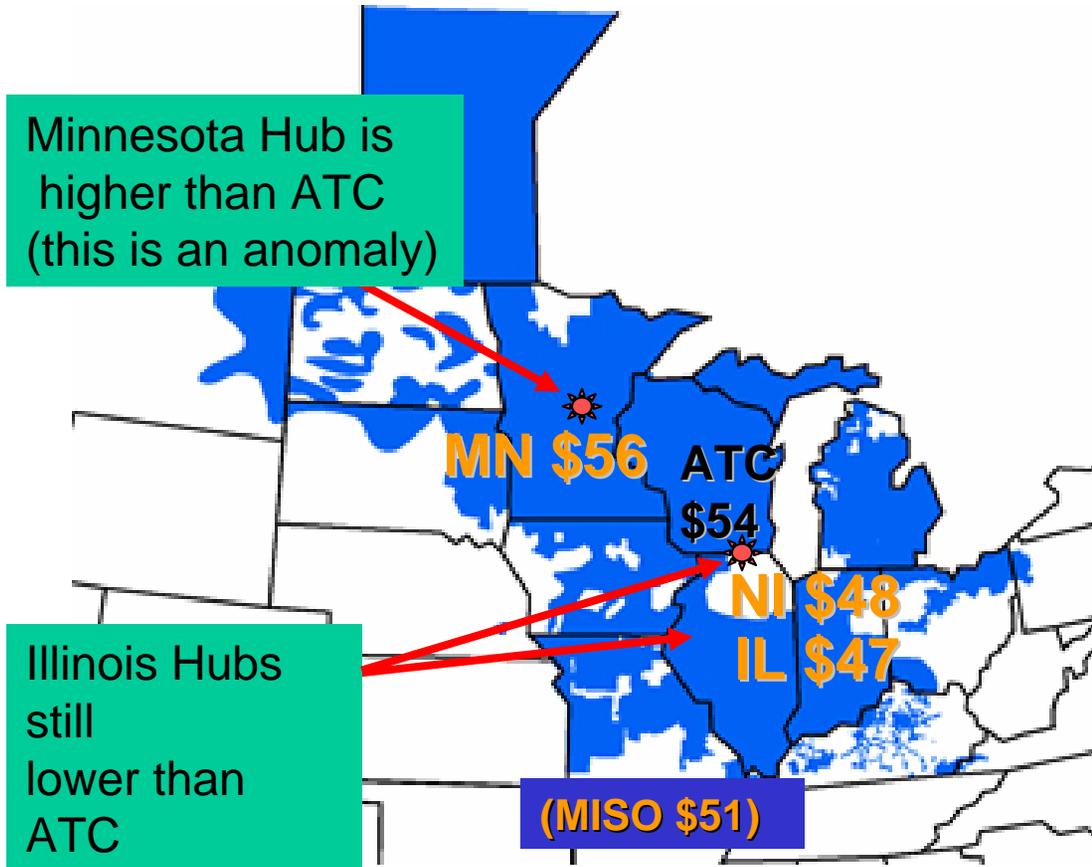
- Ensure that the future transmission grid can accommodate the needs of our customers in a reliable and cost-effective manner
- Two foundations of planning
 - Comprehensive analysis
 - Collaborative communications
 - Economic Planning
 - ATC Energy Collaborative – MI
 - 2009 Ten-Year Assessment

Reliability Planning



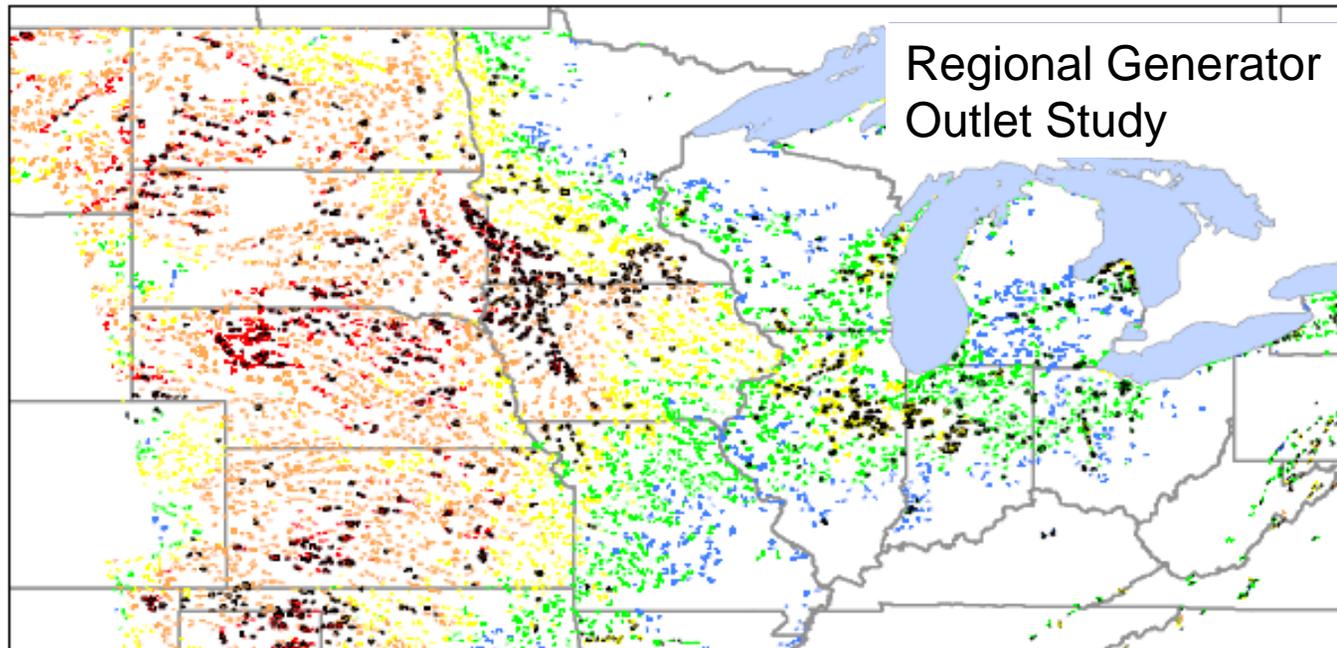
- Ten-Year Assessment analysis and publication
- Five Planning Zones
 - Identify what, where and when we need to build
- Responsible for planning 50% of the total capital expenditures of ATC
- Major projects can take several years

Economic Planning



MISO area - works as one giant “machine” to move electricity from generators to consumers (loads)

- ATC is a ‘Narrowly Constrained Area’
- Objective: provide our customers access to lower cost sources of power in MISO footprint
- Work very closely with our stakeholders as we study possible projects



- Meets and plans with neighboring transmission owners
- Supports inclusion of ATC's projects in MISO's Midwest Transmission Expansion Plan (MTEP)
- Defends ATC's projects at MISO to obtain cost sharing
- Coordinates participation in regional study initiatives



Planning for Future at ATC

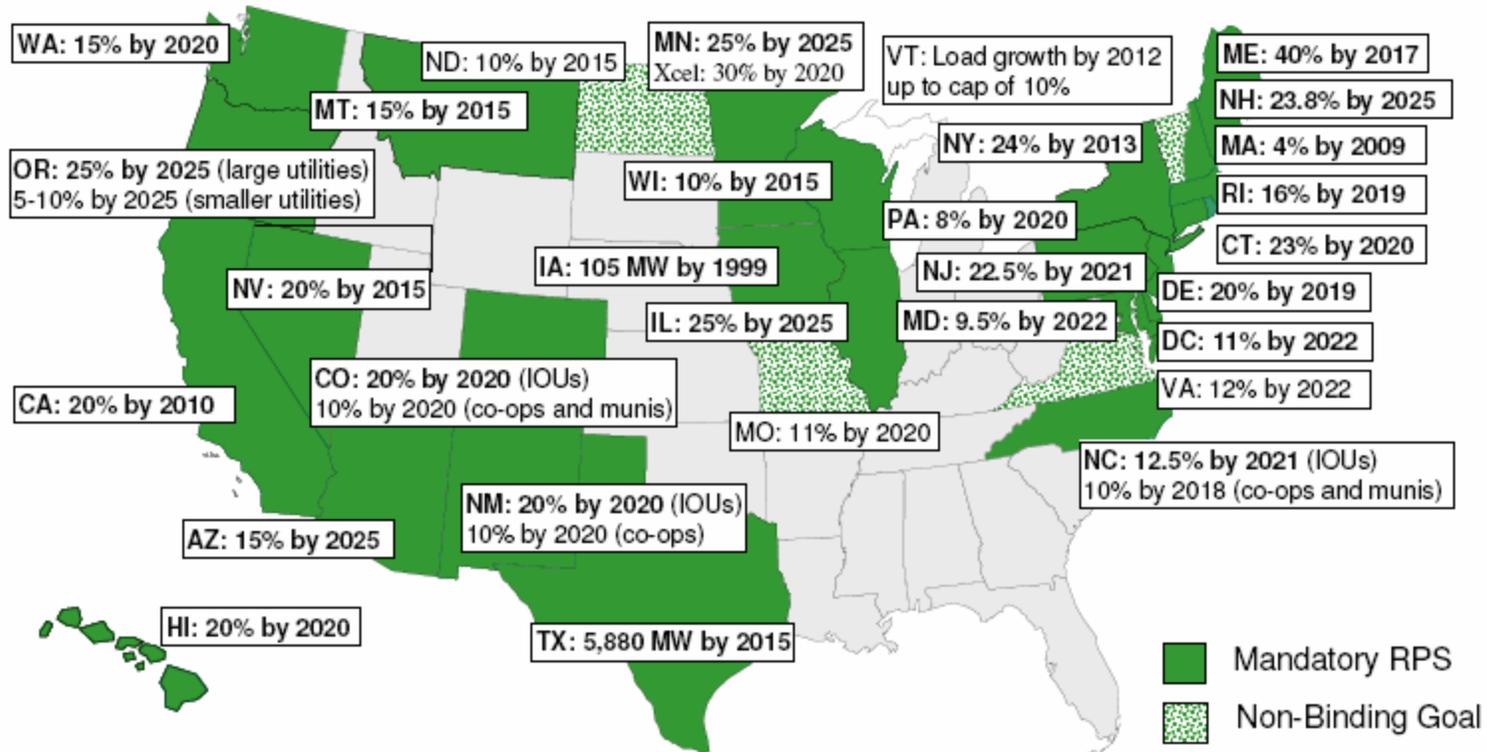
- Impact of Midwest Independent System Operator (MISO) market
 - Market has been operational since April 2005
 - Continued changes in how system is used
 - January start of Ancillary Services Market which could cause more changes in how transmission system is used
- NERC mandatory reliability standards
 - What used to be voluntary approaches and good utility practice are now mandatory and have force of federal law
 - Increased attention to how we do our studies and the documentation of those studies



Planning for Future at ATC

- Increased stakeholder collaboration
 - FERC issued an order (Order 890) calling for “open, collaborative, transparent planning”
- Identifying all the benefits of transmission
 - Reliability
 - Economic savings
 - Reduced electrical losses on the system
 - Economic savings for our customers
 - Reduced emissions
 - Increased flexibility for customers using the system
- Renewables

26 States (and D.C.) have RPS Policies

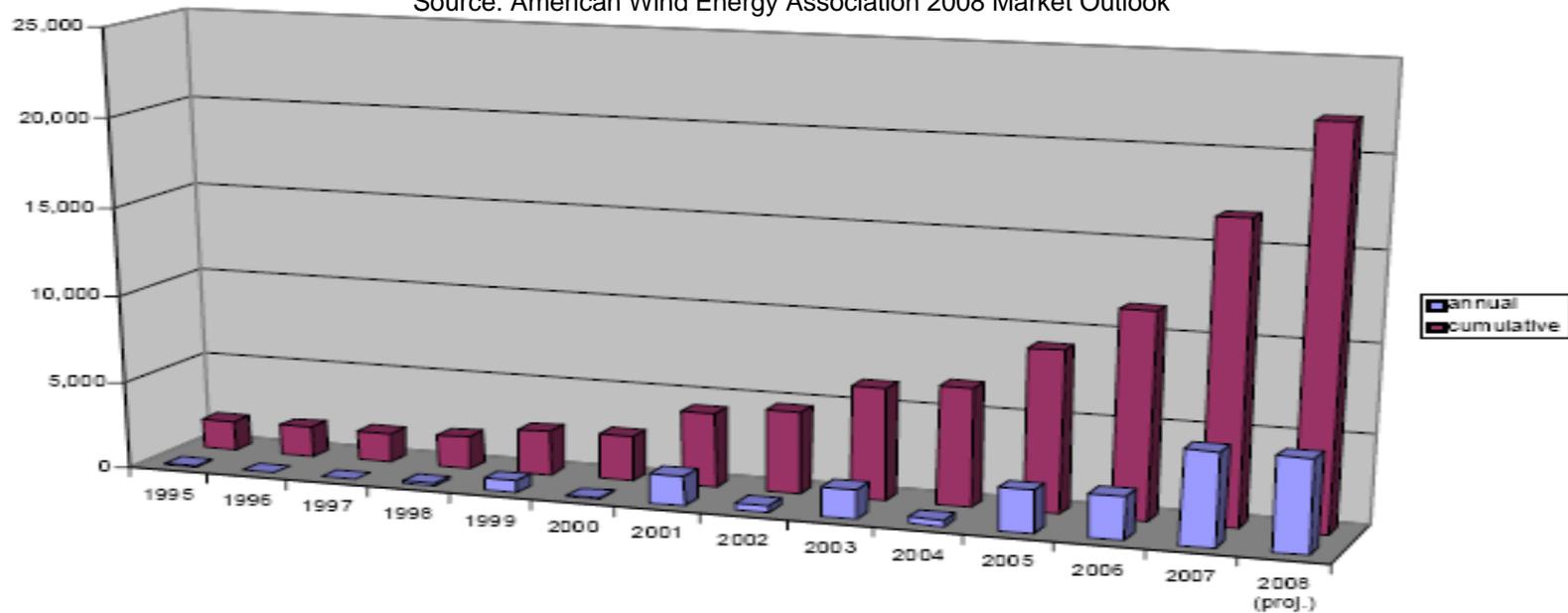


Michigan's recently enacted RPS adds to the total states with RPS.

Wind in the U.S. Growth

U.S. Wind Power Capacity, Annual & Cumulative (MW)

Source: American Wind Energy Association 2008 Market Outlook



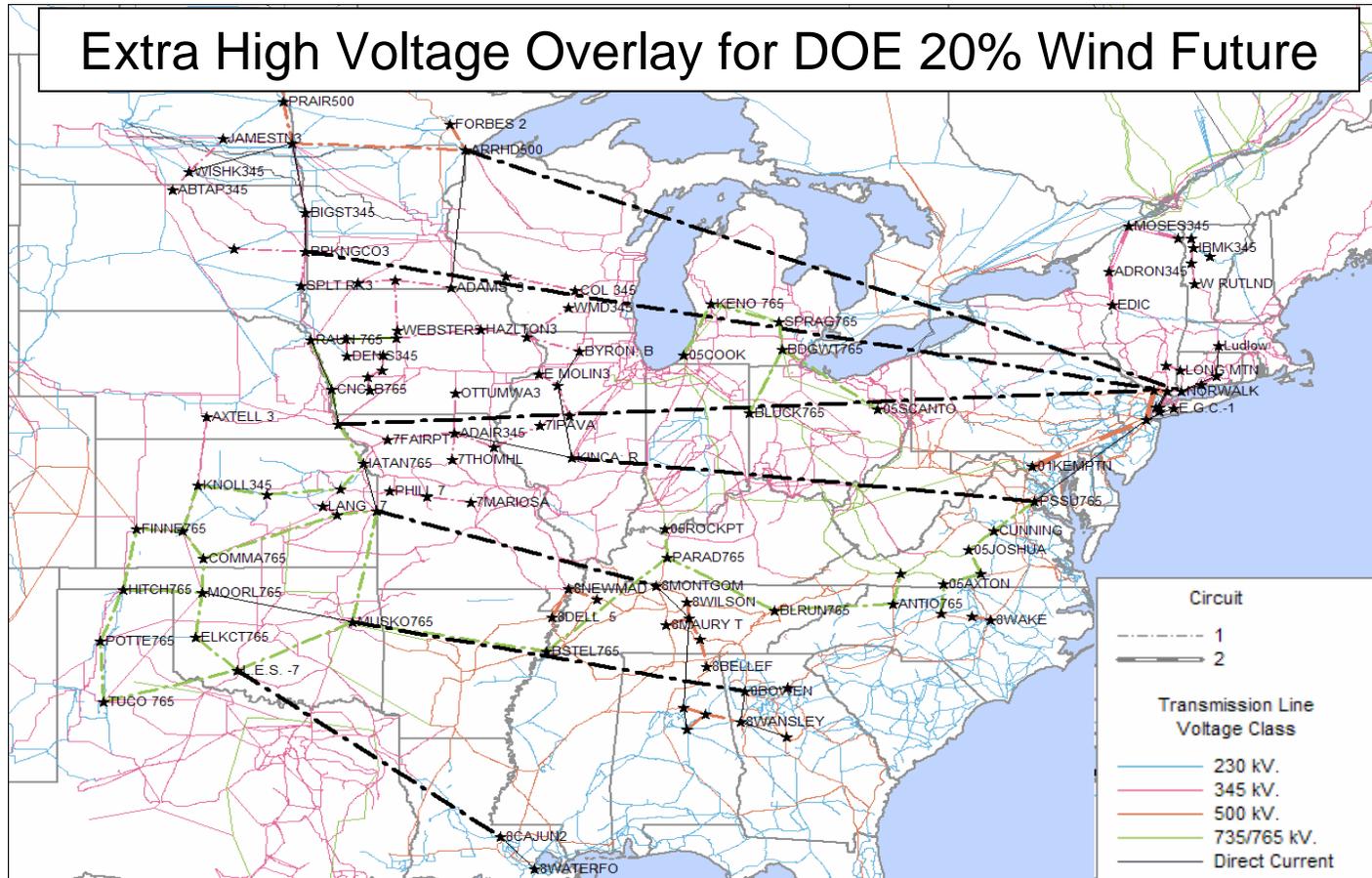
- 2007 wind increased 5,244 MWs
- Total wind: 16,818 MWs
- 2008 growth expected to equal 2007
- ~60,000 MWs of wind in MISO queue
- Energy Information Administration projects renewables to increase by 50 GWs by 2030



Wind in the U.S. DOE 20% Wind Study Report

- Objective – “dramatically reduce greenhouse gas emissions and increase energy security”
- Outlines a potential scenario to boost wind electric generation from its current production of 16.8 gigawatts (GW) to 304 GW by 2030.
- Annual installations need to increase more than threefold.
- No material constraints currently exist.
- Costs of integrating intermittent wind power into the grid are modest.
- **Transmission challenges need to be addressed.**

Wind in U.S. Joint Coordinated Study Plan



- Objective: Develop transmission plan to implement DOE 20% wind future and current RPSs
- Primarily economic analysis
- Total cost: \$82 billion



Wind in the Midwest Studies and Joint Efforts

- MISO Regional Generator Outlet Study (RGOS)
 - Transmission needs to meet RPS in MN, WI, IA
 - Identifying renewable energy zones
 - Developing conceptual transmission overlays
 - Results available in 2009
- Five-state effort to build projects out of RGOS (Upper Midwest Transmission Development Initiative)
 - MN, WI, IA, SD, ND
 - How much and where will generation be?
 - Who will build, own transmission? Who pays? Who will be able to use transmission? Who will decide?
 - Need both study and state agreement on approval process

- MI Consortium's sub-group on Generation Integration
 - Focused on transmission planning for Michigan wind resource development and other generation integration, to identify ways to best coordinate and hopefully optimize transmission expansion in Michigan
 - ATC and ITC have been participating
- Recently enacted Renewable Portfolio Standard
- Study on Wind generation on Great Lakes
 - Land Policy Institute of Michigan State University
 - Michigan's portion of the Great Lakes has the capacity to produce 321,936 Megawatts of electricity from wind energy

- Exciting time to be in transmission planning
- Challenges will continue for some time
- States working together can address challenges of building out transmission system to accommodate renewable generation and market flows
- Continued collaboration with all stakeholders is a must
 - ATC looks forward to this