



# PJM's Regional Transmission Expansion Planning Process

## Determining the Need for Infrastructure

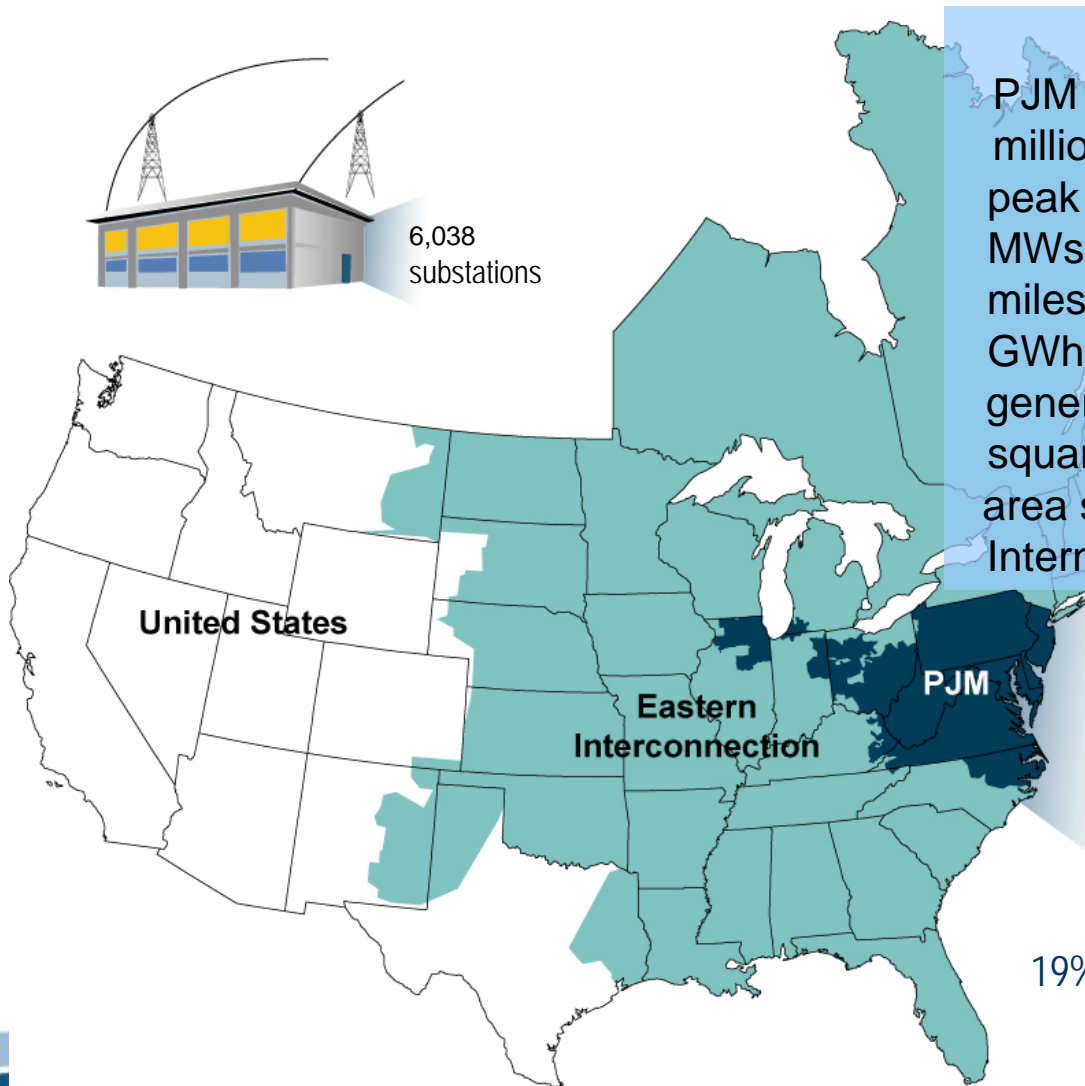
October 29, 2007

Electric Transmission: Meeting the  
Needs of the 21<sup>st</sup> Century

Bill Whitehead  
Executive Director – State  
Government Policy



6,038  
substations



## KEY STATISTICS

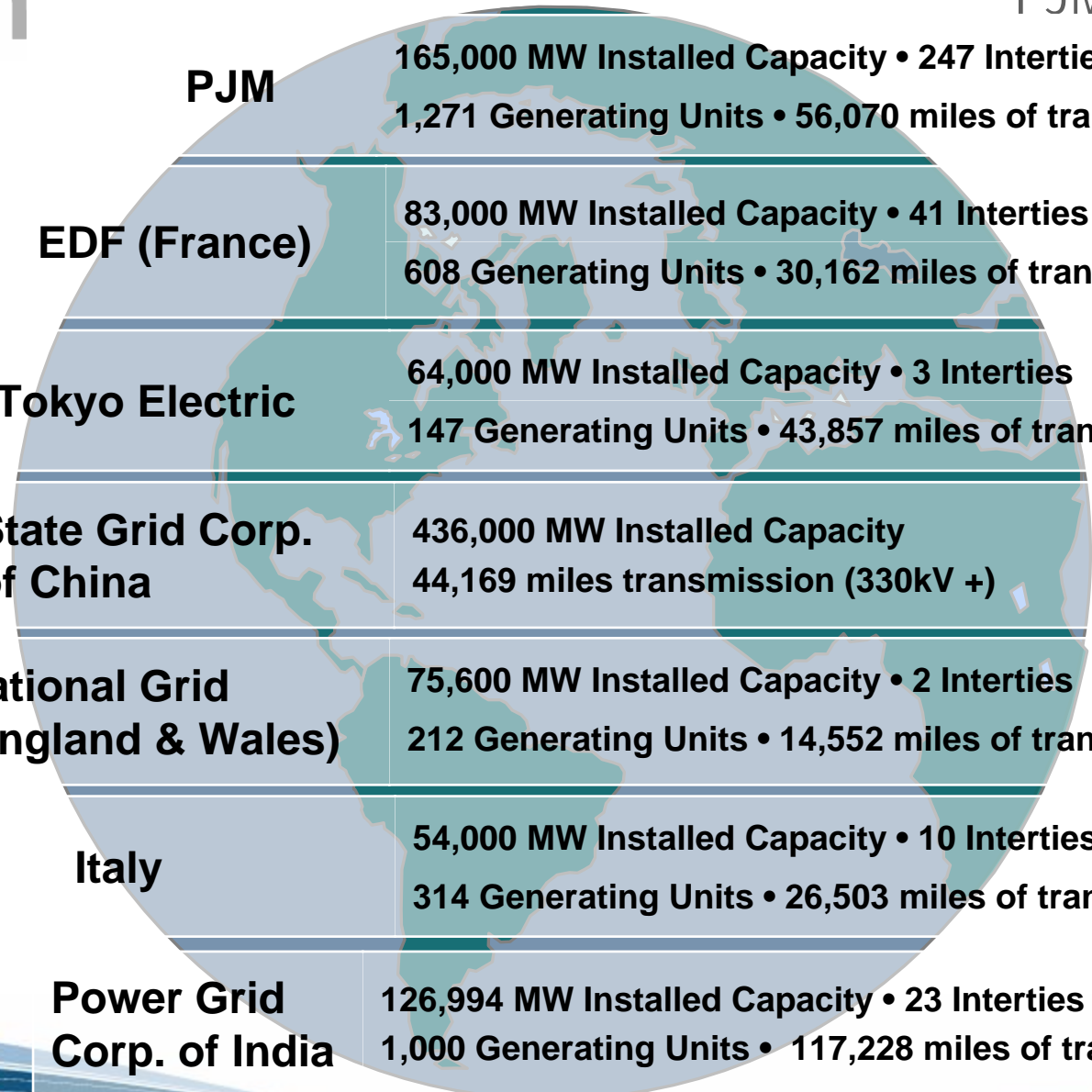
PJM member companies	500+
millions of people served	51
peak load in megawatts	144,644
MW of generating capacity	164,905
miles of transmission lines	56,250
GWh of annual energy	729,000
generation sources	1,271
square miles of territory	164,260
area served	13 states + DC
Internal/external tie lines	250

26% of generation in  
Eastern Interconnection

23% of load in  
Eastern Interconnection

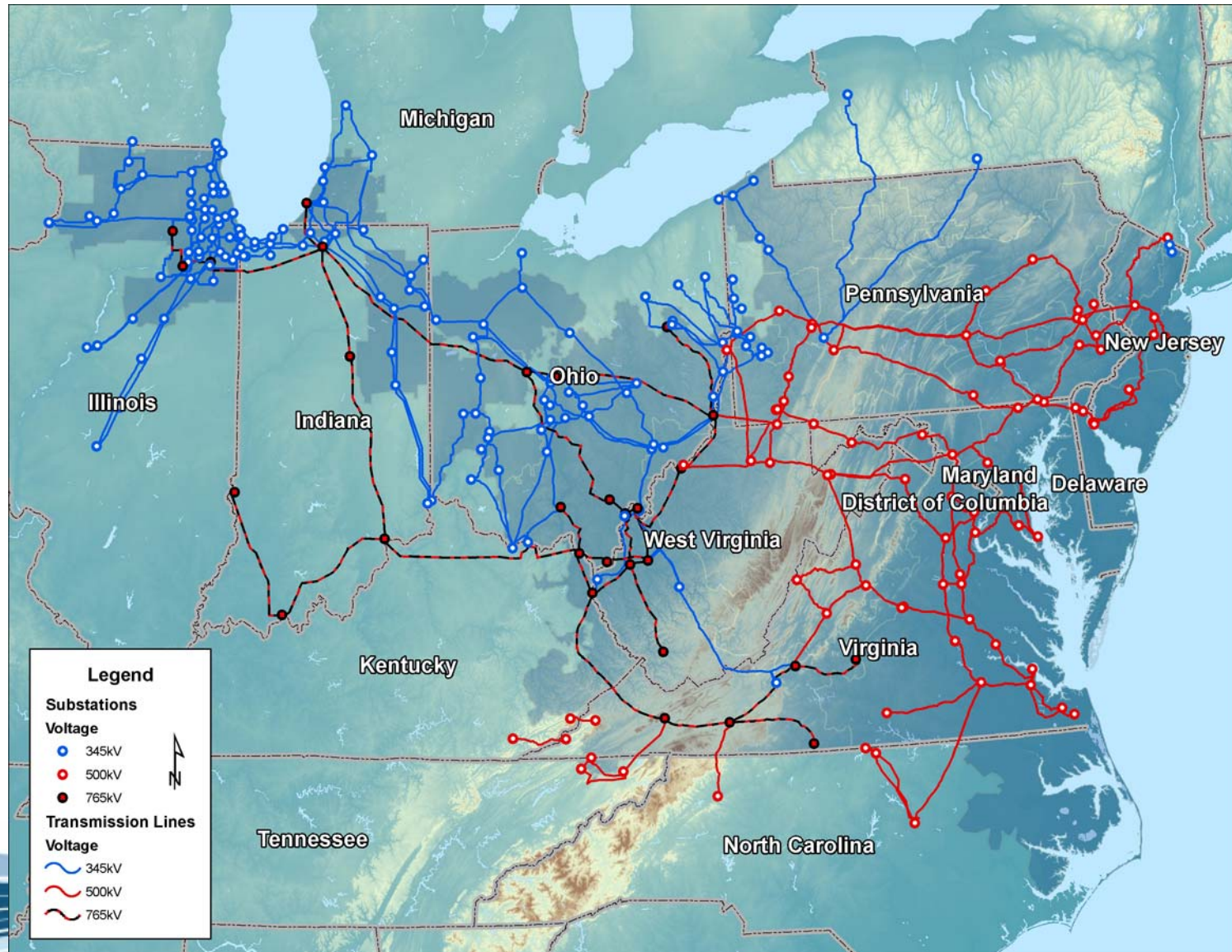
19% of transmission assets  
in Eastern Interconnection

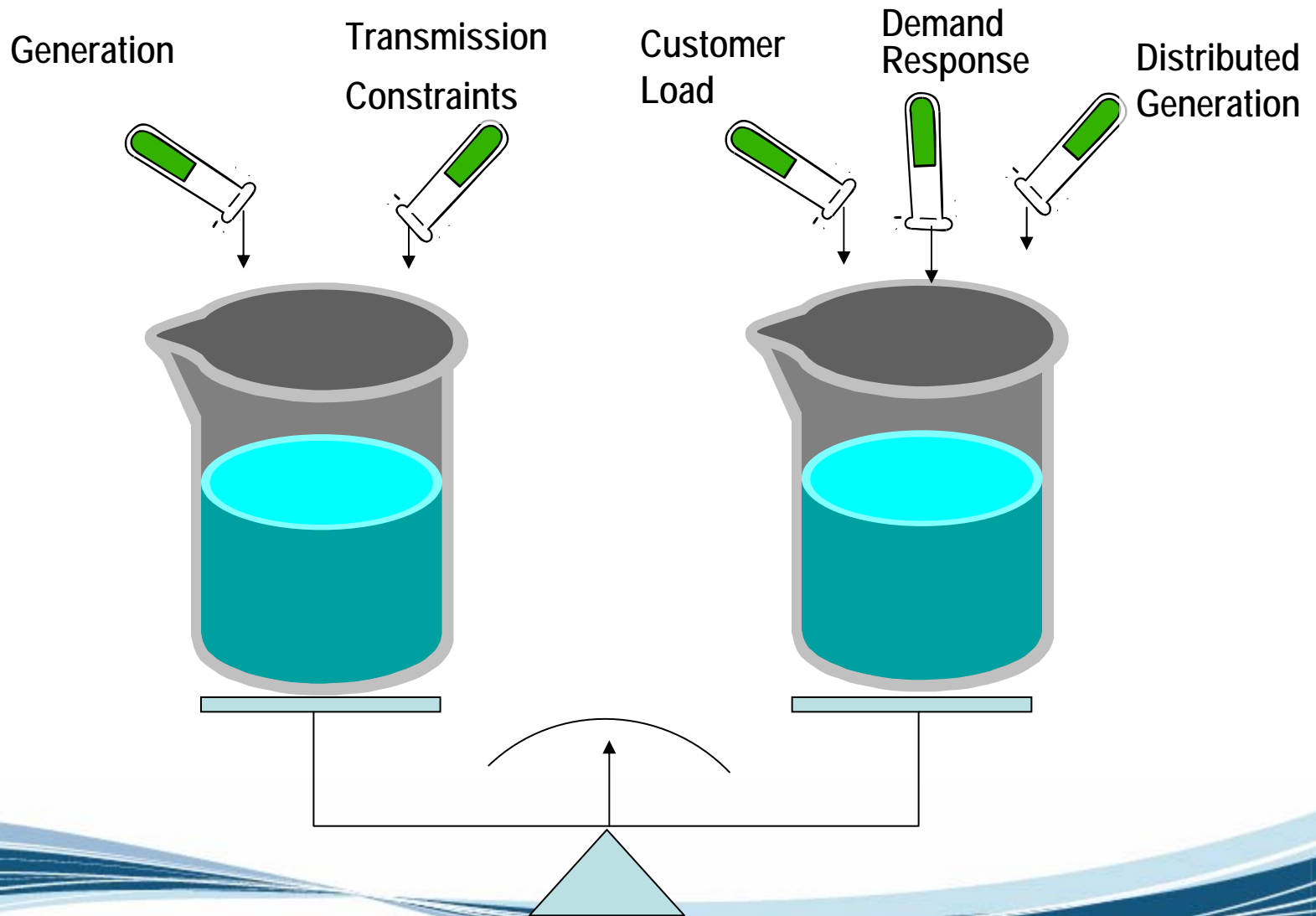
19% of U.S. GDP produced in PJM



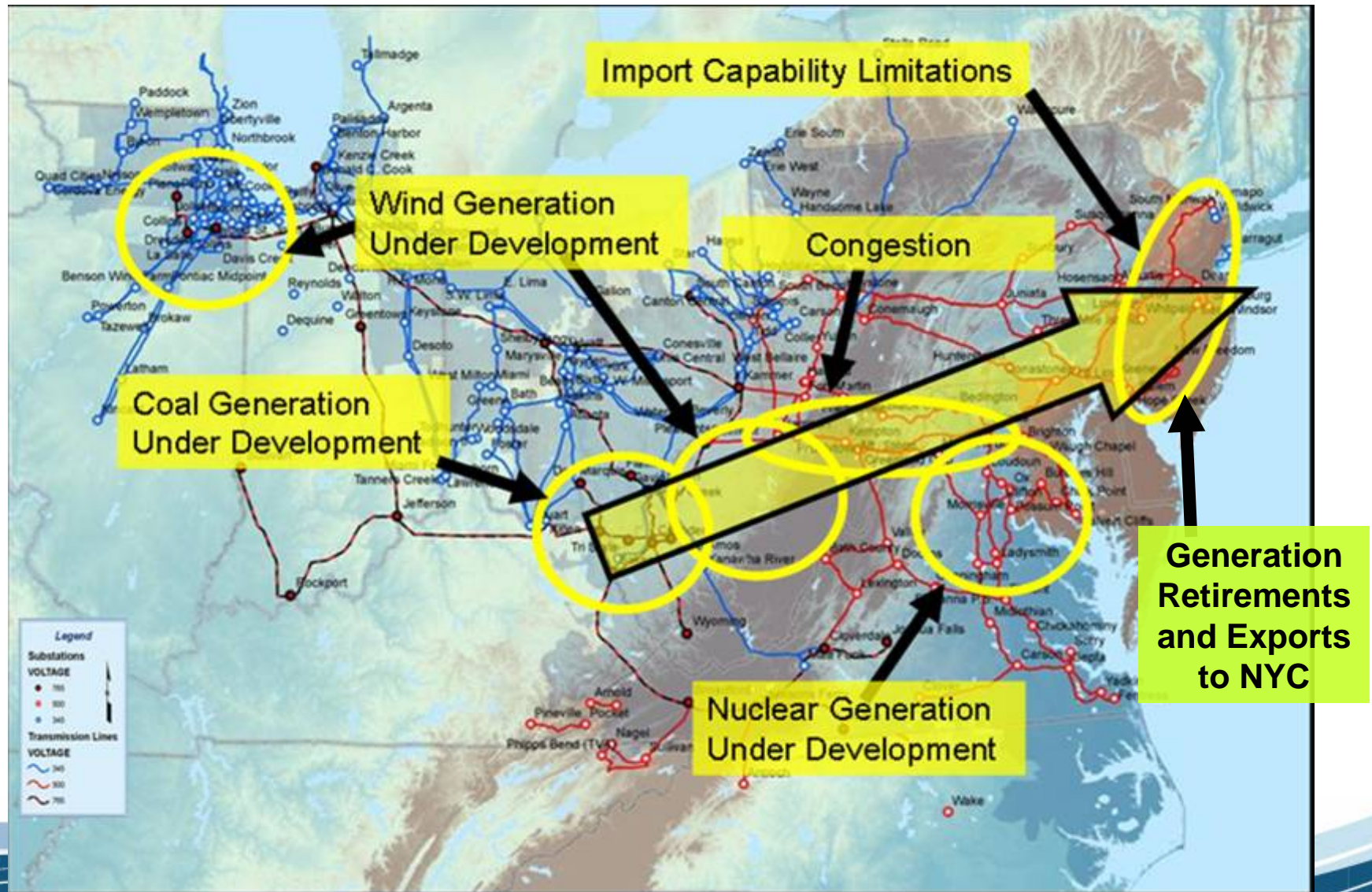
<b>PJM</b>	<b>165,000 MW Installed Capacity • 247 Interties</b> <b>1,271 Generating Units • 56,070 miles of transmission</b>
<b>EDF (France)</b>	<b>83,000 MW Installed Capacity • 41 Interties</b> <b>608 Generating Units • 30,162 miles of transmission</b>
<b>Tokyo Electric</b>	<b>64,000 MW Installed Capacity • 3 Interties</b> <b>147 Generating Units • 43,857 miles of transmission</b>
<b>State Grid Corp. of China</b>	<b>436,000 MW Installed Capacity</b> <b>44,169 miles transmission (330kV +)</b>
<b>National Grid (England &amp; Wales)</b>	<b>75,600 MW Installed Capacity • 2 Interties</b> <b>212 Generating Units • 14,552 miles of transmission</b>
<b>Italy</b>	<b>54,000 MW Installed Capacity • 10 Interties</b> <b>314 Generating Units • 26,503 miles of transmission</b>
<b>Power Grid Corp. of India</b>	<b>126,994 MW Installed Capacity • 23 Interties</b> <b>1,000 Generating Units • 117,228 miles of transmission (220kV+)</b>



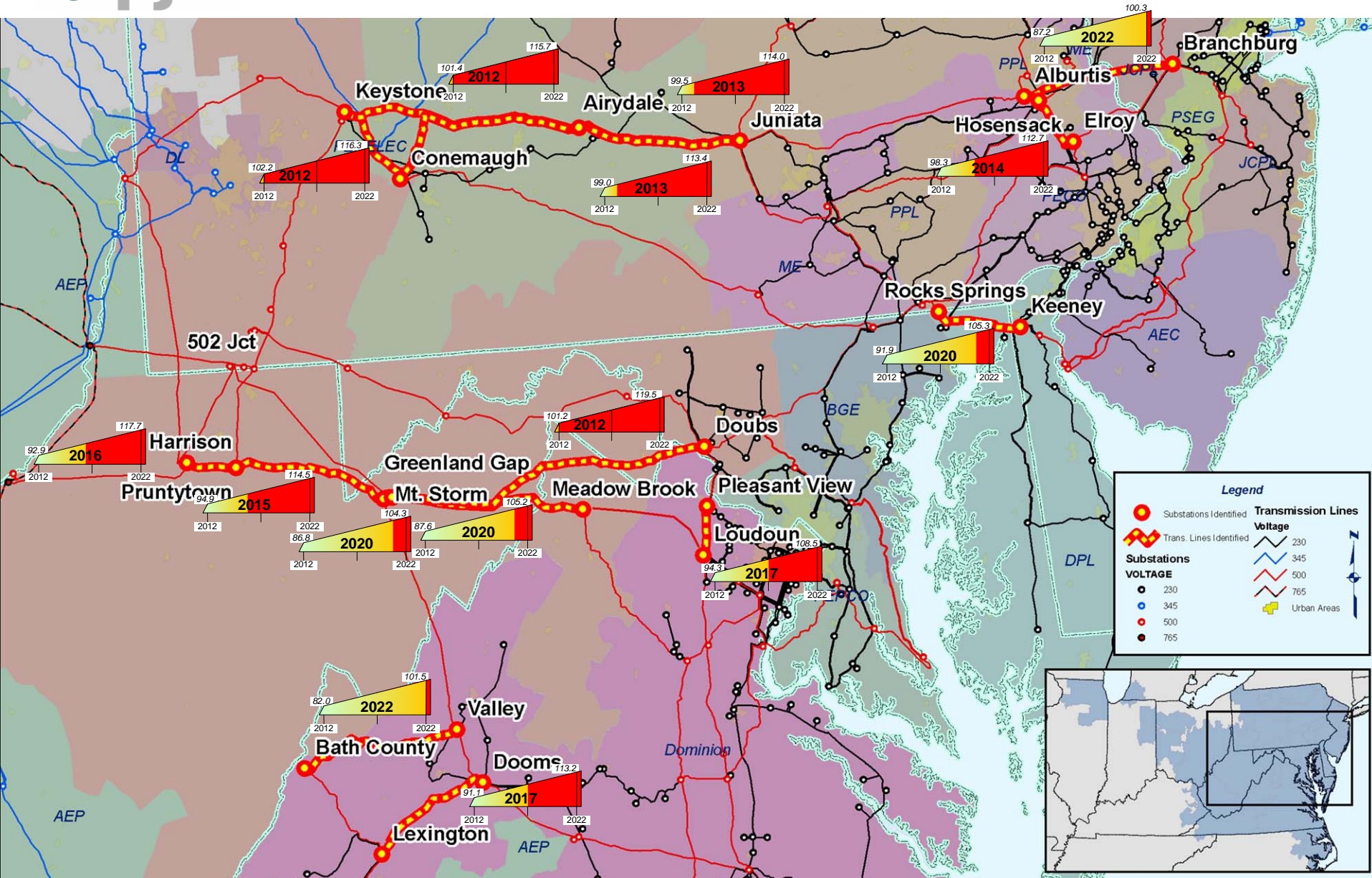




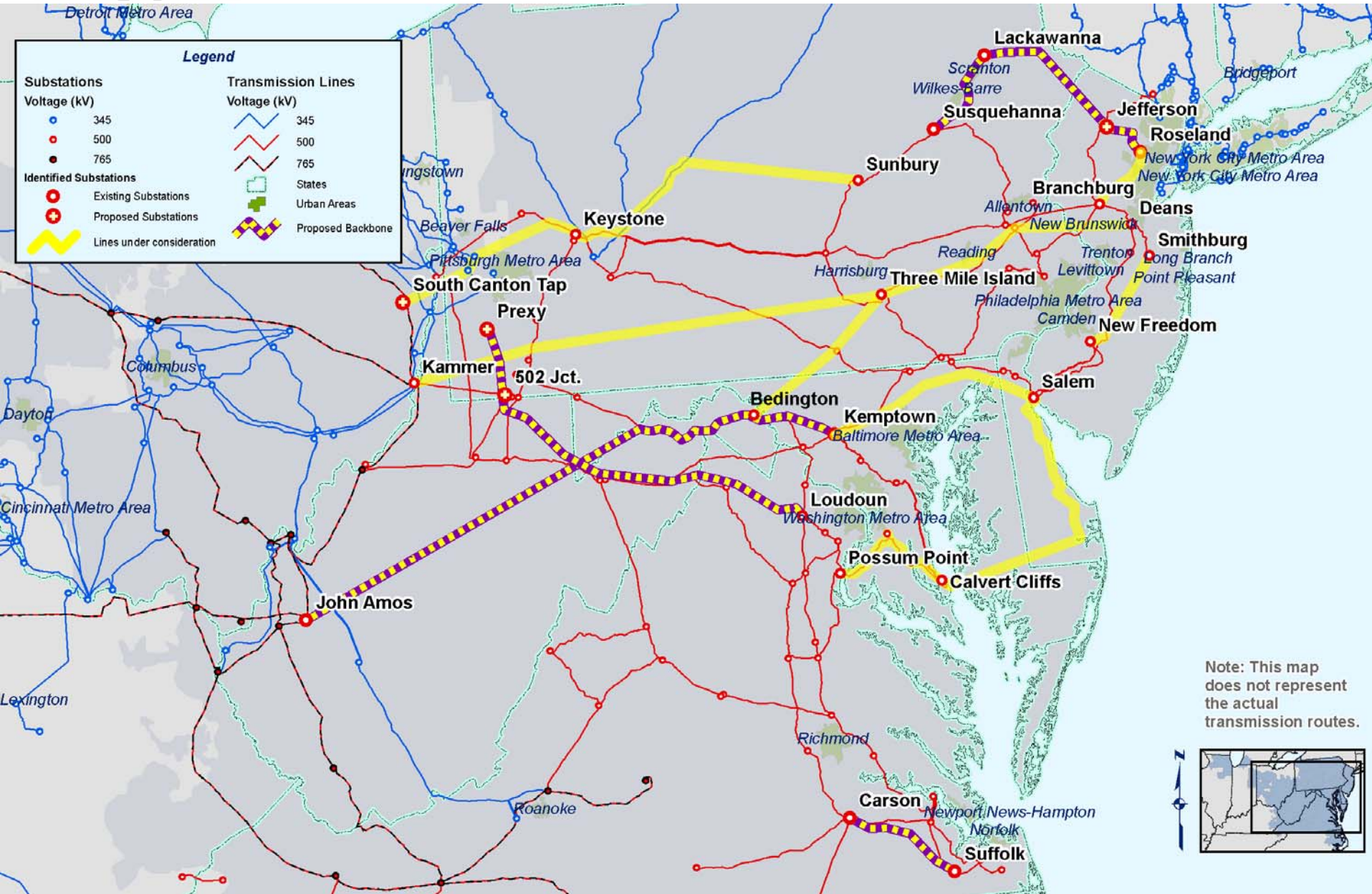




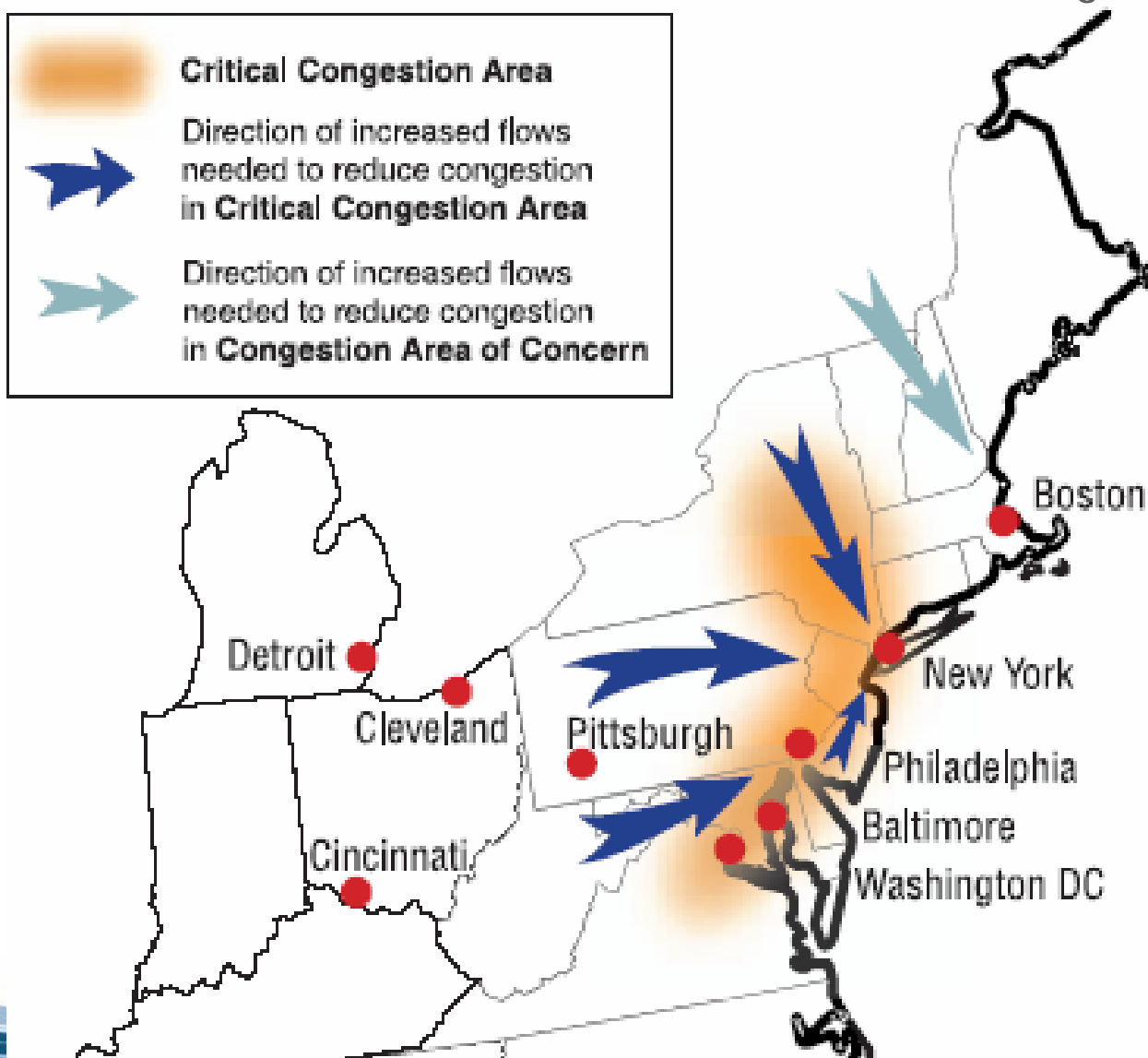
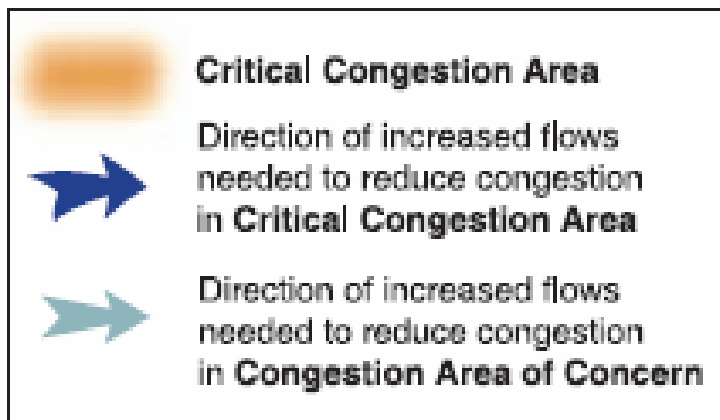


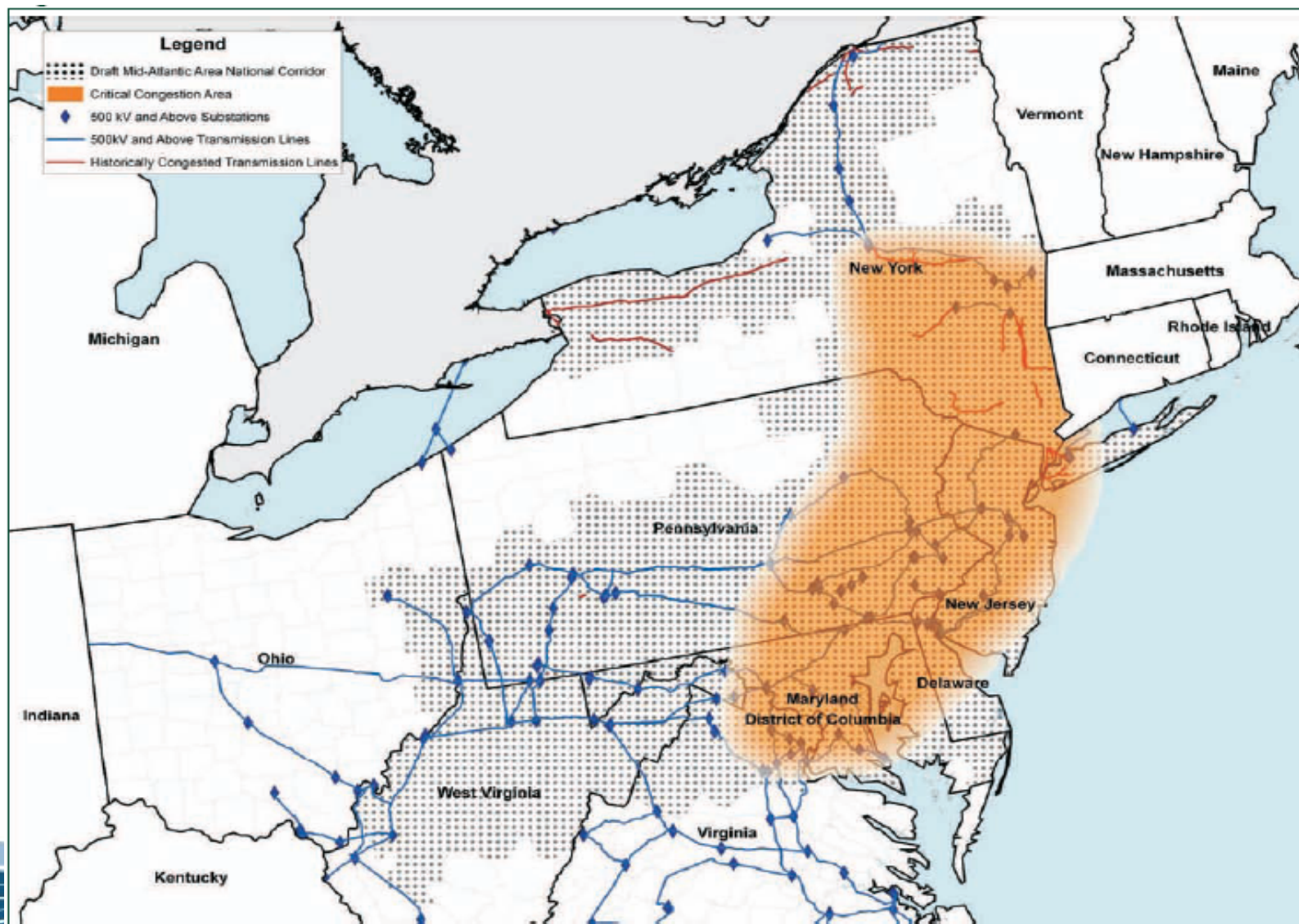












Note: County boundaries are shown.

Source: U.S. Department of Energy, 2007.



