

TVA Wholesale & Retail Competitiveness with Surrounding Utilities

TVPPA in Conjunction with VEC, Huntsville Utilities, Gibson Electric, Chris
Mitchell Consulting, & EnerVision

TVPPA

Outline of Analysis: Wholesale & Retail

- Purpose: examine TVA's cost competitiveness relative to surrounding power suppliers
- The competitiveness indicator agreed to by TVCPC and TVA is: wholesale cost per kWh, defined as total wholesale power cost for Standard Service & LPC-served BCD customers, divided by associated kWh usage
- Because retail data was readily available (EIA*), retail price competitiveness was examined as well

*U. S. Energy Information Administration

TVA's Competitiveness at Retail

- Definition: LPC retail revenues (Standard Service & LPC-served B, C, & Ds) divided by kWh sales, compared to contiguous utilities' retail revenue divided by total kWh sales
- Data Sources:
 - EIA retail data for all TVA LPCs and 15 contiguous utilities with both full-requirements and partial requirements wholesale customers, for 2010 - 2018
 - TVA Muni/Co-op Report of Average Retail Prices, 2013 - 2018
 - EnerVision retail data for 12 contiguous utilities for 2018
 - NRUCFC* avg. retail price by state, for TVA and non-TVA co-ops for 9 SE states, 2009 - 2018

*National Rural Utilities Cooperative Finance Corporation

Utilities for Comparison at Retail

- Duke South Carolina, Duke North Carolina, Duke Kentucky
- Kentucky Utilities, Louisville Gas & Electric, Mississippi Power Co.
- Georgia Power Co., Appalachian Power Co., Entergy Mississippi
- Duke Progress North Carolina, Duke Progress South Carolina
- Virginia Electric Power Co., Alabama Power Co., South Carolina Electric & Gas

TVA's Competitiveness at Wholesale

- Definition: LPC wholesale power costs (Standard Service & LPC-served B, C, & Ds) divided by kWh, compared to contiguous utilities' wholesale cost divided by kWh
- Data Sources:
 - TVA LPC wholesale power cost data from TVA's Rates Department (Mike Hynes)
 - EnerVision wholesale data for 10 contiguous utilities with full requirements customers only, and for MISO and for PJM, for 2018
 - NRUFCF wholesale data by state 9 SE states, for TVA and non-TVA co-ops for 2009 - 2018
 - Chris Mitchell Consulting Average wholesale data for client LPCs for 2018

Utilities for Comparison at Wholesale

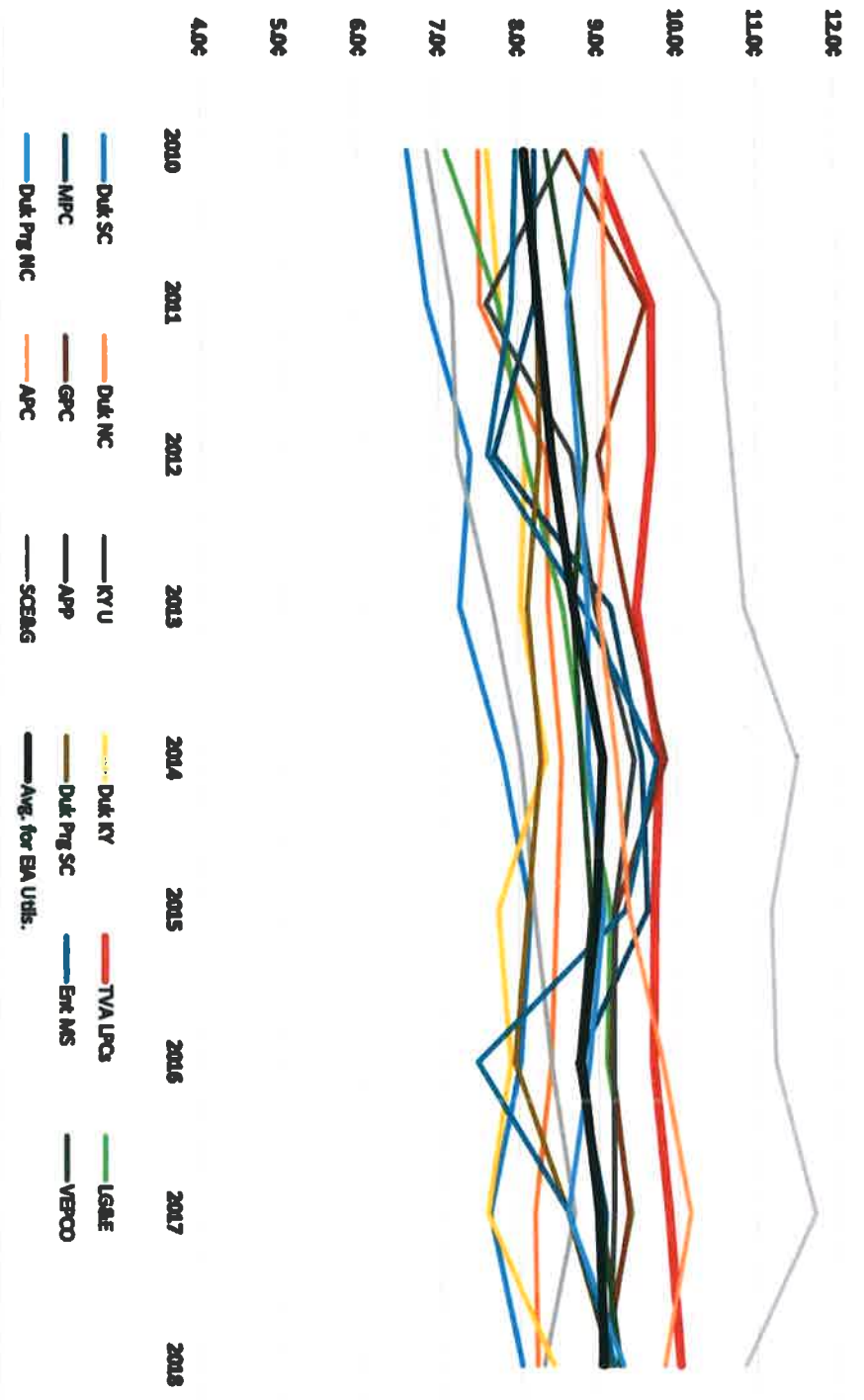
- Duke Carolinas, Duke Progress, Louisville Gas & Electric
- Alabama Power Co., South Carolina Electric & Gas, Santee Cooper
- East Kentucky Power Cooperative, M&A Electric Power Cooperative
- Appalachian Power Co., Union Electric Co.

Retail Competitiveness Results - Graphs

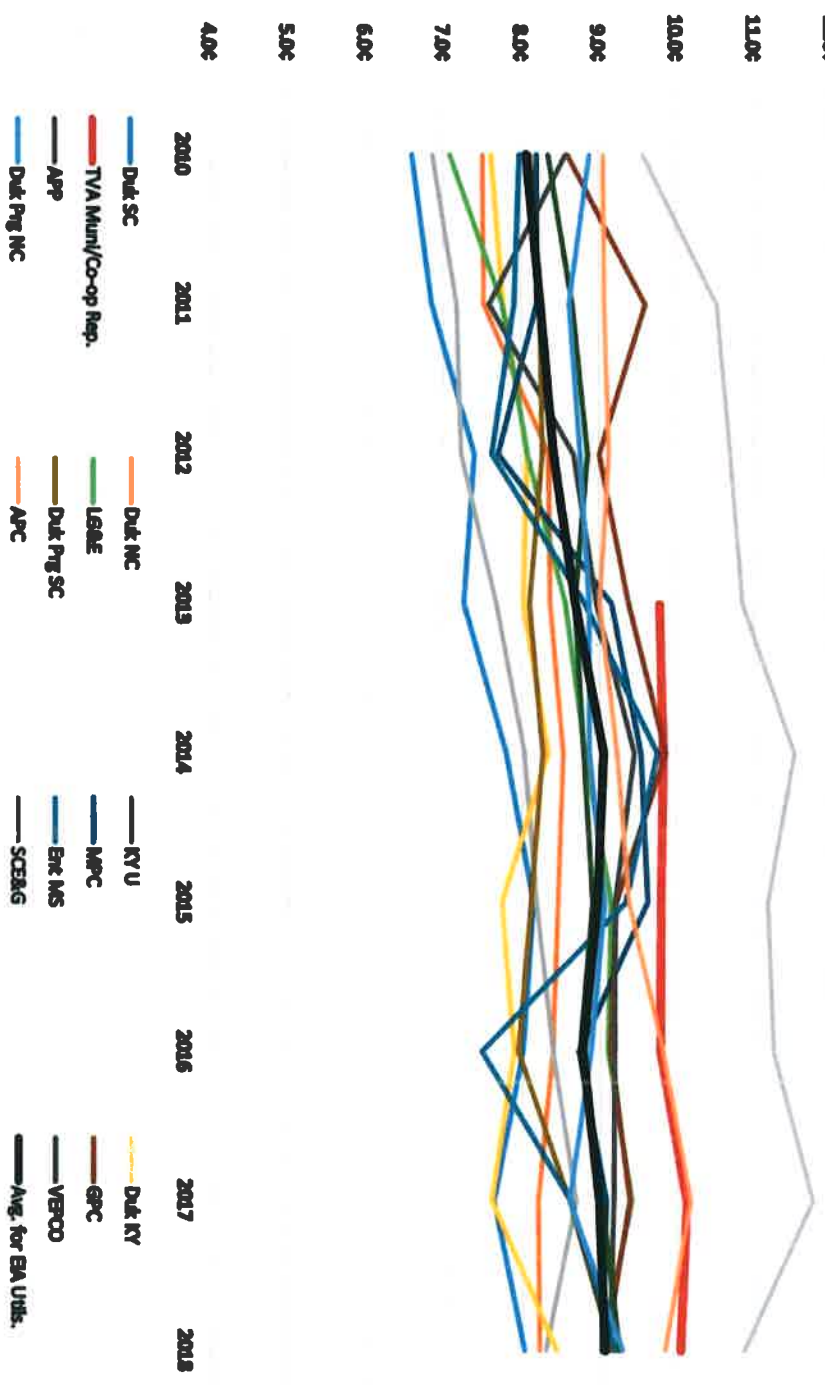
- Retail price for TVA LPCs compared to retail prices of 15 contiguous utilities for 2010 – 2018, using EIA* data
- LPC retail price from TVA's Muni/Co-op Report compared to retail prices of 15 contiguous utilities for 2010 – 2018 (EIA data for utilities)
- 2018 retail prices for utilities in EnerVision's analysis (full requirements only) compared to TVA retail price
- CFC retail prices by State for TVA VS non-TVA co-ops, for 2009 - 2016

*U.S. Energy Information Administration

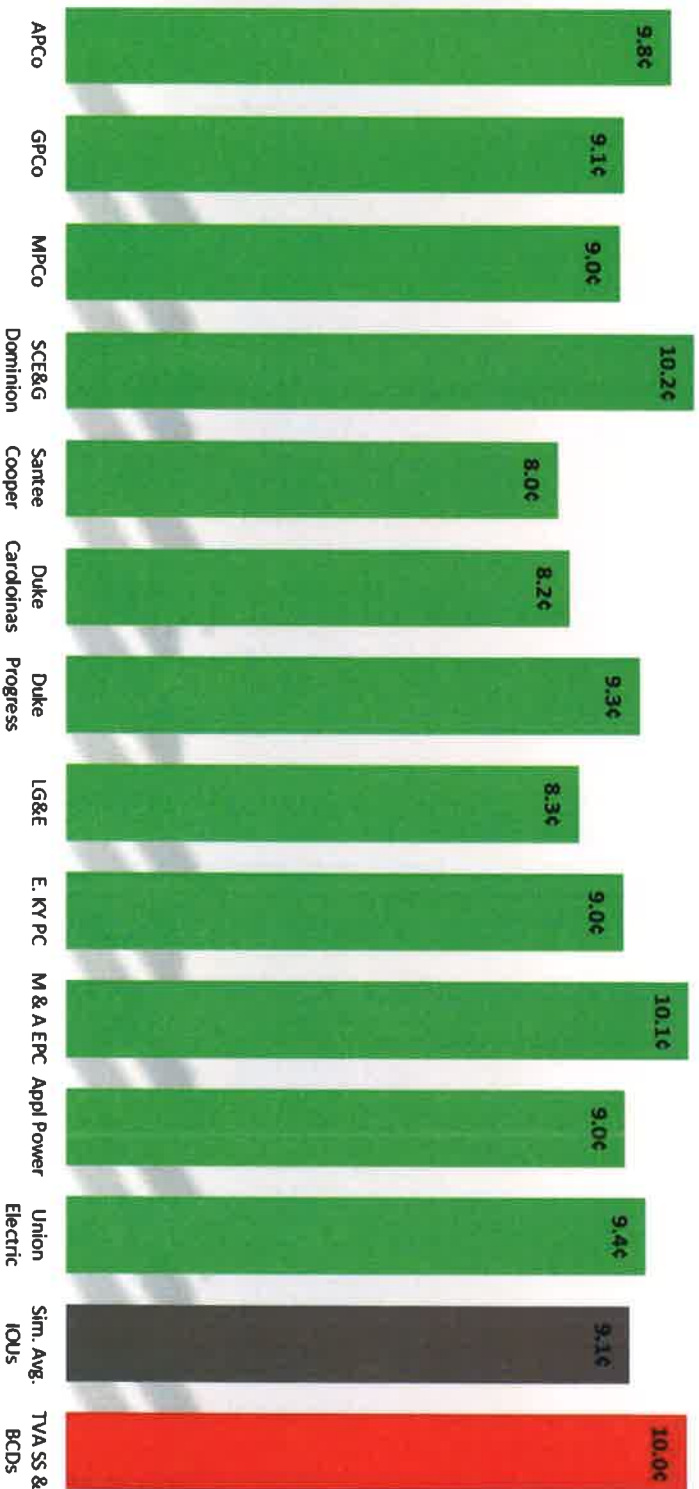
LPCs' Avg. Retail Price (EIA) VS Contiguous Utilities



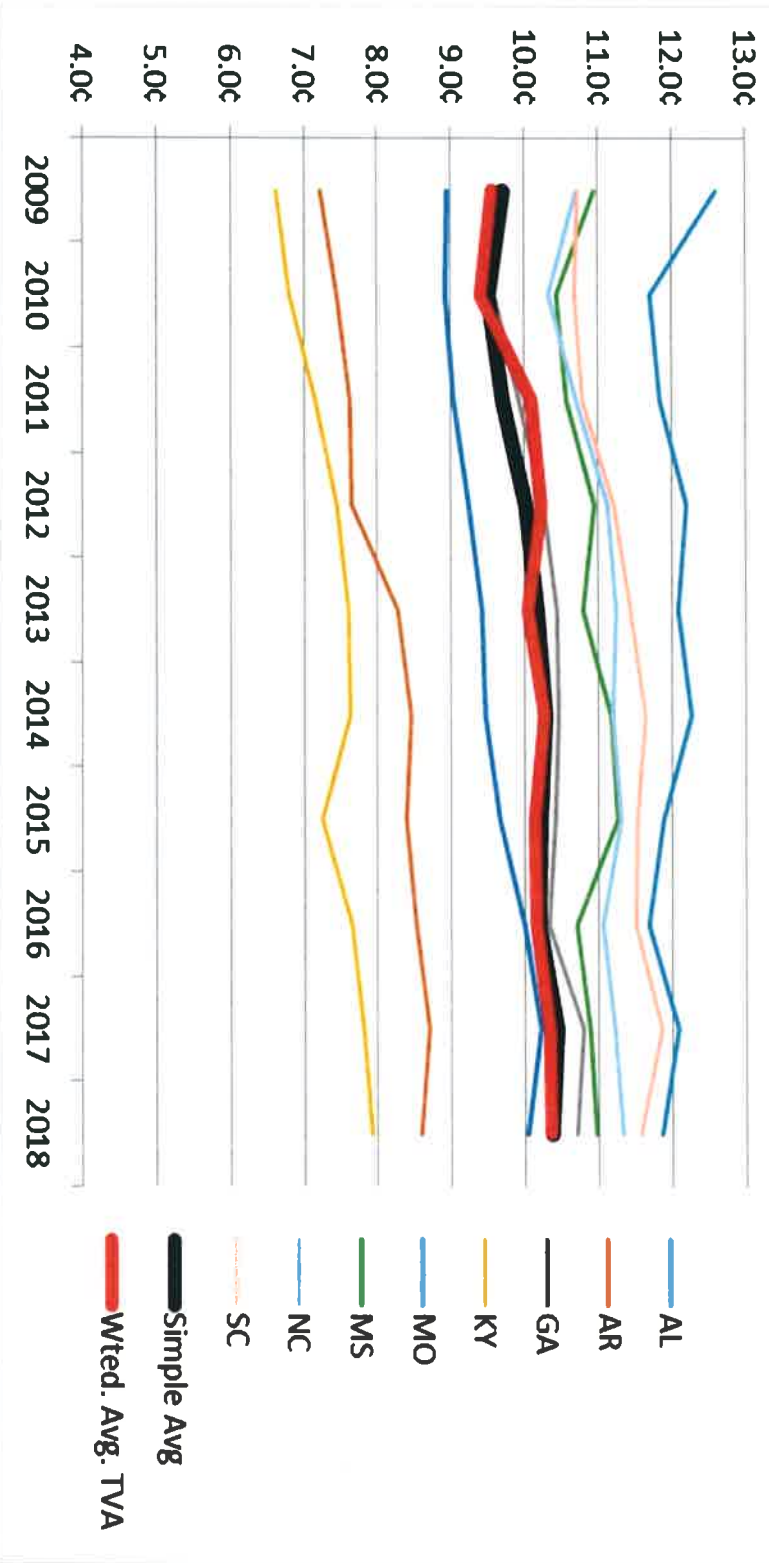
LPCs' Retail Price (Muni/Co-op Report) VS Contiguous Utilities (EIA)



2018 Retail Prices for Utilities - EnerVision Analysis



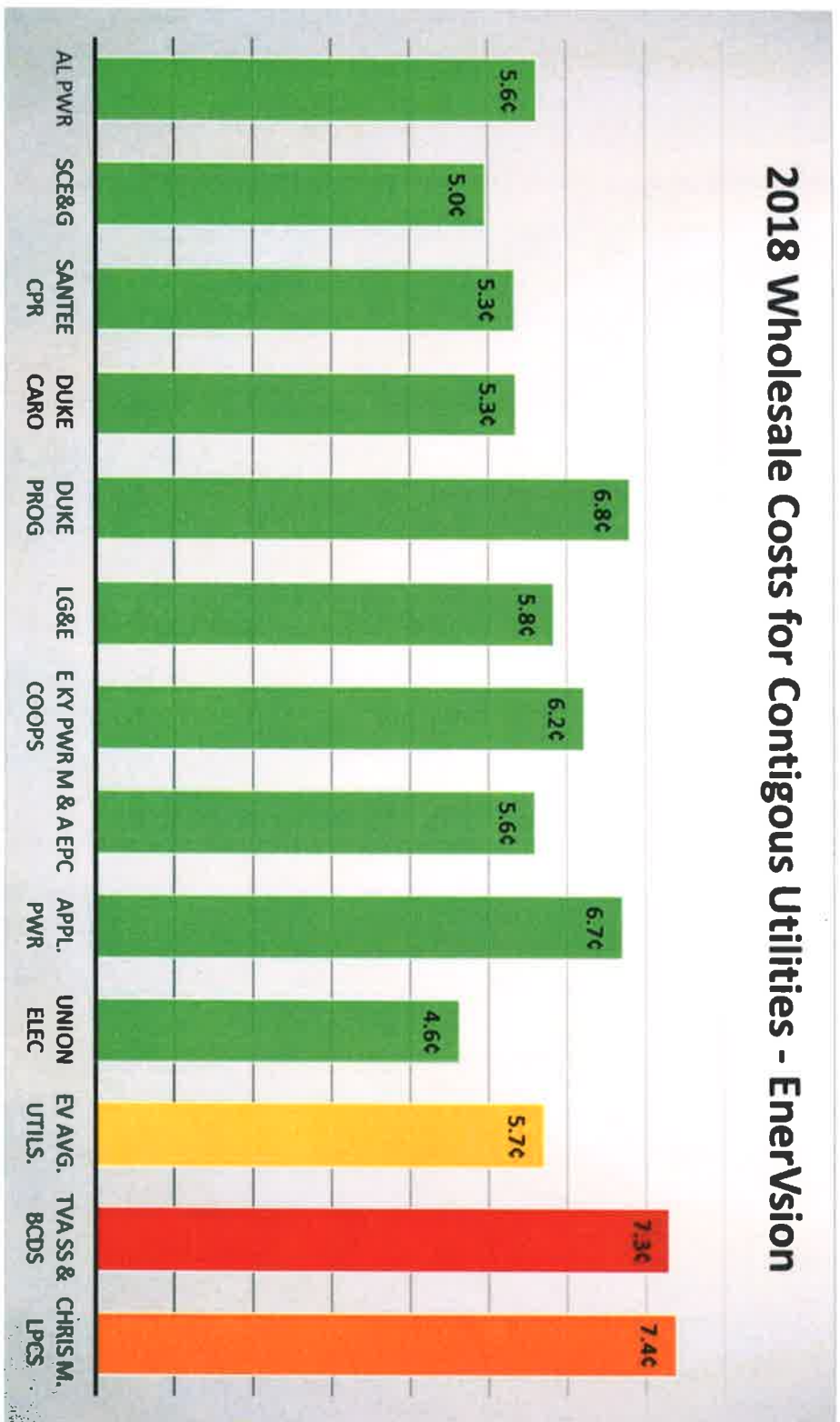
CFC Retail Prices, TVA VS Non-TVA Co-ops



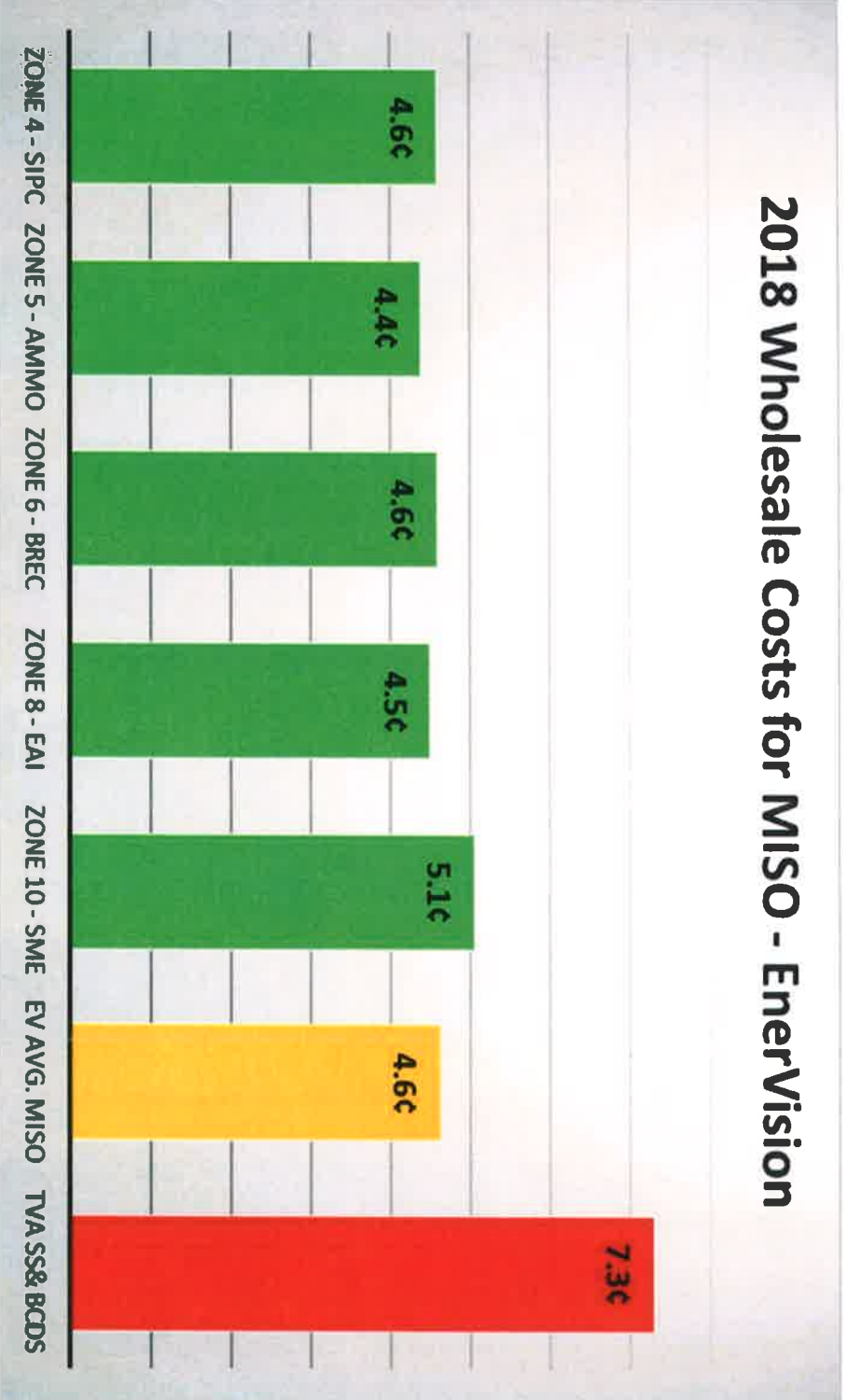
Wholesale Competitiveness Results - Graphs

- TVA wholesale power cost from TVA Rates Department compared to EnerVision wholesale data for 10 contiguous utilities with full-requirements wholesale customers only, for 2018
- TVA wholesale power cost compared to EnerVision data for MISO and PJM
- Wholesale data from Chris Mitchell's LPC clients, for 2018
- NRUFCF wholesale data by state in the Southeast, for TVA and non-TVA co-ops for 2009 – 2016
- CFC revenue minus power cost for TVA and non-TVA co-ops, 2009 - 2016

2018 Wholesale Costs for Contiguous Utilities - EnerVision



2018 Wholesale Costs for MISO - EnerVision



2018 Wholesale for PJM - EnerVision

