

# GRID MODERNIZATION: Realizing America's Renewable Energy Potential

Many of our nation's energy goals such as addressing climate change and achieving energy security rely on the rapid development and deployment of domestic renewable energy like wind, solar, and geothermal. All of these sources have enormous potential for growth, but this potential will only be realized with a modernized transmission grid.



## A MODERNIZED GRID WILL HARNESS AMERICA'S RENEWABLE ENERGY

***America's energy challenges will only be addressed when we find a way to bring renewable energy sources to more people.***

- Current renewable sources like wind, solar and geothermal power are available in nearly infinite supply, but our aging electricity grid doesn't connect energy-rich regions to the population centers that need it most.
- The majority of our nation's transmission grid was built more than 30 years ago and was not designed to reach the remote regions of the country that have the most potential for renewable energy generation.
- The key to unlocking these resources from the windswept plains and sun-drenched deserts is to build a transmission backbone able to transport the energy to our nation's population centers.
- By connecting large geographic areas, a robust grid will also help address the variability of many renewable sources.

## A MODERNIZED GRID WILL ALLOW AMERICA TO REALIZE ENVIRONMENTAL BENEFITS

***New transmission infrastructure is critical for our nation to achieve its climate change goals.***

- Legislators around the country are implementing energy policies to address the environmental impacts of fossil fuel use.
- As of January 2009, more than two-thirds of all U.S. states have put in place renewable portfolio standards (RPS) or state renewable goals calling for a specific percentage of electricity generated or consumed within the respective state to come from renewable sources by a given date. Congress will likely consider similar legislation in the near future.
- The lack of transmission capacity is hindering the states' ability to meet their energy goals.

## A MODERNIZED GRID WILL SPUR DEVELOPMENT OF RENEWABLE ENERGY AND CLEAN TECHNOLOGIES

***Our nation will never realize its renewable energy potential without more transmission infrastructure.***

- The grid's current capacity and aging condition prevents the interconnection of new renewable energy sources.
- Transmission development would encourage developers to site projects in optimal locations, address the current project queue backlog and promote more efficient use of resources.
- A "band-aid" approach to transmission expansion will result in only a small portion of renewable capacity being developed and will not reduce the queue length for energy projects.
- Additional transmission is needed to spur clean technologies like plug-in hybrid electric vehicles and additional electricity is needed to ensure their viability long-term.

