



# **9c - Inter-regional Price, Consumption and Emissions Difference and Policy Implications**

Board of Directors

February 18, 2021

# Significant Inter-regional Differences Prices & Emissions

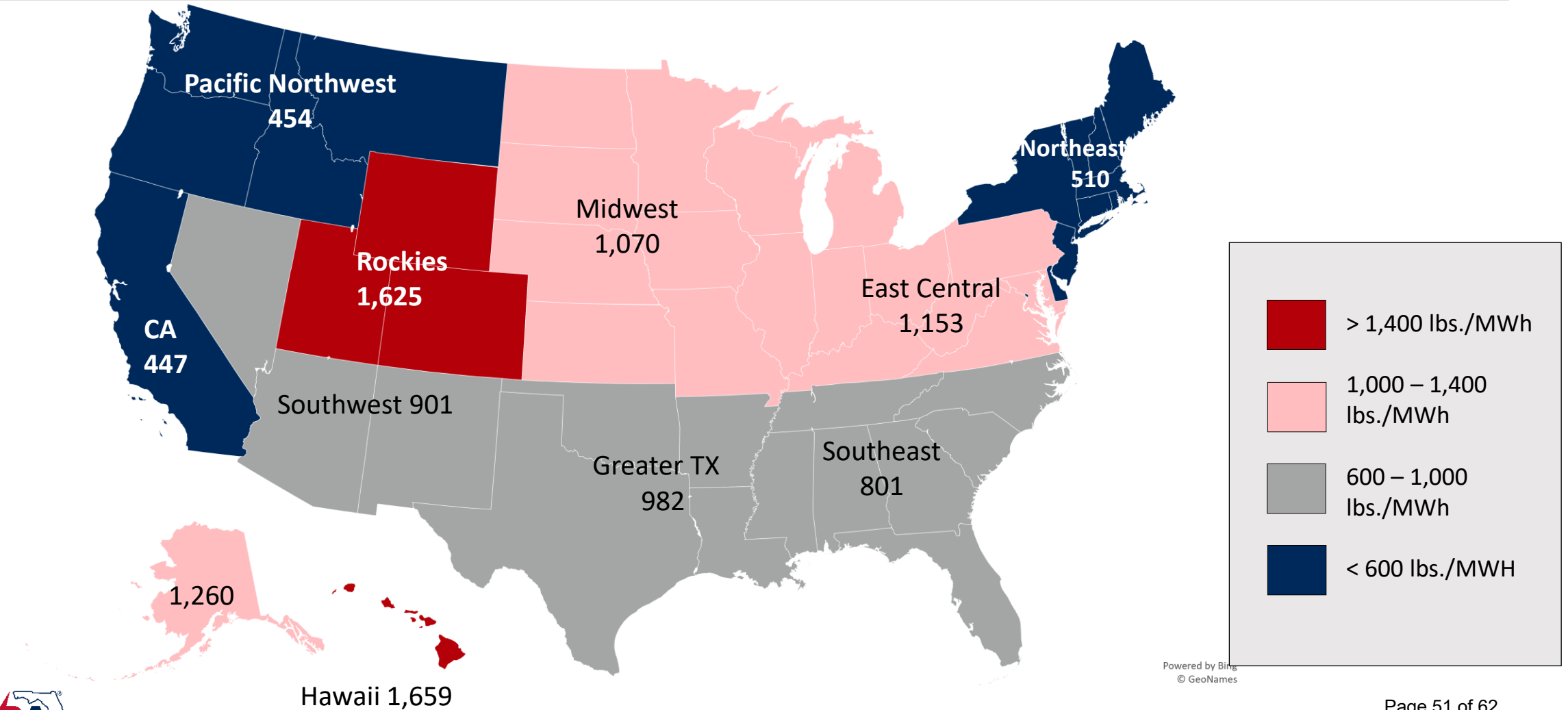
## *CO<sub>2</sub> Policy Implications – Regionalization, Balance Cost Impacts*

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- Significant inter-regional diversity of electric emissions, prices and consumption in U.S.
  - Southeast and Greater TX have low electric prices, high per capita of **consumption of** electricity, moderate CO<sub>2</sub> emissions
  - CA and New England have very high costs, low consumption and CO<sub>2</sub> emissions
  - East Central and Midwest have moderate prices, consumption, relatively high CO<sub>2</sub> emissions
  - Pacific NW with its hydro abundance has low prices and CO<sub>2</sub> emissions
  - Eastern U.S. renewable options generally limited to solar
- CO<sub>2</sub> policy implications – need for regional vs national standards
- Need for balancing “Environmental” vs “Economic” justice
- Looking for feedback on policy positions

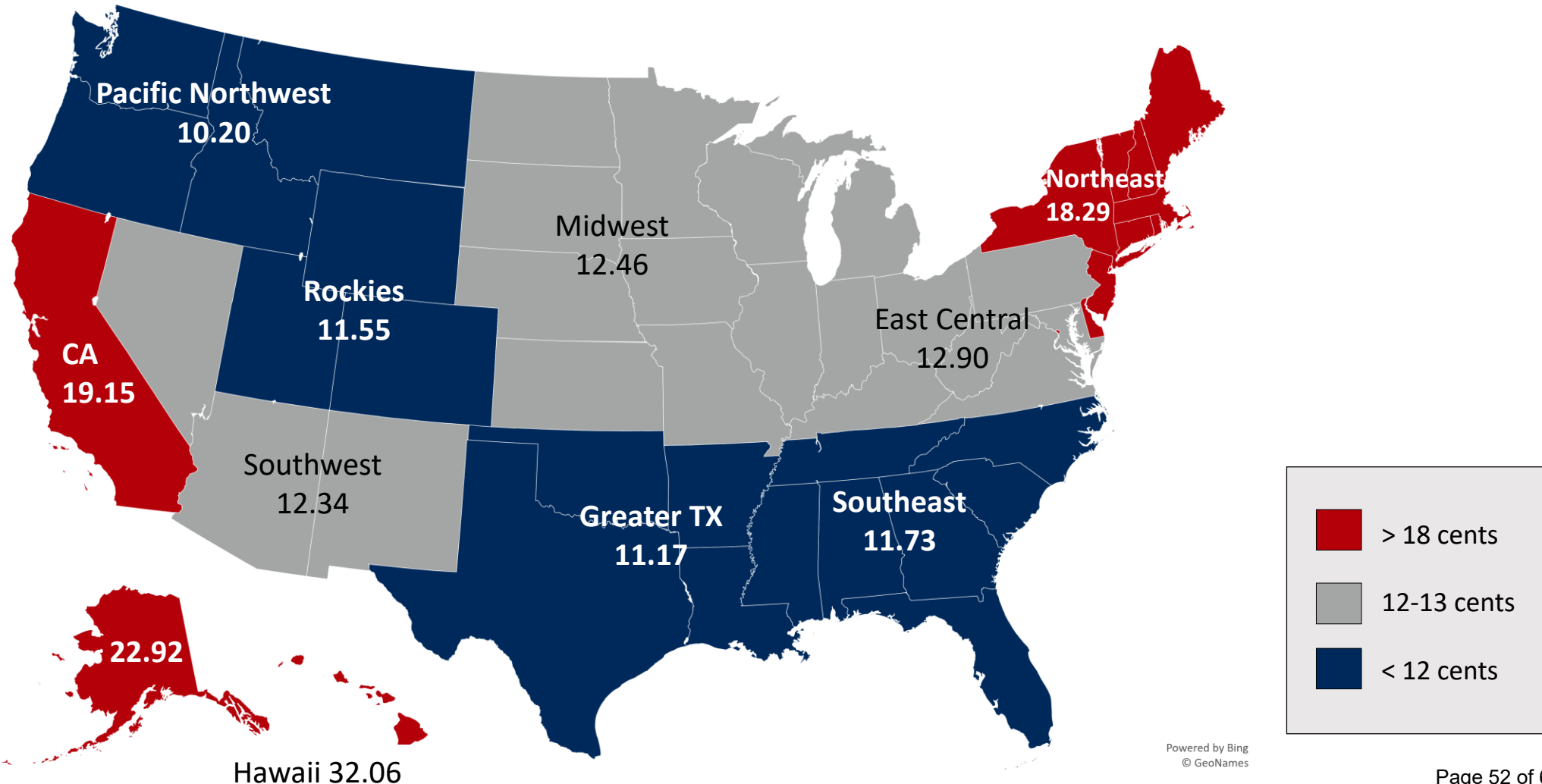
# U.S. Regional Electric Generation Emissions (lbs./MWh)

*Emissions Driven in Part by Access to Natural Resources*



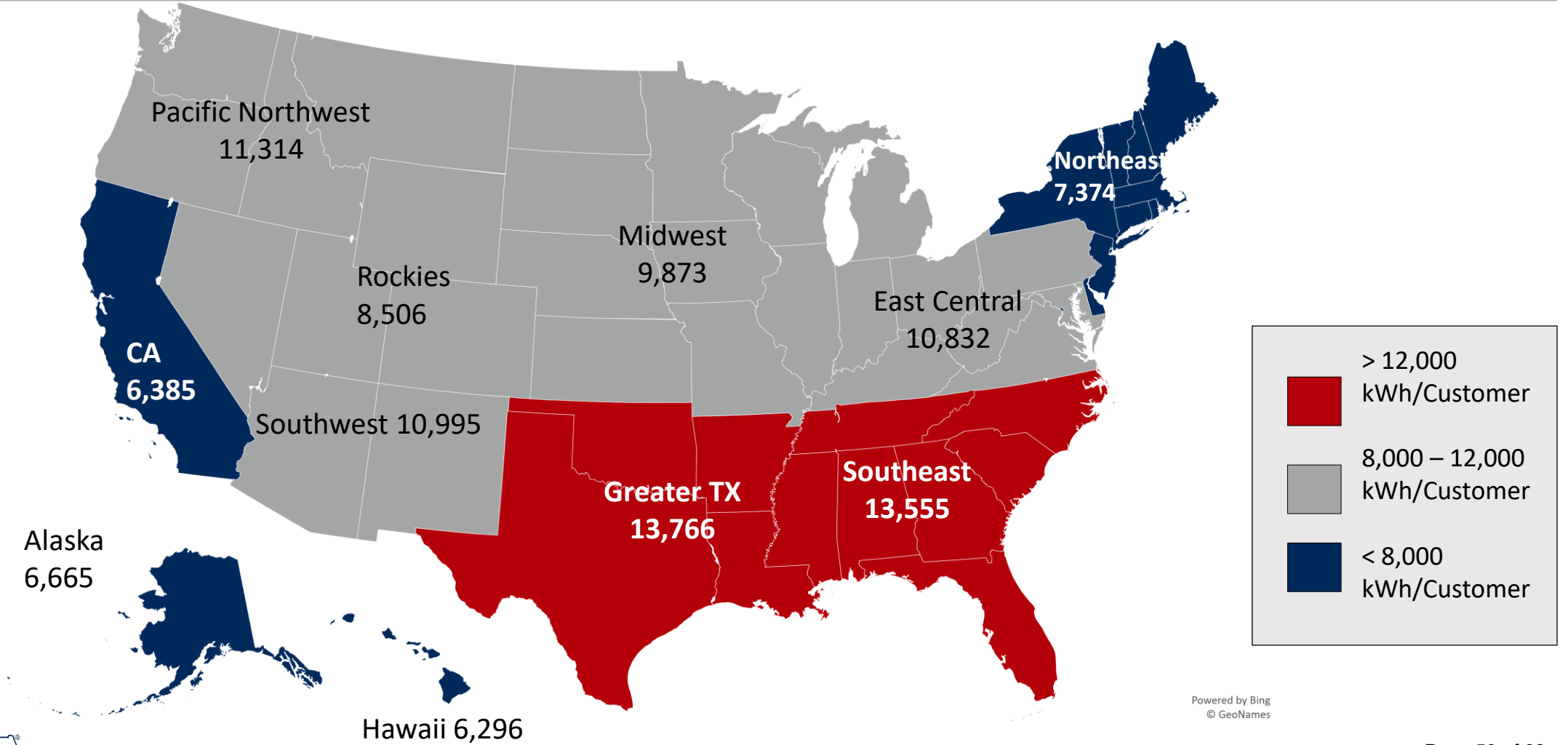
# U.S. Average Residential Retail Price (cents/kWh)

*Higher Consumption Regions Have Lower Prices*



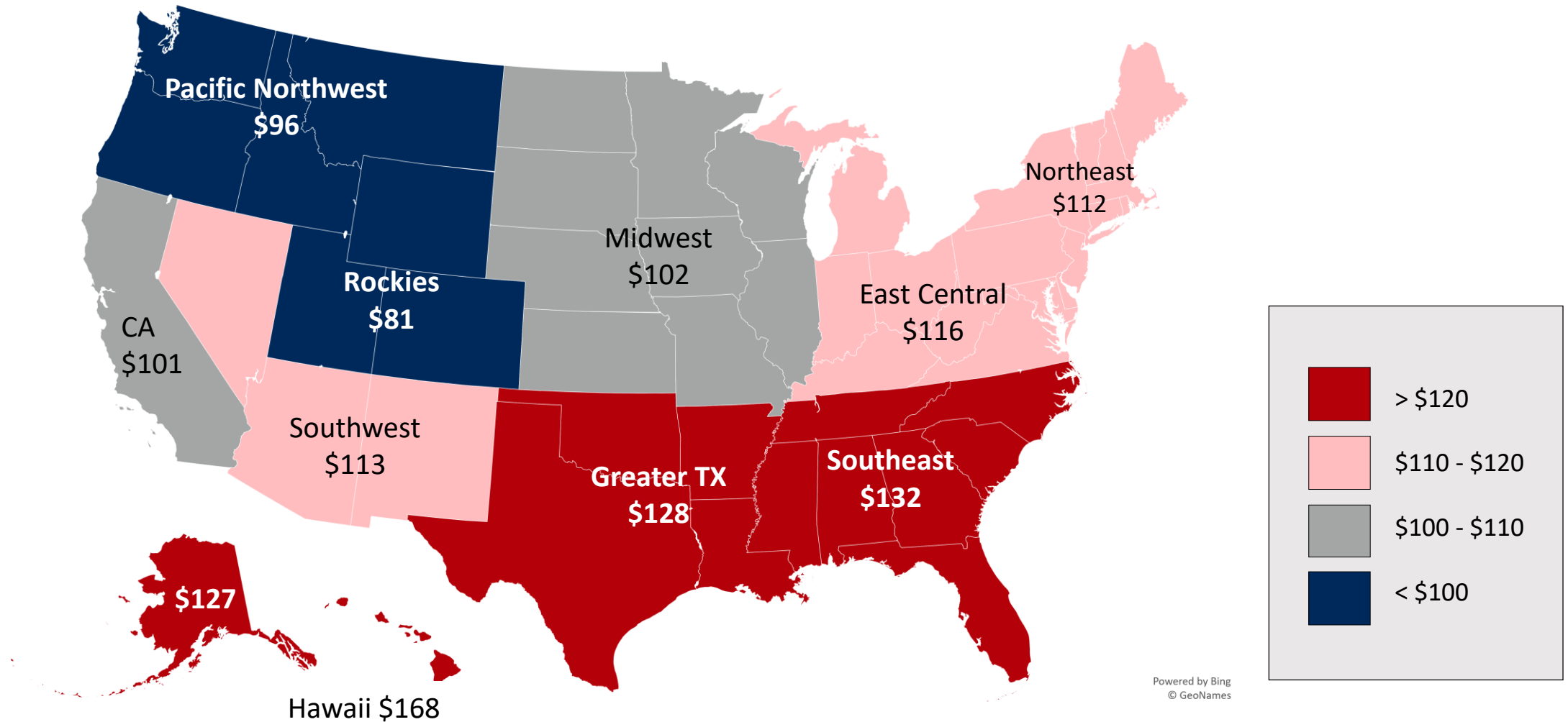
# U.S. Residential Customer Consumption (kWh/Cust.)

*Usage Driven by Space Conditioning*



# Regional Average Residential Electric Bill (\$/Month)

*Highest Usage Regions Have Highest Bills*







FOR  
**1 OF 3**  
FLORIDIANS

**10% of disposable income  
goes to the electric bill**

SOURCE: American Coalition for  
Clean Coal Electricity, "Energy  
Cost Impacts on Florida  
Families," Page 55 of 626

# Increasing CO<sub>2</sub> Reductions in FL Comes at a Cost

*Power Costs Increases Could Range from Inflationary to 300%*

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**50%**

CO<sub>2</sub> Reductions

**Inflationary  
cost increases**

expected through  
2027 while  
achieving 50% CO<sub>2</sub>  
reduction from  
2005 levels

**70%**

CO<sub>2</sub> Reductions

**20%  
cost increases  
over inflation**

using gas  
generation for  
reliability and  
peaking, solar  
power increases,  
some batteries

**95%**

CO<sub>2</sub> Reductions

**50 - 100%  
cost increases  
over inflation**

with significant  
solar power plus  
battery backup  
with natural gas  
only available for  
emergency use

**100%**

CO<sub>2</sub> Reductions

**200 - 300%  
cost increases**

with significant  
amounts of new  
solar plus dramatic  
increase in battery  
capacity to provide  
days of reserves for  
cloudy periods



# Federal CO<sub>2</sub> Policy Needs Regional Considerations

## *Should Balance “Environmental” and “Economic” Justice*

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- Federal CO<sub>2</sub> policy needs regional considerations
  - CO<sub>2</sub> emission targets should be regionalized – vastly different starting points and CO<sub>2</sub> free resources available to reduce emissions
  - Cost of emission reductions should be balanced regionally - no region’s customers bearing large share
  - Policy should have “price circuit-breakers” if consumer costs rise too fast in given region
- Pace of CO<sub>2</sub> emissions reductions in U.S. should be balanced against economic impact on fixed and low income consumers
  - Balance “Environmental” vs “Economic” justice
- Pace of CO<sub>2</sub> emission reductions should account for present technological solutions cost effectiveness
- Other thoughts?

**AGENDA ITEM 9 – INFORMATION  
ITEMS**

**d. Summary of Finance Committee  
Items**

**Board of Directors Meeting  
February 18, 2021**



# 9d – Summary of Finance Committee Items

Board of Directors

February 18, 2021

# Other Items

## *March Review/Approval*

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- Approval of Risk Policies
- Review of the Agency Annual Risk Inventory

**AGENDA ITEM 10 – MEMBER  
COMMENTS**

**Board of Directors Meeting  
February 18, 2021**



**AGENDA ITEM 11 – ADJOURNMENT**

**Board of Directors Meeting  
February 18, 2021**