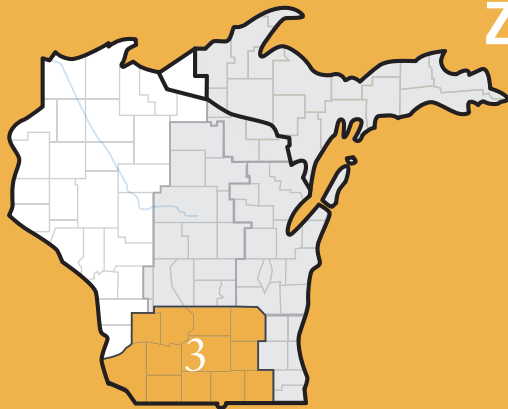




An excerpt from ATC's 2010 10-Year Transmission System Assessment

An annual report describing economic and regional solutions to electric reliability needs



Zone 3 South Central/Southwest Wisconsin and North Central Illinois

COLUMBIA

CRAWFORD
(southern portion)

DANE

DODGE

GRANT

GREEN

IOWA

LAFAYETTE

JEFFERSON

RICHLAND

ROCK

SAUK

WALWORTH

WINNEBAGO, ILL.
(northern portion)

VILAS (southern portion)

WAUPACA

WAUSHARA

WINNEBAGO
(western portion)

WOOD





Helping to **keep the lights on,**
businesses running and communities strong®

Economics, renewables increasingly in focus

Planning for regional solutions

American Transmission Co. was formed in 2001 to plan, permit, build, own, operate and maintain a high-voltage electric grid that meets the reliability and economic needs of our customers. Our planners continually conduct engineering studies on the electric transmission system, looking for potential problems that may affect future performance. Our studies identify and prioritize future projects needed to improve the adequacy and reliability of the system and meet evolving public priorities.

After nearly 10 full years of operation and \$2.2 billion in new and upgraded infrastructure investment, electric system reliability remains our top priority. But looking forward, we see an increasing need for an expanded regional transmission system. Consequently, our planning focus has broadened to consider projects that provide economic and public policy benefits as well. Several factors, including the emerging wholesale market and federal and state policy, play a larger role in our planning process today than they did when we first began operation in 2001.

The majority of the grid’s regional interconnections were made in the late 1950s through the early 1970s to accommodate local reliability needs. Nationally, the transmission system was not designed to accommodate the expanded energy flows required by the current wholesale marketplace.

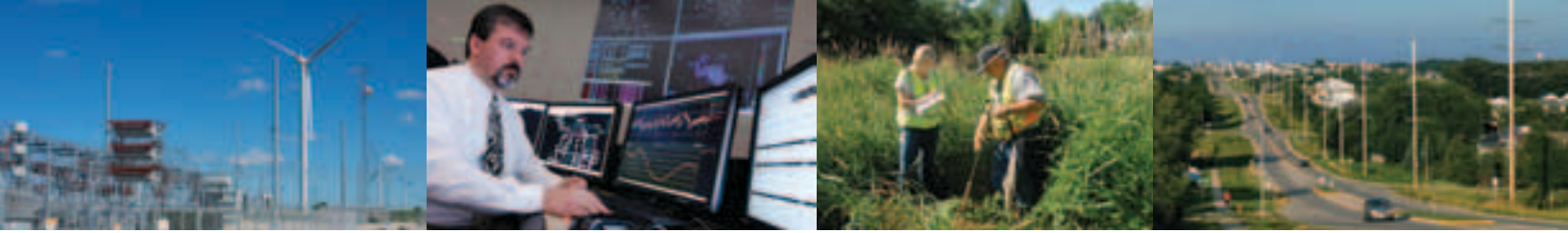
Renewable portfolio standards also call for a more robust regional grid to move power from wind-rich areas west of Wisconsin to population centers where the electricity is consumed. The changed marketplace and increasing importance of renewable energy sources necessitate a broader view of the system, which influences planning policies and studies.

Since our inception, load growth and operational issues were the primary drivers for transmission improvements, and planning studies were conducted accordingly. Today, finding a way to build the system to allow states to meet their renewable energy standards and getting the full benefit of the Midwest ISO market for ATC customers have become more significant transmission needs. We continue to collaborate with customers and other stakeholders to plan best-value projects that meet system needs and provide multiple benefits.

The 2010 Assessment covers the years 2010 to 2019, and for the second year, we have included asset renewal projects through the full 10-year horizon. Our studies indicate \$3.4 billion in necessary transmission system improvements. The total includes \$1.0 billion for transmission network upgrades, \$0.7 billion for regional multi-value projects, along with \$1.7 billion in interconnection and asset renewal projects, infrastructure replacement and relocation, and other smaller network reliability improvements.

Cost estimate of system improvements

	2006	2007	2008	2009	2010
Total 10-Year Capital Cost	\$3.1B	\$2.8B	\$2.7B	\$2.5B	\$3.4B



South Central/Southwest Wisconsin and North Central Illinois – Zone 3

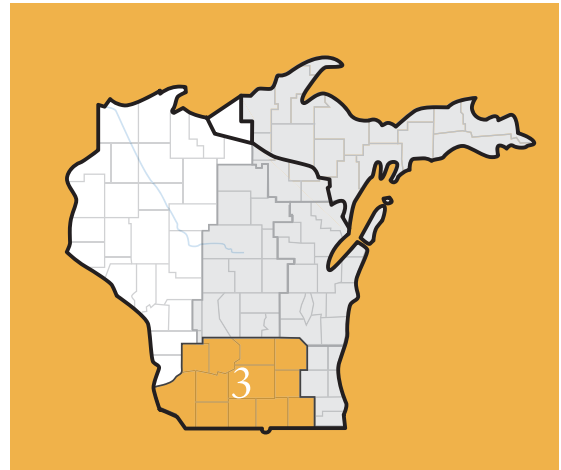
Electric System Overview

Increases expected in population, employment

Population in Zone 3 is projected to grow about 1.1 percent annually between now and 2020, and employment is projected to grow about 1.3 percent each year for the same time period. Dane County is projected to realize the largest increase in population and employment.

Higher-than-average demand anticipated

Electric load is expected to grow approximately 2.2 percent annually through 2019 for all of Zone 3.

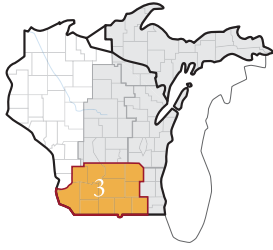


www.atc10yearplan.com



Transmission is the vital link in bringing power to communities

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 distribution lines. A reliable transmission network provides access to many sources of power, whether they are local or regional. Having multiple paths to get power from producers to consumers lessens the chance that they will experience service interruptions. With an increasing emphasis on renewable energy, transmission system planning will become even more important to put the power of wind on the wires.



System Limitations

South Central/Southwest Wisconsin and North

Transmission system characteristics in Zone 3

ATC delivers power in Zone 3 with various transmission facilities including:

- Columbia-North Madison 345-kV lines,
- Columbia-Rockdale 345-kV line,
- Paddock-Rockdale 345-kV line (in-service spring 2010),
- Paddock-Wempletown 345-kV line,
- Rockdale-Wempletown 345-kV line, and
- 138-kV facilities from the Nelson Dewey Power Plant, around the Madison area, and in the northwest and southeast portions of Zone 3.

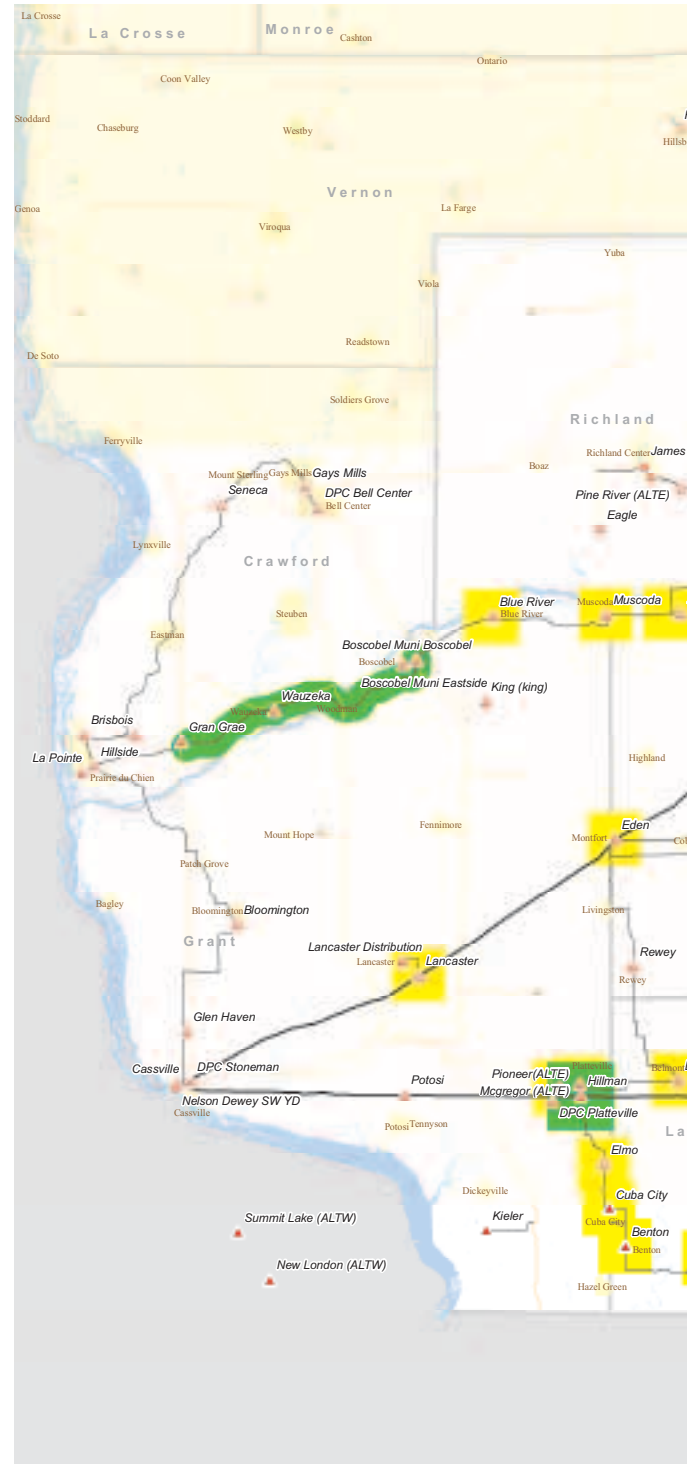
There are a number of transmission system performance issues in Zone 3 including voltage instability, limited import capability, overloaded lines and equipment, and low system voltages throughout the zone. The causes of these emerging issues include steady growth in certain areas, import capability from Illinois, new power plants and different generation dispatch scenarios.

Transmission system limitations in Zone 3

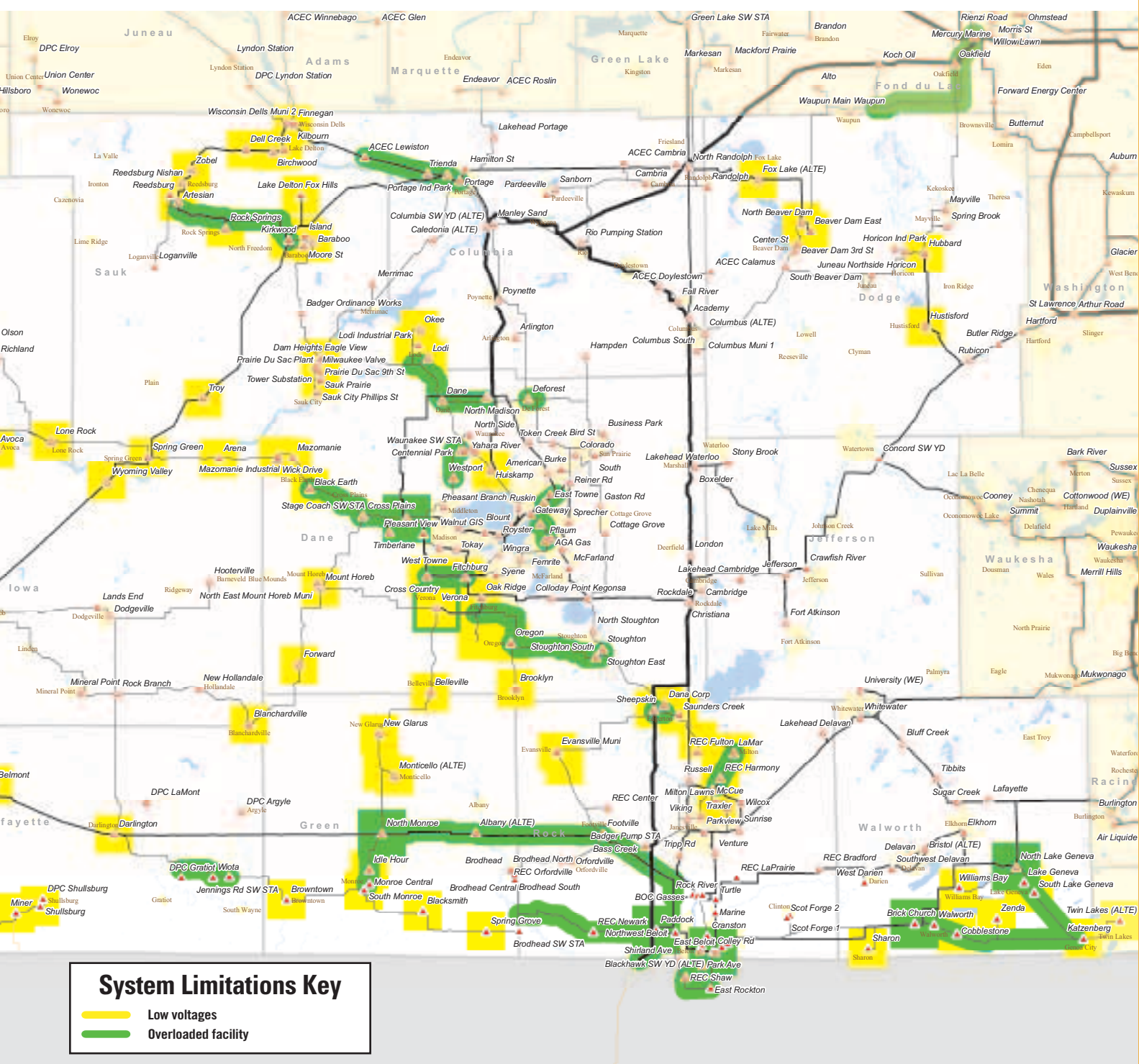
In our analysis of Zone 3, we identified low voltages and transmission facility overloads. Low voltages are particularly serious in the Spring Green, Jefferson, Milton and Brodhead areas. Many overloads on 138-kV and 69-kV facilities through Zone 3 are emerging concerns.

Zone 3 includes the counties of:

COLUMBIA	GREEN	ROCK
CRAWFORD (southern portion)	IOWA	SAUK
DANE	LAFAYETTE	WALWORTH
DODGE	JEFFERSON	WINNEBAGO, ILL. (northern portion)
GRANT	RICHLAND	

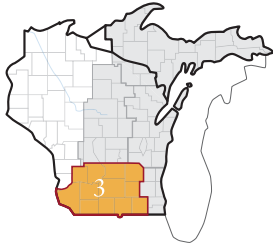


Central Illinois – Zone 3



System Limitations Key

- Low voltages
- Overloaded facility



Transmission projects in Zone 3

South Central/Southwest Wisconsin and North

We have implemented seven projects in Zone 3 since the 2009 Assessment, most notably the construction of the Paddock-Rockdale 345-kV line.

Our current plans in Zone 3 include 45 system reliability and economic projects between 2010 and 2024. These projects are in various stages of development. The most notable planned, proposed, provisional and asset renewal projects in Zone 3, along with their projected year of completion and the factors driving the need for the projects, are listed below.



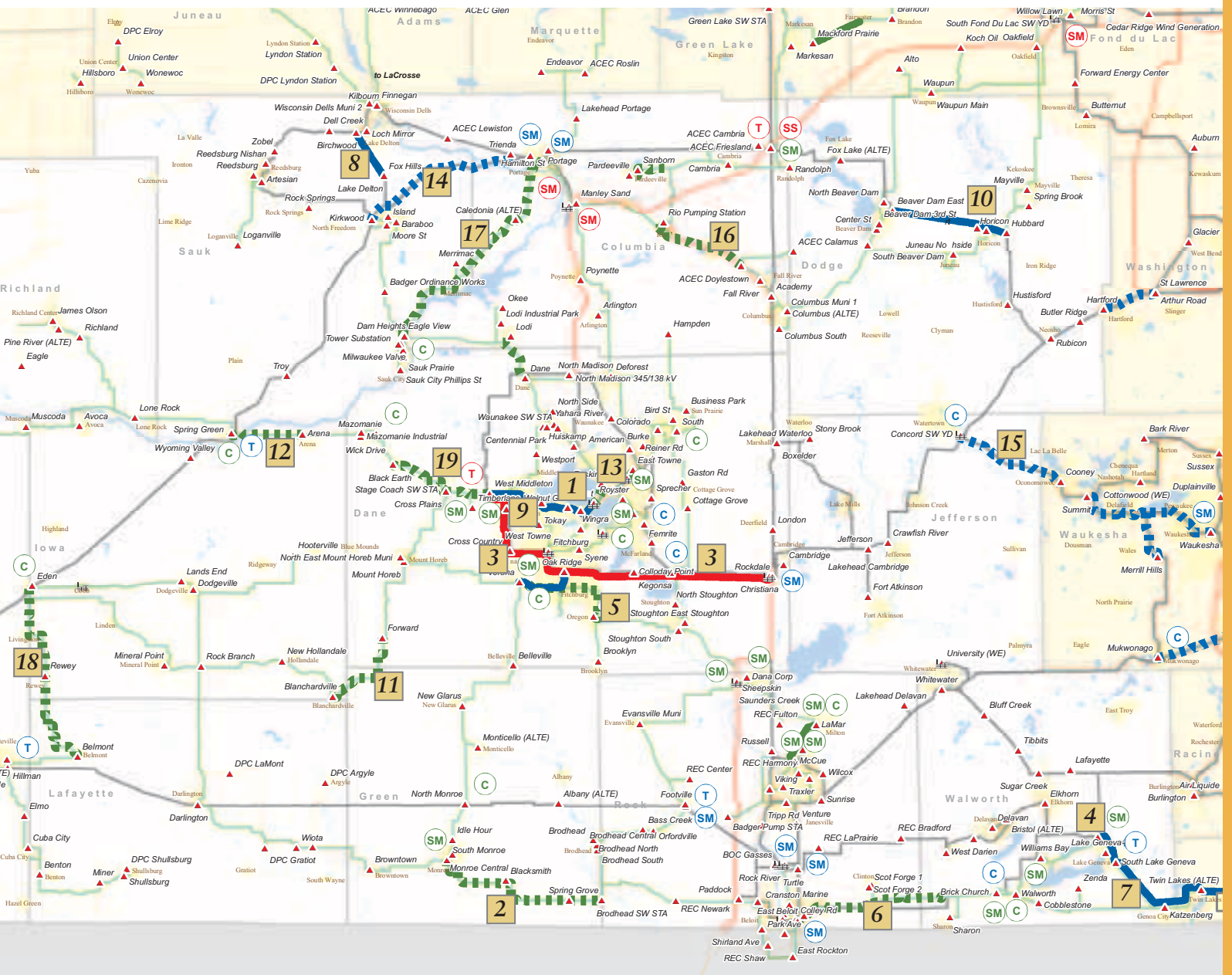
	Project description	In-service year	Need driver
	Planned projects		
1	Replace two overhead Blount-Ruskin 69-kV lines with one underground 69-kV line	2011	Completion of earlier project per agreement with the City of Madison
2	Brodhead-South Monroe 69-kV line rebuild	2011	Overloads and low voltages
3	Rockdale-West Middleton (Cardinal) 345-kV line	2013	Addresses overloads and low voltages, improves transfer capability to Madison area, averts voltage collapse, lowers system losses
	Proposed projects		
4	North Lake Geneva-South Lake Geneva 138-kV line*	2016	Overloads and low voltages, transmission to distribution interconnection
	Provisional project		
5	Verona-Oregon 69-kV line rebuild	2014	Improve area voltages and address overloads
6	Colley Road-Brick Church 69-kV line rebuild	2018	Overloads and low voltages
7	Spring Valley-Twin Lakes-South Lake Geneva 138-kV line plus Katzenberg-Brick Church 138-kV line	2018	Overloads and low voltages, provides network service
8	Lake Delton-Birchwood 138-kV line	2020	Overloads and low voltages
9	Cardinal-Blount 138-kV line	2020	Overloads and low voltages
10	Hubbard-East Beaver Dam 138-kV line	2022	Overloads and low voltages
	Asset Renewal projects		
11	Rock Branch-Forward 69-kV line rebuild	2010	Condition and performance
12	Spring Green-Stagecoach 69-kV line rebuild	2011	Condition and performance
13	Sycamore-East Towne 69-kV replace underground cables	2012	Condition and performance
14	Kirkwood-Trienda 138-kV line rebuild	2012	Condition and performance
15	Concord-Rubicon 138-kV line rebuild	2013	Condition and performance
16	Doylestown-Rio Pumping Station 69-kV line rebuild	2013	Condition and performance
17	Dam Heights-Portage 69-kV line rebuild	2018	Condition and performance
18	Hillman-Eden 69-kV line rebuild	2018	Condition and performance
19	West Middleton-Stagecoach 69-kV underground cable replacement	2019	Condition and performance

* The North Lake Geneva-South Lake Geneva 138-kV line project could be delayed to a later in-service date. Please refer to our full Assessment text at www.atc10yearplan.com for details.

SUBSTATION KEY

- SS** New substation
Supports transmission system expansion
- SM** Substation modifications
Upgrades equipment ratings to avert facility overloads
- T** Transformer
Supports local growth and improves voltage levels

Central Illinois – Zone 3



TRANSMISSION LINE KEY

- 345-kV transmission line
- 115-, 138- or 161-kV transmission line
- - - Rebuilt 115- or 138-kV transmission line
- Transmission line voltage conversion
- 69-kV transmission line
- - - Rebuilt 69-kV transmission line

EXISTING TRANSMISSION LINES KEY

- ▲ 69 kV
- ▲ 115 kV
- ▲ 138 kV
- ▲ 161 kV
- ▲ 230 kV
- ▲ 345 kV

- C Capacitor bank or reactor
Relieves low voltages or high voltages
- T-D T-D interconnection
Supports local growth



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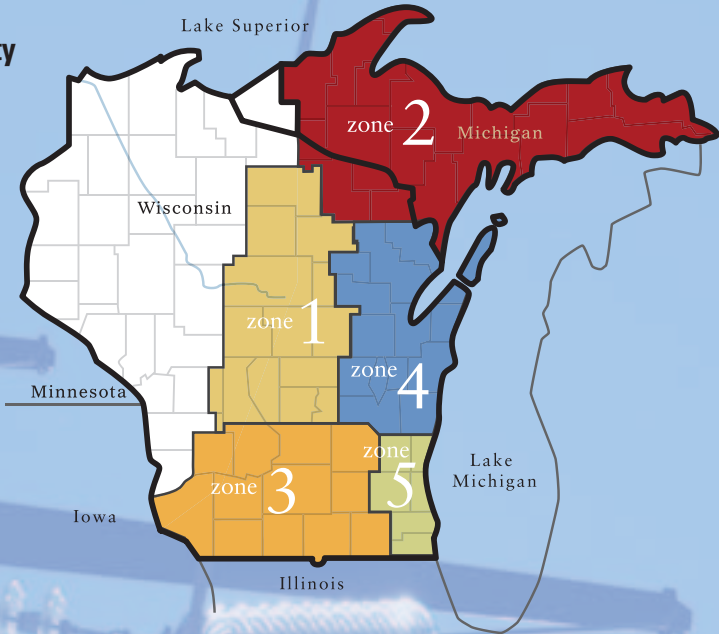
ATC AT A GLANCE

- Formed in 2001 as the first multi-state, **transmission-only utility**
- Owner and operator of approximately **9,400 miles of transmission line and 510 substations**
- Meeting electric needs of more than **five million people** in 72 counties in four states: Wisconsin, Michigan, Minnesota and Illinois
- \$2.75 billion** in total assets

CONTACT

Mail P.O. Box 47 ■ Waukesha, WI 53187-0047
Toll-free 1-866-899-3204
Web info@atcllc.com

More detailed information is available at www.atc10yearplan.com



www.atcllc.com

**Would you like a speaker from ATC to address your group?
Give us a call, toll-free, at 1.866.899.3204, ext. 6922.**

