



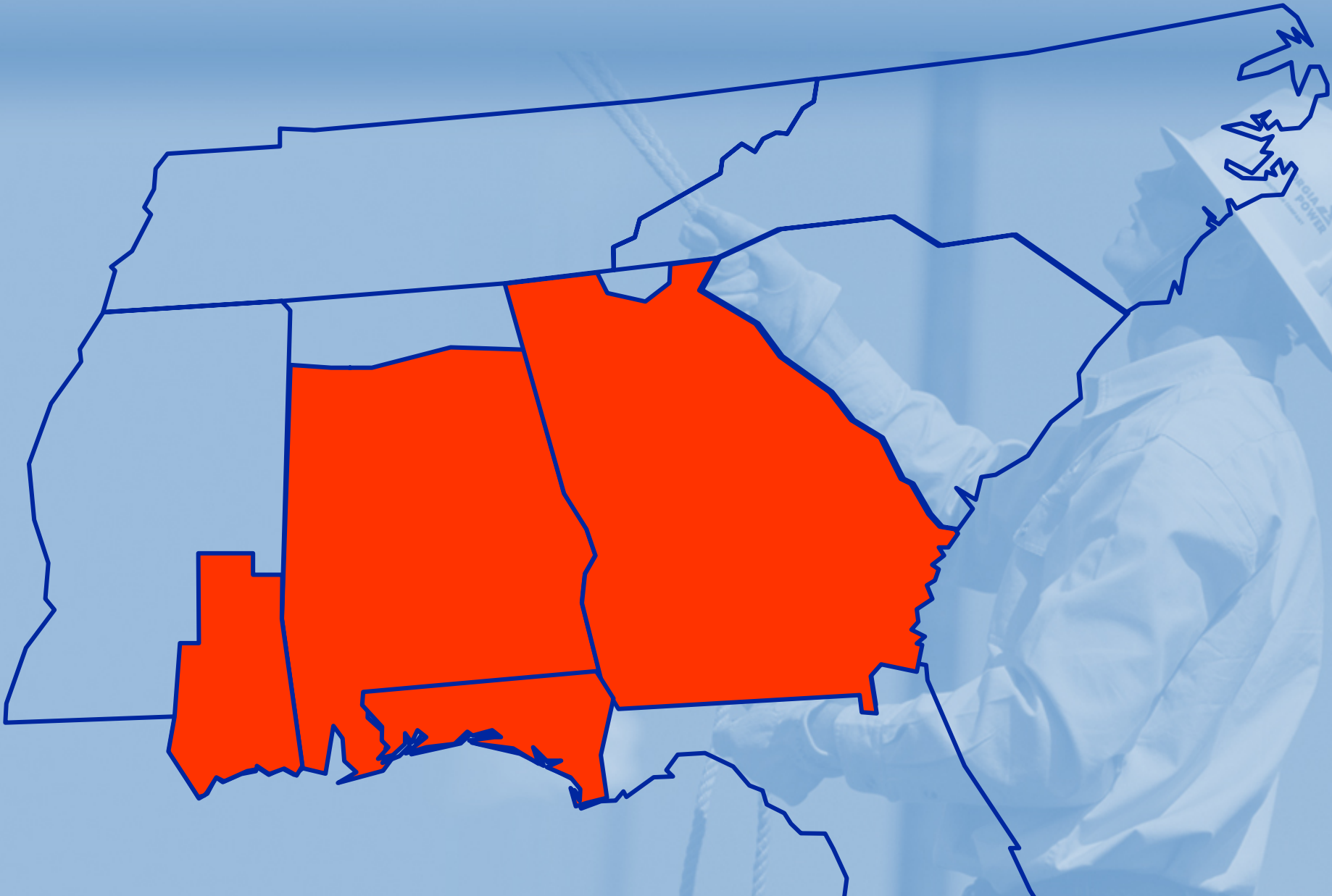
SOUTHERN COMPANY *Transmission*

# Increasing Grid Utilization through Creativity

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# Southern Company



# New Application Focus

- Real time stability analysis and reactive capabilities
- Regional Awareness
- Operator Training tools
- Eastern Interconnect Phasor Project



# I get concerned when...

- When people assume that more knowledge of system conditions will create greater system capability
  - New control room tools do not generally create transmission capacity
  - They can unlock previously unavailable capacity
  - They can show that current practices are unreliable and “reduce” available capacity

# Visualization tools

- EIPP and other projects will produce overwhelming amounts of data
  - New visualization tools are required to make this information useful
- Development of visualization tools requires a clear understanding of control room operators



# I get concerned ...

- About the value placed on deep technical expertise in the industry
  - Major operators all need to keep technical “heavy hitters” on staff

# Training tools

- New simulators provide opportunities for operators to experience system conditions that would have taken years to see using on the job training
- Demographics of the electric utility employees makes new training tools a priority



## Others areas of opportunity

- Metrics and tools that clearly show how close to the edge we are
- Tools to help in choosing responses to system problems
- Expert systems





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# Balanced Approach to Future Reliability

- New and better tools are essential for future reliability



# Balanced Approach to Future Reliability

- New and better tools are essential for future reliability
- Grid improvements are also essential for future reliability

The Future requires Both





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- The future is bright.....





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- The future is bright.....

DREAM BIG!

