



# Regional Energy Resource Council

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Nov 29, 2017  
Knoxville, Tennessee



# Term 3 RERC Members

**Michael Butler**

Tennessee Wildlife Federation

**Wayne Davis\***

University of Tennessee

**Rodney Goodman**

Habitat for Humanity

**Dan Ionel**

University of Kentucky

**Wes Kelley**

Huntsville Utilities

**Doug Lawyer**

Knoxville Chamber

**Robert Martineau, Jr.**

State of Tennessee

**Peter J. Mattheis**

Tennessee Valley Industrial Committee

**Jennifer Mundt**

State of North Carolina

**Jeremy Nails**

Morgan County Economic Development Association

**Alice Perry**

State of Mississippi

**Doug Peters**

Tennessee Valley Public Power Association

**Derwin Sisnett**

Gestalt Community Schools

**Stephen Smith**

Southern Alliance for Clean Energy

**Charles Snavelly**

Commonwealth of Kentucky

**John Warren**

Commonwealth of Virginia

**Lloyd Webb**

Olin Chlor Alkali

**Susan R. Williams**

SRW & Associates

\* RERC Chair

# Safety Moment



## Building Emergency Plan

# Introductions



- Name
- Organization and Role
- Something you like to do in your free time



# Agenda and Meeting Protocols

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# Agenda – November 29, 2017

<b>8:30</b>	<b>DFO and RERC Chair Welcome</b>	Dr. Joe Hoagland/ Designated Federal Officer (DFO) Dr. Wayne Davis, RERC Chair
<b>8:40</b>	<b>Introductions</b>	Jo Anne Lavender, Facilitator and Council Members
<b>8:50</b>	<b>FACA / RERC Orientation</b>	Khurshid Mehta, Office of the General Counsel
<b>8:55</b>	<b>Meeting Purpose / DFO Briefing</b>	Hoagland
<b>9:00</b>	<b>Introduction to TVA</b>	Hoagland Cass Larson, Vice President of Pricing and Contracts
<b>9:30</b>	<b>TVA Rates</b>	Michael Hynes, Director, Rate Design and Administration
<b>10:30</b>	<b>About TVA's Low Income Approach for Energy Efficiency</b>	Frank Rapley, Senior Manager, EnergyRight® Solutions for the Home
<b>10:50</b>	<i>Break</i>	
<b>11:05</b>	<b>RERC Discussion</b>	Lavender, and Council Members
<b>12:05</b>	<i>Lunch</i>	
<b>1:15</b>	<b>Public Comment Session</b>	Lavender, and Council Members
<b>2:15</b>	<b>RERC Discussion (cont.)</b>	Lavender, and Council Members
<b>3:30</b>	<b>Wrap up and Adjourn</b>	Davis / Hoagland/ Lavender

# RERC Meeting Protocols

## Agenda

- ◆ Agenda prepared and approved by the Designated Federal Officer (DFO) in consultation with Council Chair
- ◆ Agenda distributed to Council and published in the Federal Register prior to each meeting
- ◆ Topics may be submitted to the DFO by any member of the Council, or non-members, including members of the public

## Meeting Minutes

- ◆ DFO will ensure that minutes are prepared for each meeting, approved by the Chair, and made available to Council members

## Voting

- ◆ Any member of the Council may make a motion for a vote
- ◆ Recommendations to TVA Board shall require an affirmative vote of at least a simple majority of the total Council members present on that date
- ◆ Council members may include minority or dissenting views

## Discussion

- ◆ DFO (or his designee) will facilitate and ensure good order during all open discussions
- ◆ Only one speaker or attendee is permitted to comment at a time
- ◆ To be recognized by the Chair (or meeting facilitator) in order to provide comment, please turn your name card on its side





The Federal Advisory Committee Act  
and  
The Regional Energy Resource Council

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FACA Briefing—Third Term  
Khurshid Mehta, Attorney  
Office of General Counsel

# Historical Background on Advisory Committees

- ❖ Growth in advisory committees occurred after WWII
- ❖ Congressional concerns:
  - Proliferation of committees
  - Domination by special interest groups
  - Lack of transparency and accountability
  - Waste of federal funds



## Federal Advisory Committee Act of 1972

- ❖ U.S. Congress formally recognized the merits of seeking advice and assistance
- ❖ The Act assures that advisory committees provide advice that is relevant, objective and open to the public, and comply with record keeping requirements



## Key Elements of the Federal Advisory Committee Act

### Public access and transparency

- ❖ Meetings (reasonably accessible and timely notice required—generally open to the public)
- ❖ Records (available for public inspection, subject to limitations)

### Structured management

- ❖ Filed charters
- ❖ Expiration after two years
- ❖ Attendance of a federal officer

## Advisory Committees Today

- ❖ Play an important role in shaping programs and policies of the federal government
- ❖ Approximately 1000 committees with more than 60,000 members
- ❖ Advise the President of the United States and the executive branch
- ❖ Subject to FACA and General Services Administration (GSA) Regulations



## TVA's Regional Energy Resource Council

- ❖ Created by TVA in 2013 “to provide advice on its energy resource activities and the priorities among competing objectives and values”
- ❖ TVA's energy resource activities include:
  - Constructing and operating various supply-side resources, including fossil-fueled power plants, nuclear plants, hydroelectric dams, and renewable resources
  - The development and management of demand-side resources, including energy efficiency
  - The design, construction, and operation of power delivery systems
  - The integration of all of these energy resources into plans for meeting future demands for electricity in the TVA region

## Key Provisions of RERC Charter

- ❖ Council provides advice only
  - Advice reported to the TVA Board's External Relations Committee
- ❖ Term of Council is two years
  - Third term expires July 31, 2019
- ❖ Approximately two meetings per year
- ❖ Designated Federal Officer (DFO): Joe Hoagland, Vice President, Enterprise Relations and Innovation
- ❖ Balanced Membership



# DFO Update

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Joe Hoagland, Designated Federal Officer



# Meeting Purpose

- Welcome new members to the 3rd term of the RERC
- Provide an introduction to TVA and a preview of the 3rd Term
- Information topic about TVA finances and rates
- Information topic on the next generation IRP
- Follow up topic: TVA's Energy Efficiency Programs
- Host a public listening session
- Obtain Advice
  - Guiding Principles in designing wholesale rate changes
  - Engagement of Valley stakeholders on wholesale rate changes



# Introduction to TVA

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Joe Hoagland, Vice President Enterprise Relations and Innovation

Cass Larson, Vice President of Pricing and Contracts



# TVA Purpose, Mission, Governance

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Joe Hoagland, Vice President Enterprise Relations and Innovation

# What We Are

- Provider of low-cost, reliable power
- Steward of the Valley's natural resources
- Partner for economic growth



*“Power is really a secondary matter.... TVA is primarily intended to change and to improve the standards of living of the people of that valley. Power is, as I said, a secondary consideration. Of course, it is an important one because, if you can get cheap power to those people, you hasten the process of raising the standard of living.”*

President Franklin D. Roosevelt

# What We Do

- Serve 7 states, 154 local power companies, 57 directly served customers and 80,000 square miles
- Generate \$10.9 billion annual revenue
- Manage the Valley's river systems and environmental resources.



**First power pole erected in 1934 in Pontotoc, Miss.**



**“Father of TVA,” Senator George Norris**

# Our Mission

## Energy



Provide affordable electric power throughout the Tennessee Valley Region

## Environment



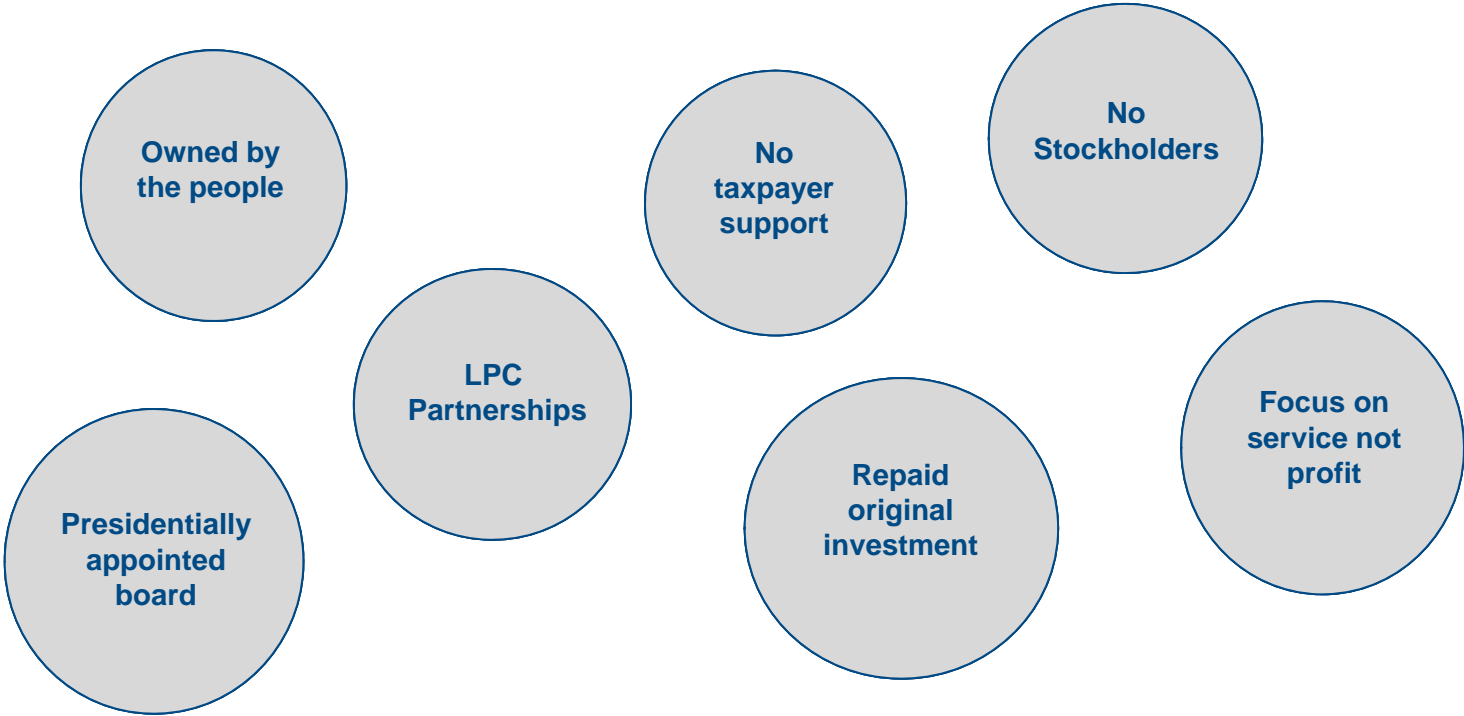
Act as a steward of the Valley's natural resources

## Economic Development

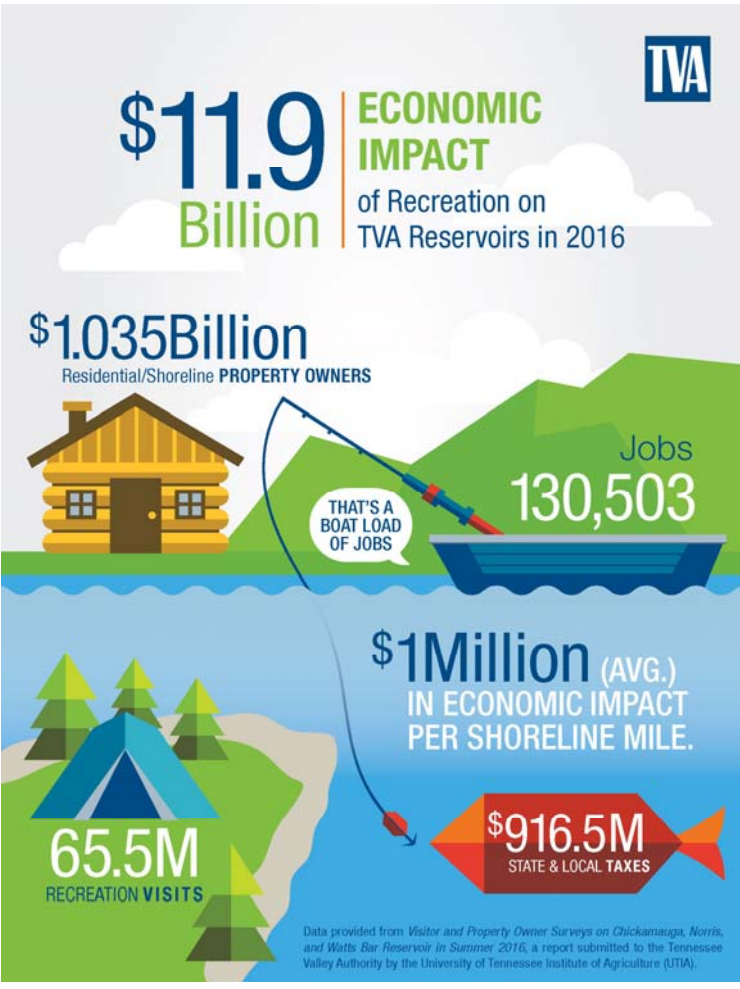


Serve as a catalyst for sustainable economic development

# Why We're Unique



# Environmental Stewardship





# Serving the People of the Valley

## Energy Efficiency

**381.4 GWh** FY16 ERS ACHIEVEMENT

The Valley has exceeded its load management targets nine years in a row.

**\$790 million**

CAPITAL AVOIDANCE AT \$700 PER KILOWATT OF INSTALLED COSTS

**2.0¢ per kWh**

AVERAGE LIFETIME COSTS FOR TVA'S ENERGY EFFICIENCY PROGRAMS

**1,128 MW**

AVOIDED CAPACITY ADDITION

**>3,120 GWh**

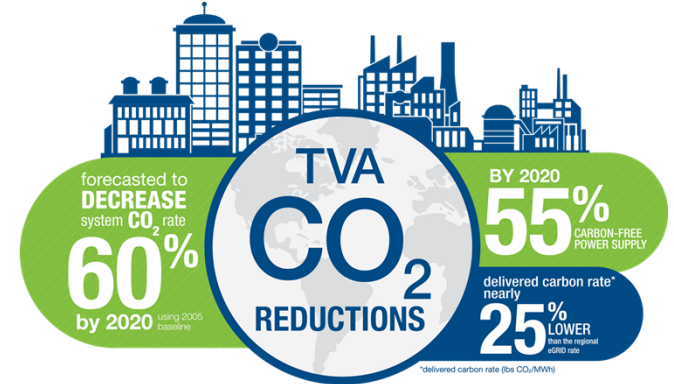
ENERGY NEEDS AVOIDED

Savings of EnergyRight Solutions programs from 2008 to 2016.

## Low Rates

Top Quartile Industrial Rates

## Cleaner Generation



# Economic Development

## FY17 TVA Economic Development Year-End Results

<u>Region</u>	<u>Jobs Attracted/Retained</u>	<u>Capital Investment</u>
Alabama	10,700 jobs	\$1.3 billion
Kentucky	6,000 jobs	\$ 1.1 billion
Middle Tennessee	22,700 jobs	\$2.8 billion
Mississippi	6,870 jobs	\$520 million
Northeast Valley	7,760 jobs	\$1.1 billion
Southeast Valley	6,990 jobs	\$790 million
West Tennessee	8,260 jobs	\$540 million

**In FY 17:**

**\$8.3 billion in  
capital investment**

**70,000 jobs**

# The Value of Public Power

- People are first – Accountable to stakeholders, not stockholders
- Rates are set to recover costs and reinvest in facilities – Not maximize profits
- Low-cost, reliable service are the focus – Not shareholders
- Collaborative regulatory process with a clear focus on serving energy consumers



*More than 25% of our nation's electricity consumers receive their energy from public power*

# TVA Governance

- Corporate Agency of the United States, receives no tax dollars / self financing
- Nine-member Board of Directors, nominated by the President, confirmed by the Senate
- CEO, appointed by the TVA Board
- RERC provides advice to the TVA Board



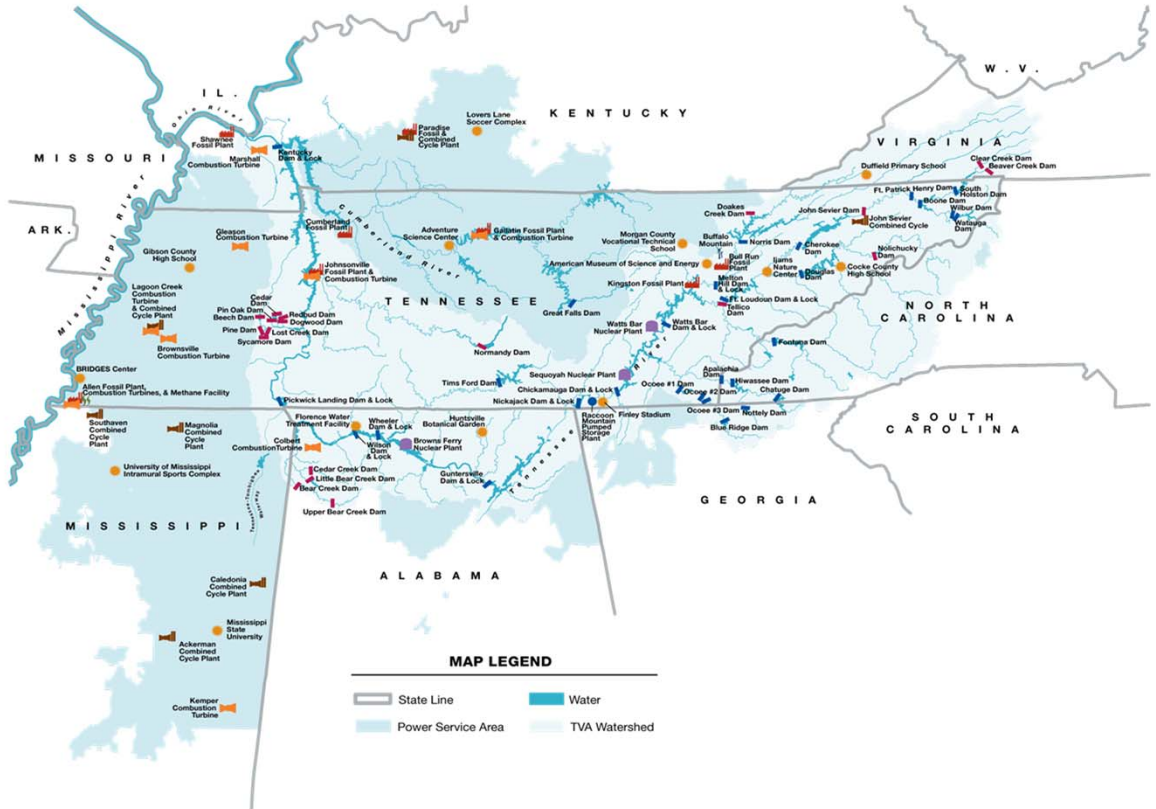


# TVA Finances, Generation Portfolio and Transmission System

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Cass Larson

# TVA's Service Territory



TVA provides electricity through:

- 154** local power companies
- 57** directly served customers
- 9 Million** residents
- 7** states
- 80,000** square miles

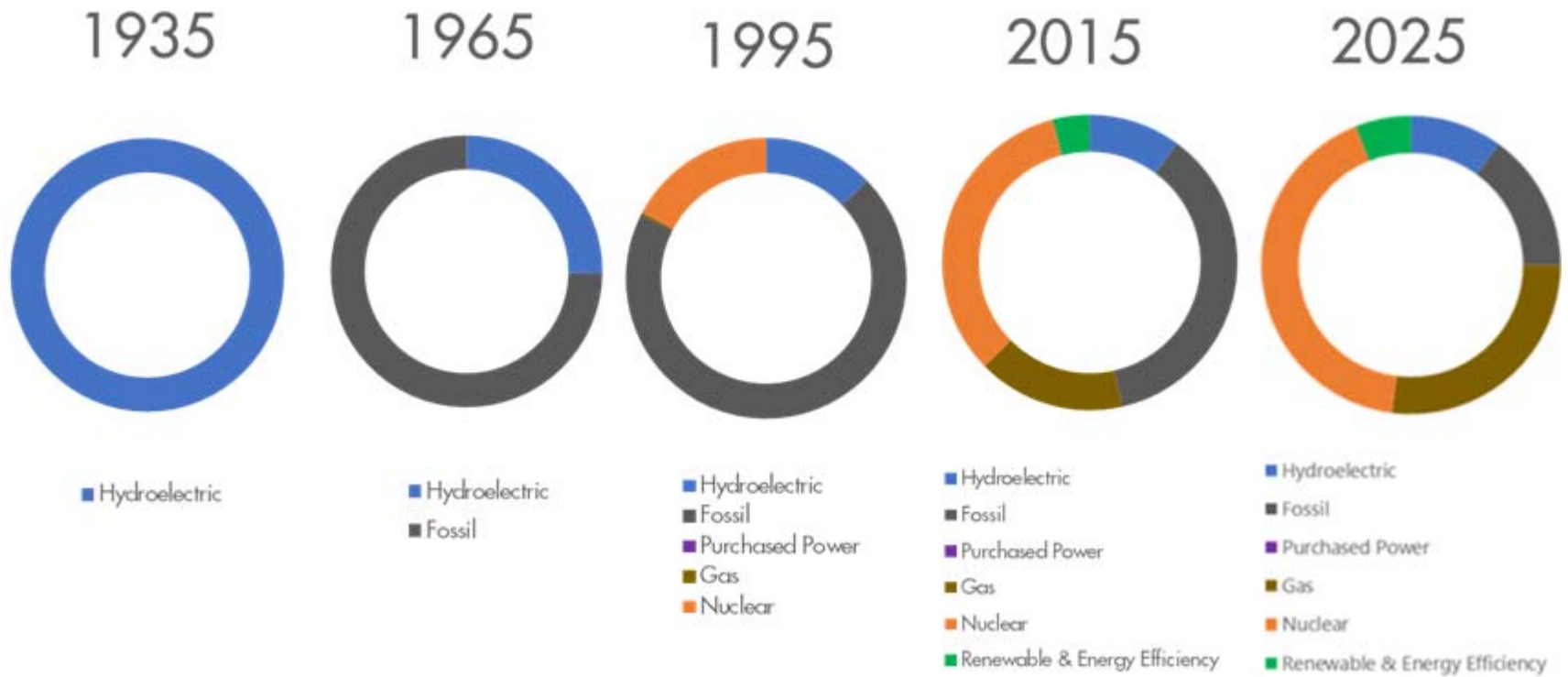


# Our Transmission System



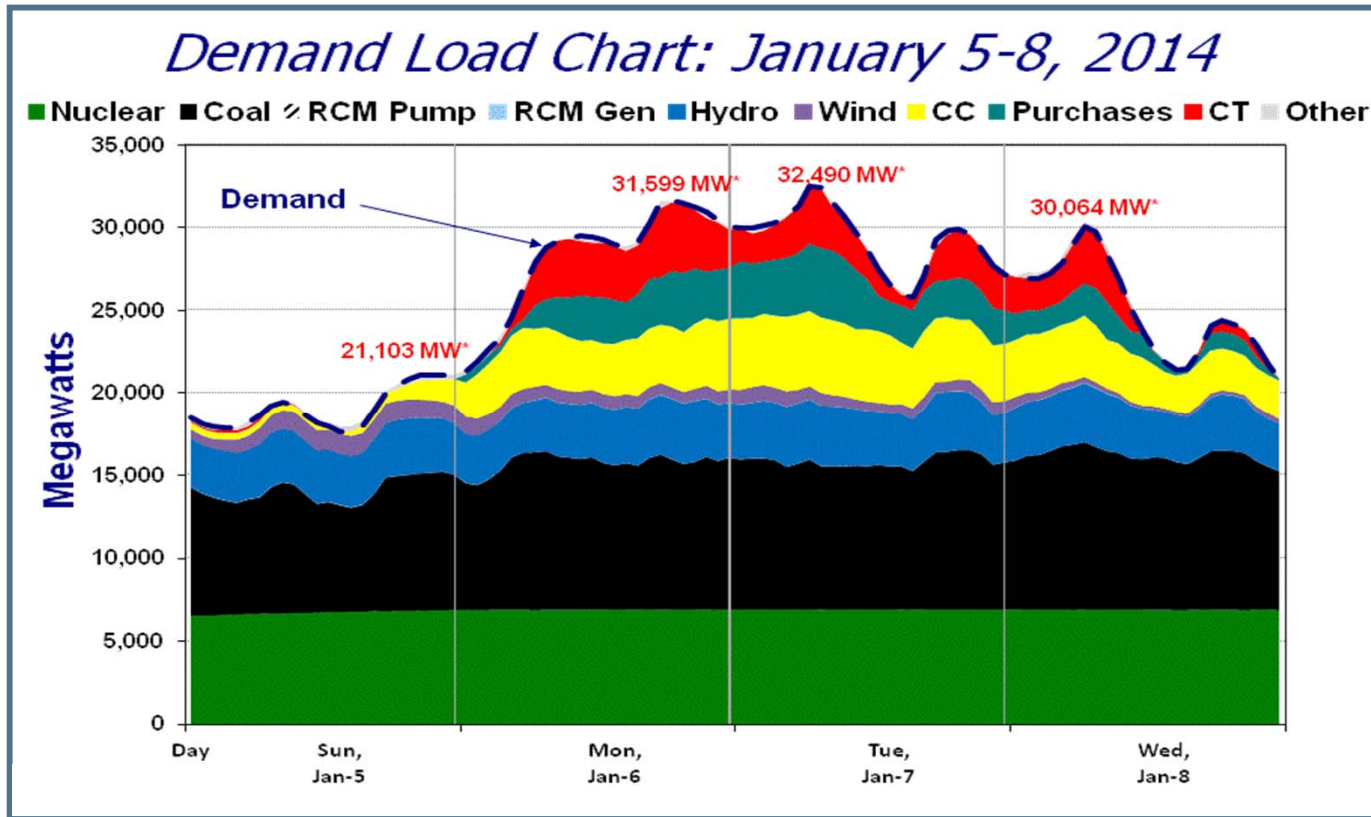
- **99.999** reliability for 18 years
- More than **16,000** circuit miles of transmission line
- Over **400** substations and switchyards (100-kV and above)
- Over **104,000** transmission structures on **236,000** right-of-way acres
- Over **1,200** customer connection points (includes generators and neighboring systems)
- **2** fully-operational Control Centers

# Generation Over the Decades





# Obligation to Serve the Extremes



# Our Mission and Strategic Imperatives

Why We Are Here

How We Achieve Sustainability



## TVA Mission



Energy



Environment



Economic Development

## Strategic Imperatives



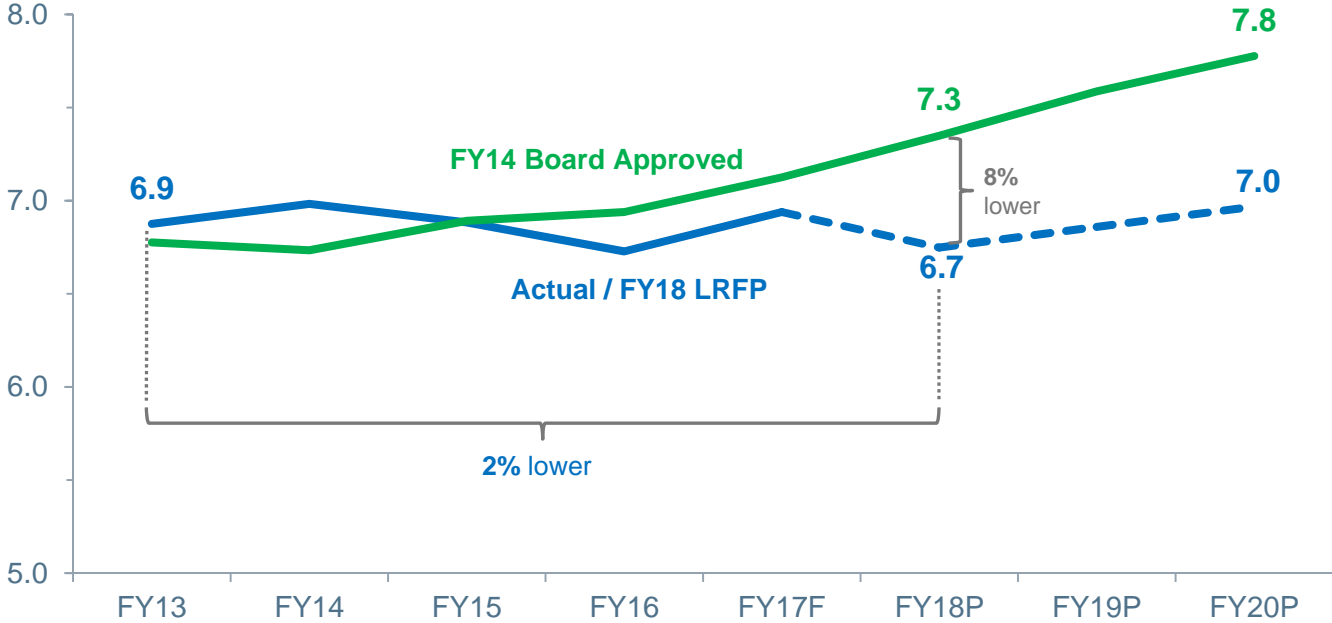


## Progress Toward Financial Commitments

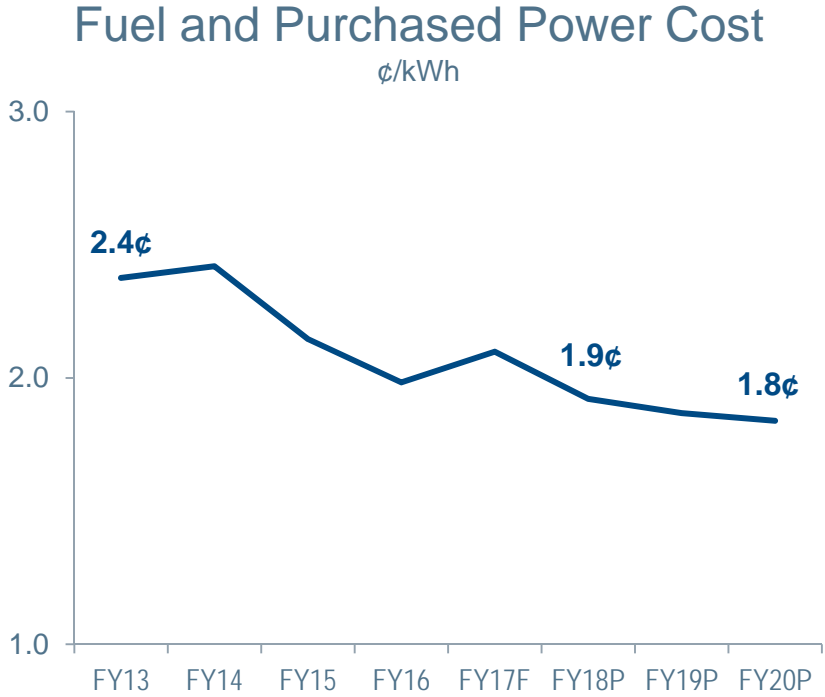
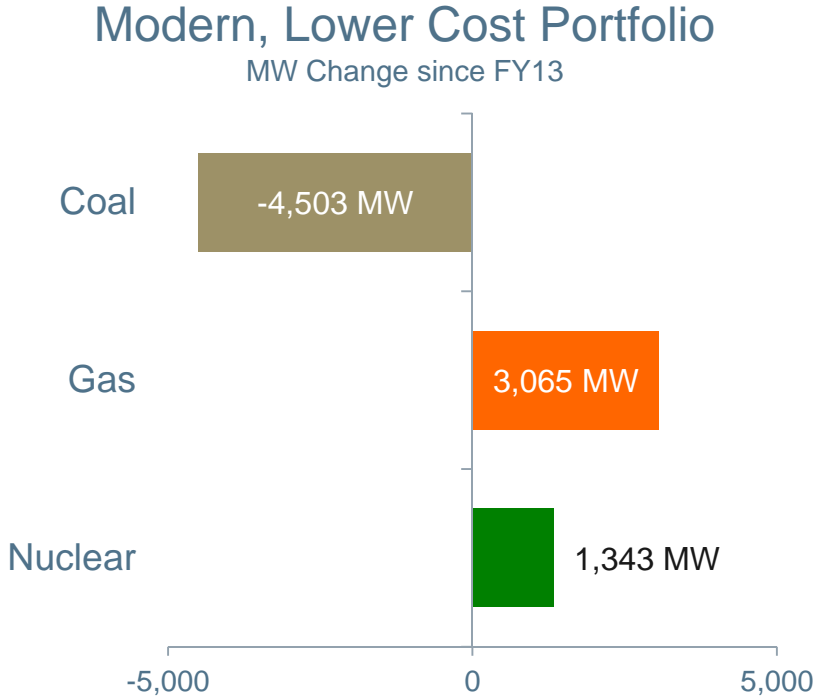
- Completed Large Construction Projects
- Asset Investments Improving Fuel Costs
- Lower O&M Expense
  
- Debt Reduction Next Priority
- Favorability Exists In Years FY21 to FY23
- Risks to Long-term Financial Health Remain

# Maintaining Low Rates

Wholesale Rate (¢/kWh)

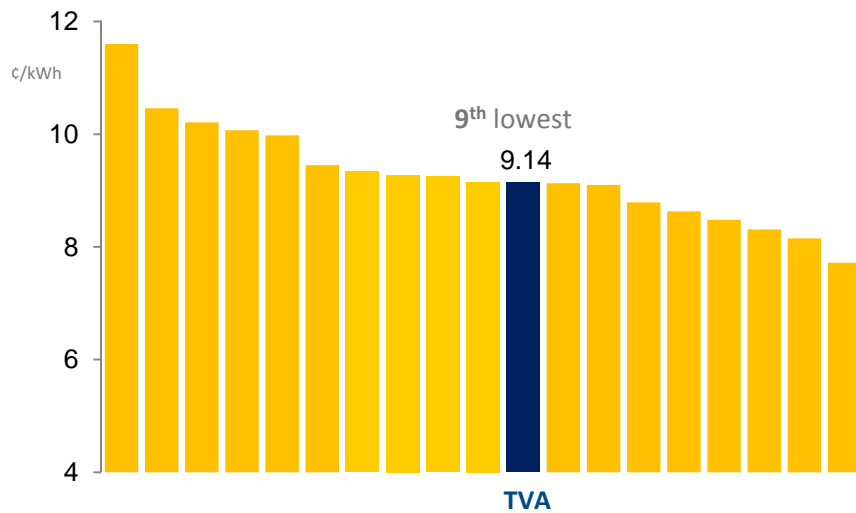


# Asset Investments Improving Fuel Costs



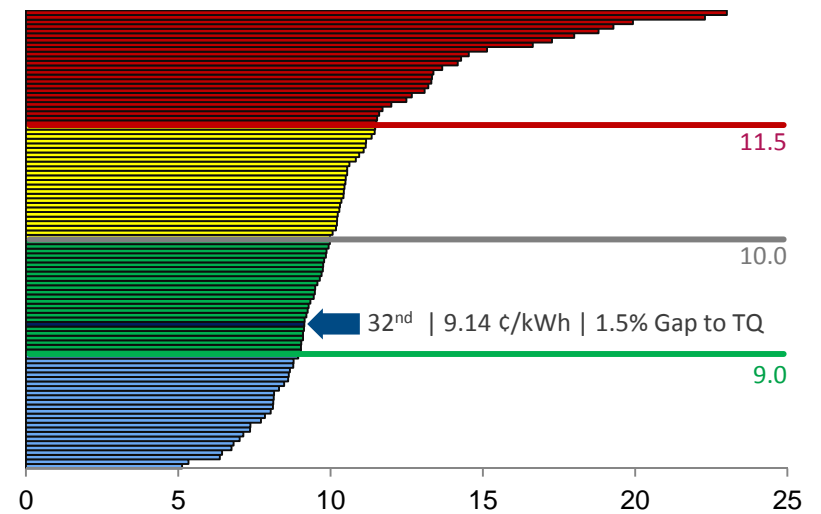
# Retail Rate Competitiveness

Compared to Regional Peers - May 2017



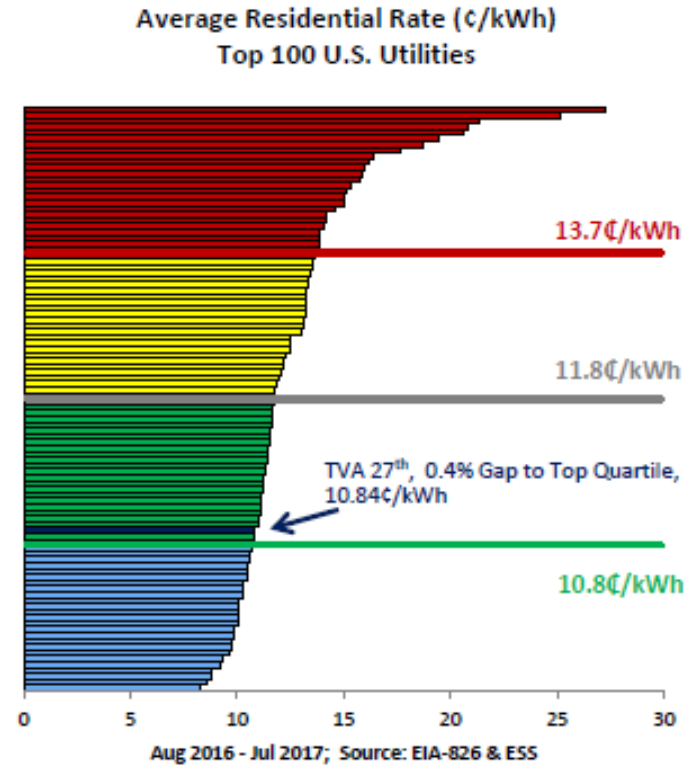
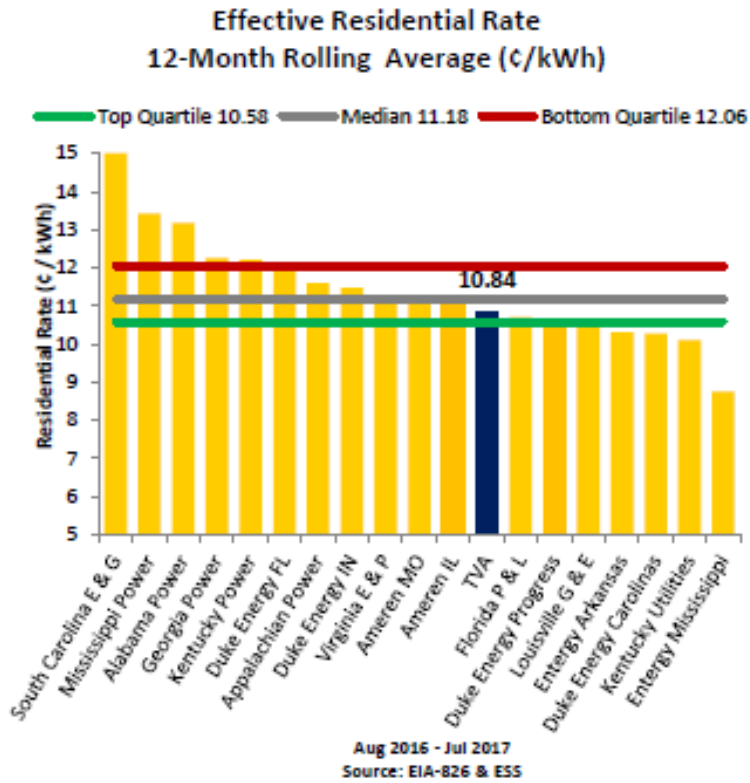
April 2013 – 12th lowest

Among Top 100 U.S. Utilities - May 2017



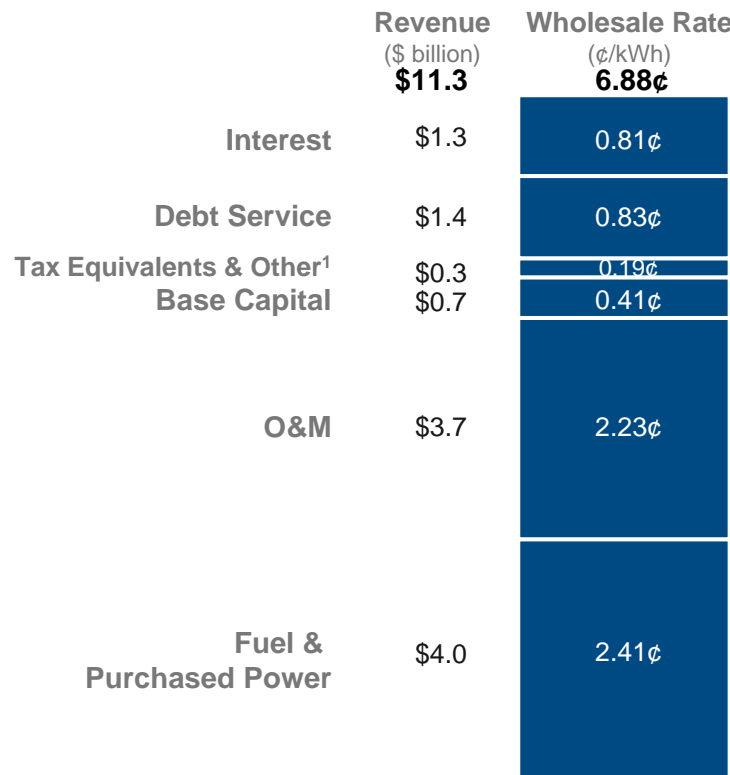
April 2013 – 37th lowest – 8% Gap to Top Quartile

# Residential Rate Competitiveness

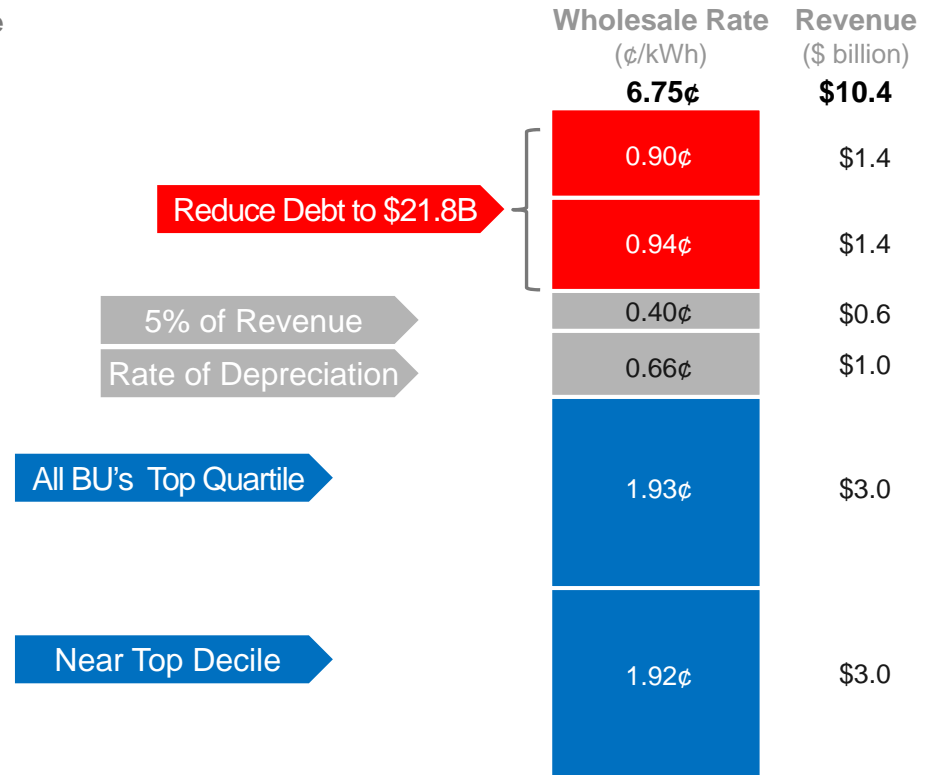


# Debt Reduction Next Priority

## FY 13 Budget Revenue Requirement



## FY 18 Budget Revenue Requirement



Reduce Debt to \$21.8B

5% of Revenue

Rate of Depreciation

All BU's Top Quartile

Near Top Decile

<sup>1</sup>Tax Equivalents & Other for FY13 excludes adjustment for pension expense







## Risks to the Plan Remain: \$Billion+

Unfunded Pension Liability

Loss of Load and/or Customers

Aging Infrastructure

Large Asset Event

Industry Issue

Asymmetric Financial Risk

Litigation

New Regulation/Compliance



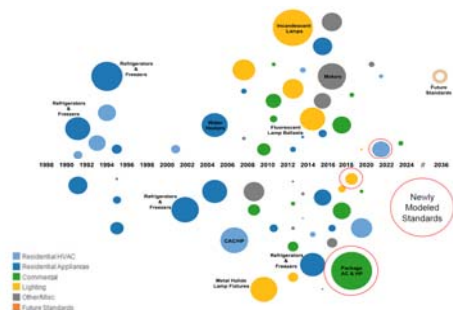
# The Changing Utility Marketplace The Future is Here

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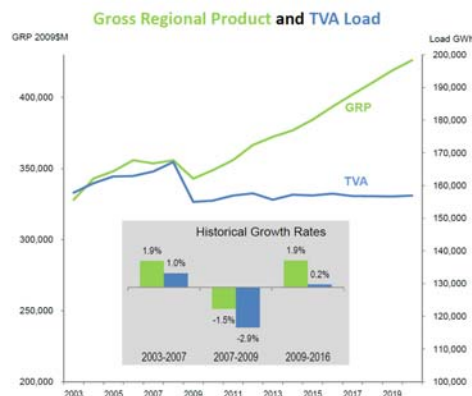
Joe Hoagland, Vice President Enterprise Relations and Innovation

# Consumer behaviors and preferences are changing

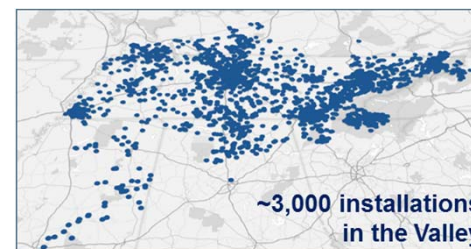
Energy efficiency penetration continues



Load is declining despite economic recovery



Renewables are becoming more attractive



**New installed capacity from renewable sources surpassed natural gas, nuclear power, coal and oil combined in 2016**

# Companies are committing to renewables



- Committed to 100% renewable electricity
- 87 companies to date



- Publicly stated renewable energy goals, but not RE100 commitment



- Committed to accelerating procurement of wind and utility-scale solar energy
- 160+ members

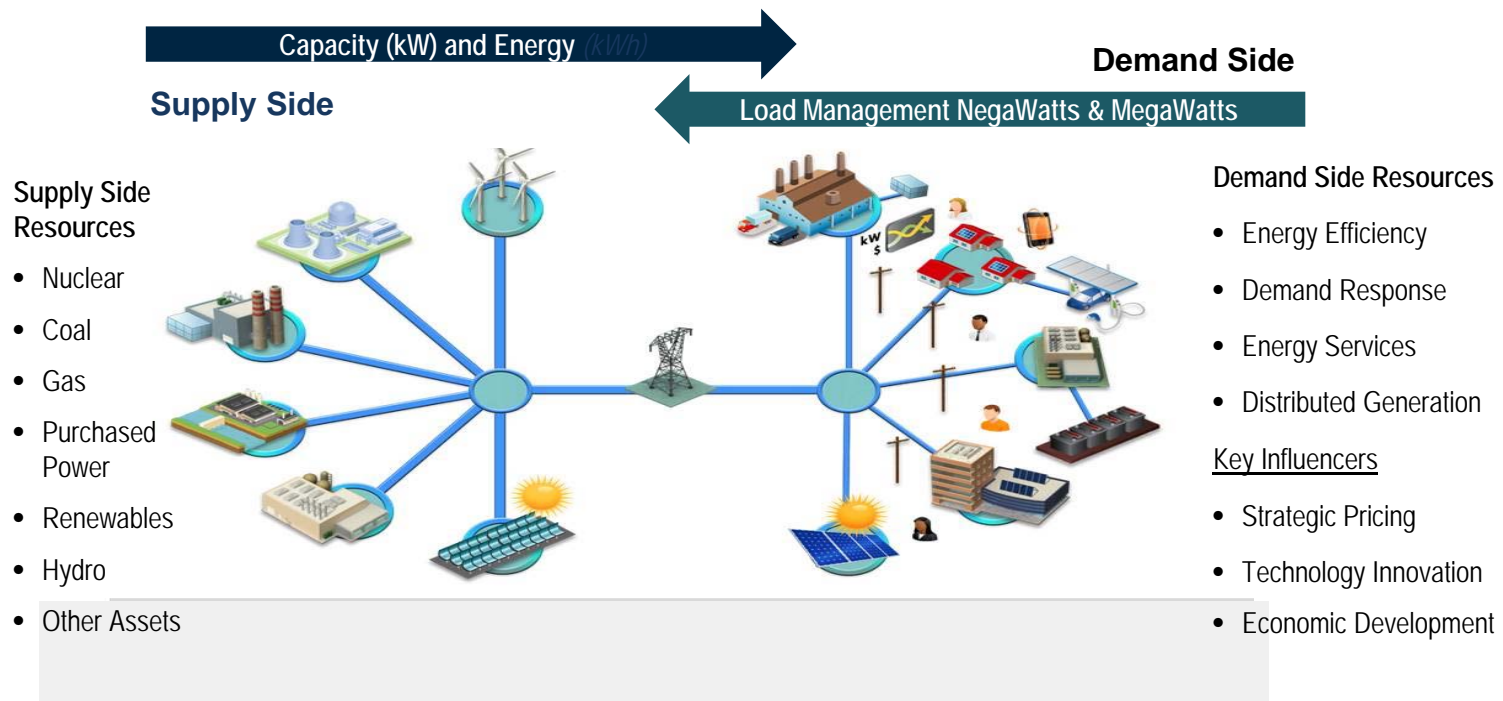


- Goal of growing corporate demand for renewables
- 58 signatures to date



**“We intend to achieve this goal, with or without you.” – RE 100 member**

# Distributed Energy Resources (DER) introduces fundamental change





# TVA Rates – Rates 101

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Michael Hynes  
Director, Rate Design and Administration

# TVA Products

## TVA Sells Two Products:



### Capacity

- To meet instantaneous demand across the valley
- Costs are largely **fixed** in nature – our assets



### Energy

- To meet hourly energy requirements every hour of the day
- Costs are primarily fuel, purchase power, and are **variable** in nature

# Energy, Environment & Economic Development



We deliver power at the lowest feasible cost, and we are working to make power rates better for all our customers while keeping TVA electricity safe and reliable.



TVA's mission of service includes being stewards of the region's natural resources and its public lands and waters.



TVA's reliable, low-cost electricity helps the region recruit industry and keeps power bills lower for the region's homes, businesses and industry.



# TVA & Rate Related Responsibilities

*Wholesale and  
retail rate  
authority  
established within  
the Power  
Contract*

1

LPC Standards Service – 154 Local Power Companies (residential, small commercial and industrial)

2

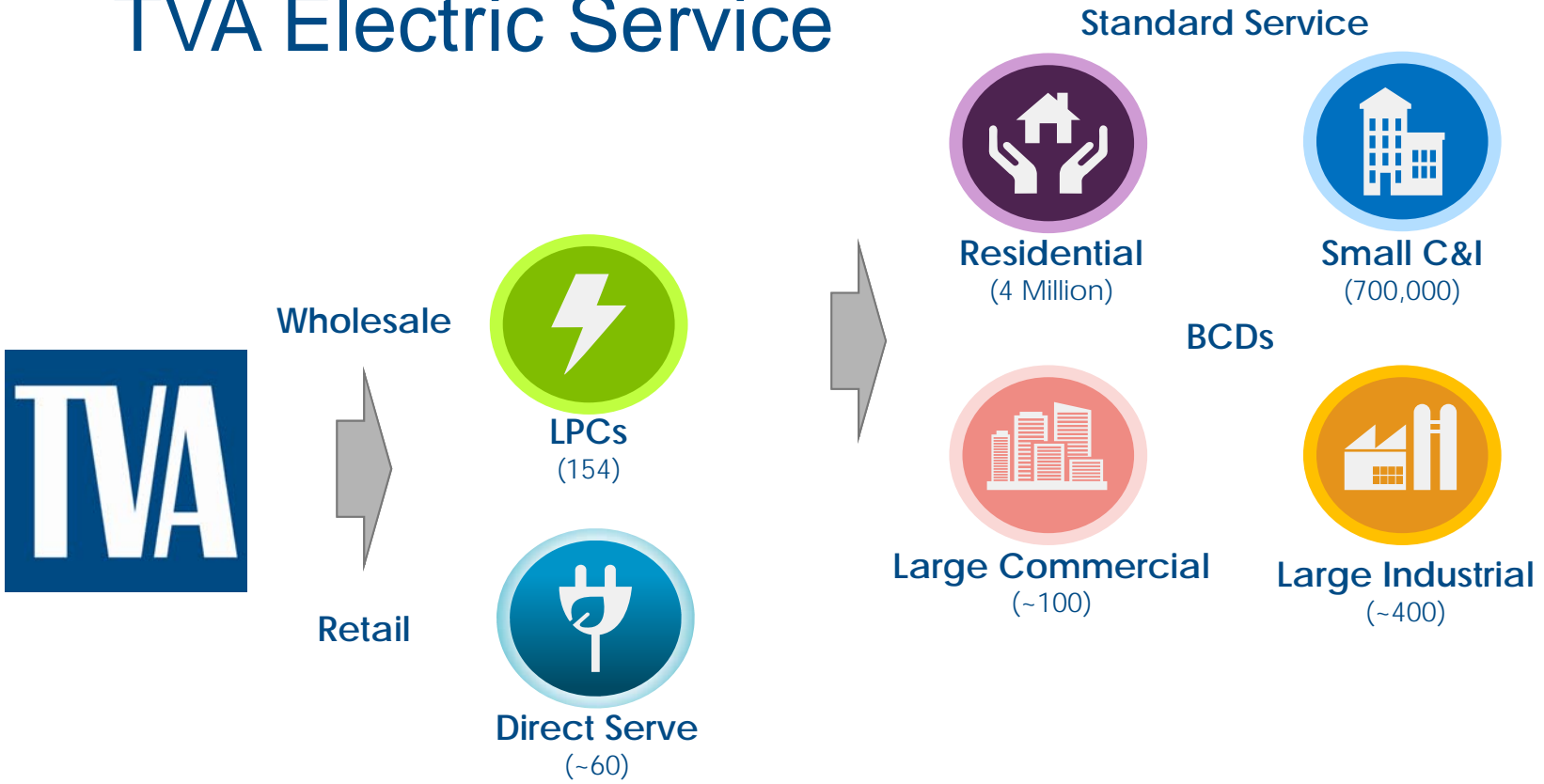
Directly Served Customers - ~60 direct serve customers (large manufacturing, federal and commercial)

3

Retail Rate Regulator – according to TVA Board approved process

- Retail rate approver for 150 LPCs
- Non-discriminatory oversight for 4 LPCs

# TVA Electric Service



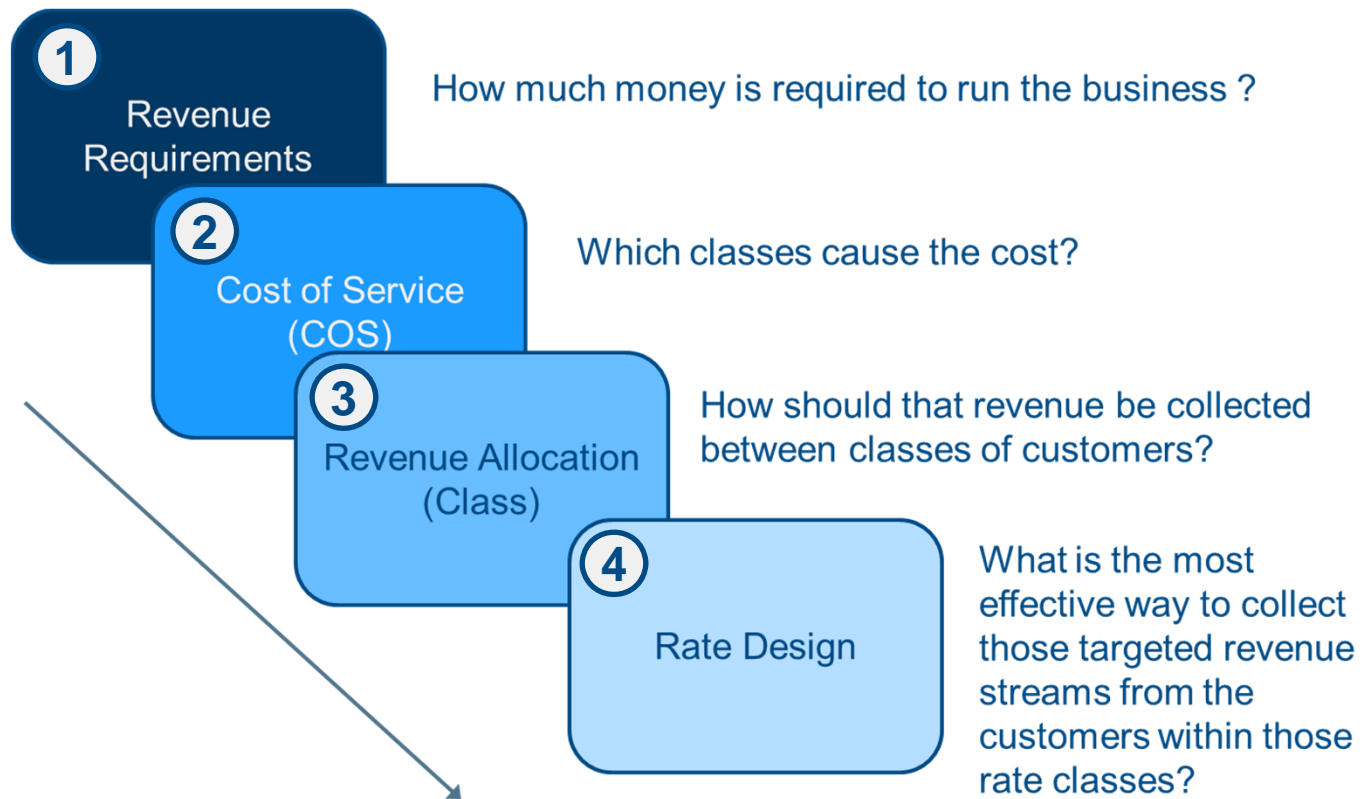
Interval data for Large Commercial & Industrial meter points are subtracted from interval meter reads at the wholesale LPC meter





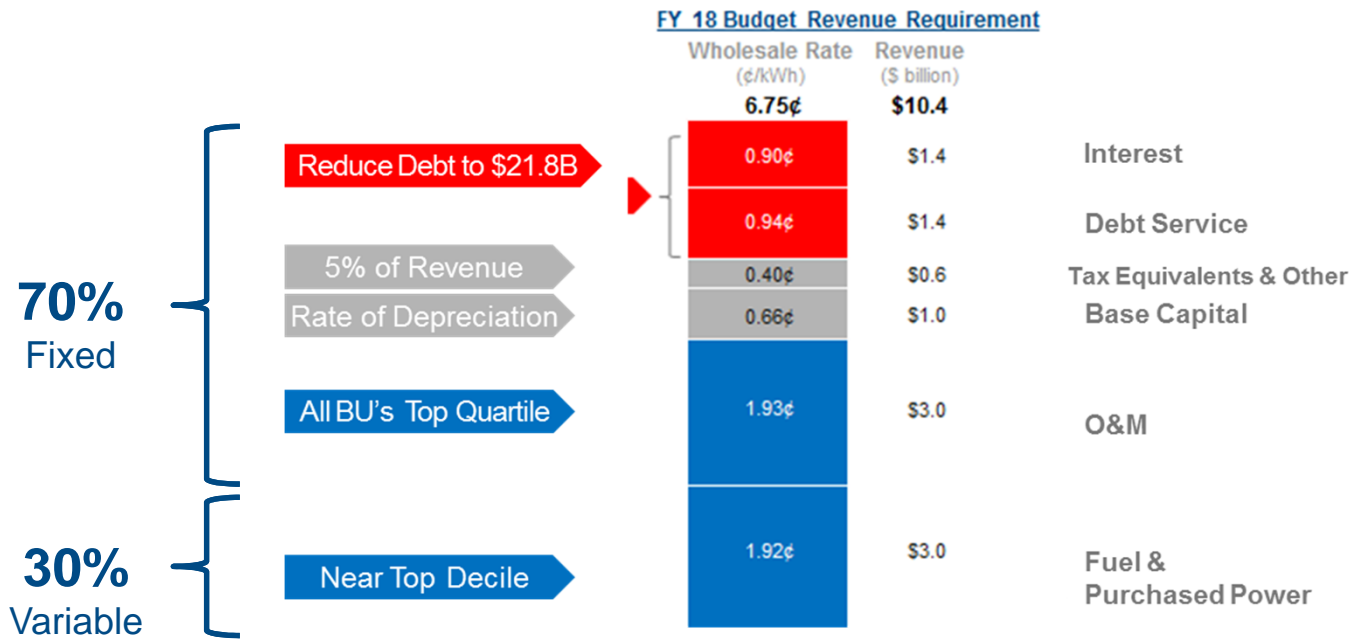
# The Rate Setting Process

# Rates – How Do They Work?



# Revenue Requirements

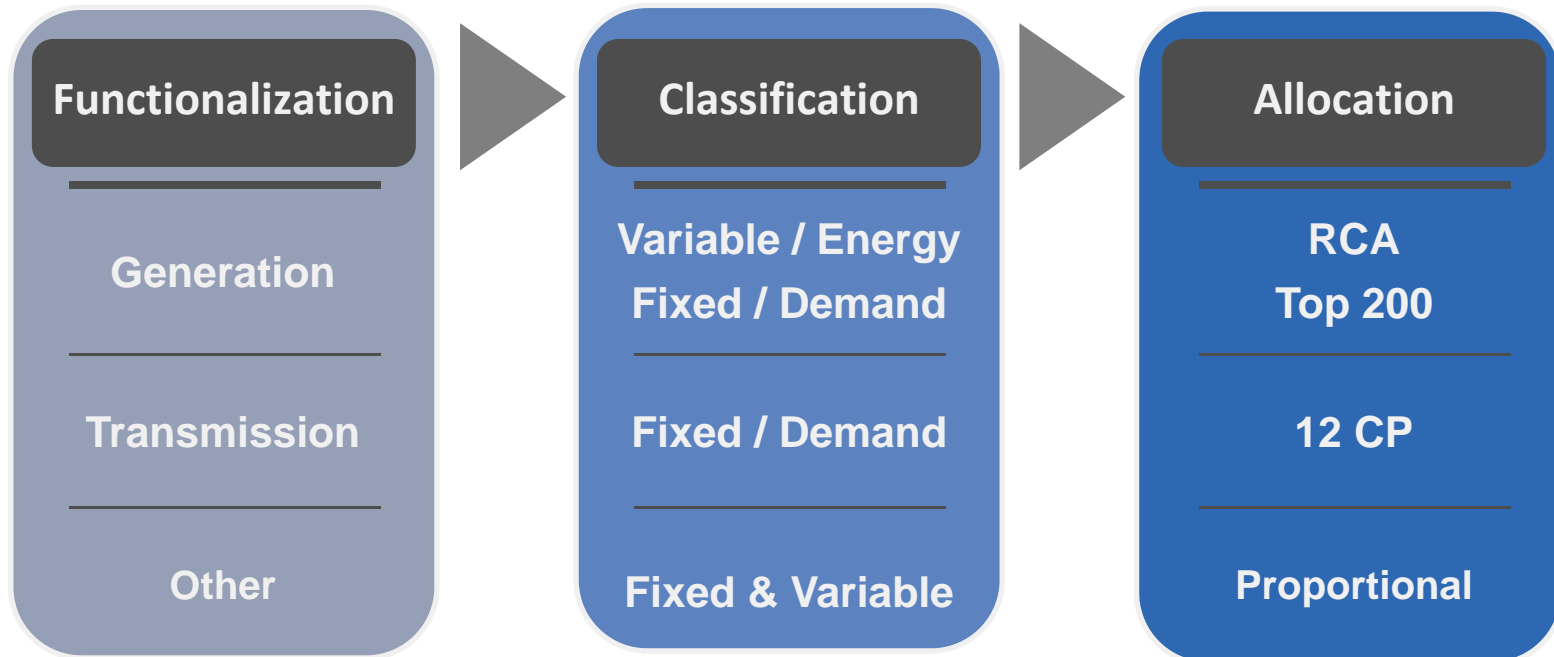
*How much money is required to run the business?*



TVA has significant costs before a single kWh is sold

# Purpose – Determine Cost Causation

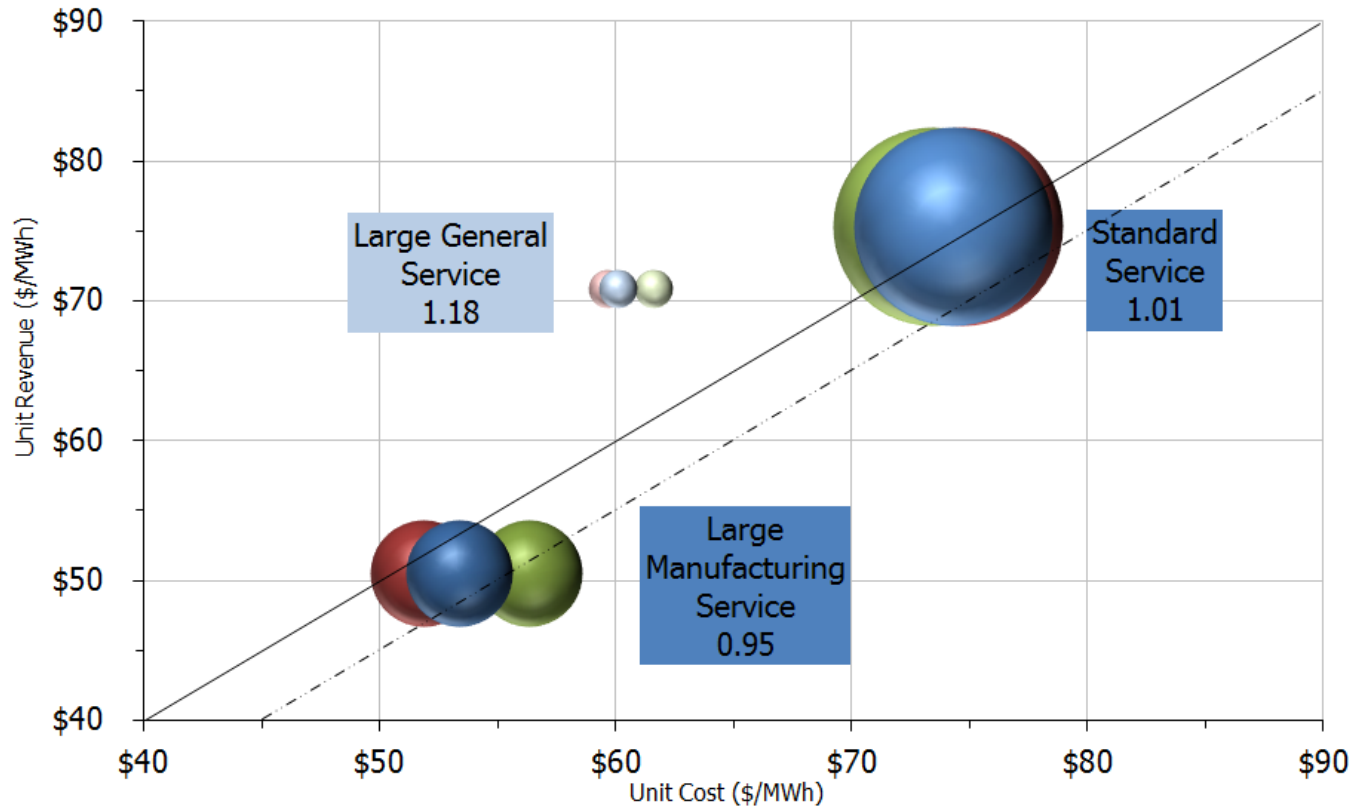
Cost of Service functionalizes, classifies, and allocates costs based on what the costs were incurred for, what caused the costs to be incurred, and who caused the costs to be incurred.



# Multiperspective COS – FY 2016

2  
Cost of Service

Revenue to Cost Comparison - Fiscal Year 2016



## Perspectives

- TVPPA
- TVA
- TVIC



# Revenue Allocation

1. Revenue Allocation
  - The process of developing targeted revenues to be collected by each rate class through rate design
  - Ideally, targeted revenues are consistent with the results of a Cost of Service study
  
2. Revenue Allocation can occur in one of two fashions:
  - Rate Adjustment
  - Rate Change

Revenue allocation is typically prepared to correct revenue to cost relationships



# Rate Adjustment

TVA can **adjust** wholesale rates if the TVA Board approves this action, and the wholesale power contract has specific provisions about how to enact this rate adjustment.

- An **adjustment** is an “across the board” adjustment in how much money the rates are charging/collecting

# Rate Change

TVA can **change** wholesale rates upon TVA Board action, and subject to different contractual requirements than a rate adjustment.

- A rate **change** is when there is a fundamental change to how the rates are structured
- TVA must endeavor to reach agreement with 154 LPC's about the proposed rate structure change for 180 days before a rate change is enacted.

# Rate Design Guiding Principles

4  
Rate Design



Rates must cover costs



Rates track Cost of Service



Rates must send Pricing Signals



Rates must balance precision with simplicity



Rates must be stable



Rates must be competitive & affordable

## GUIDING PRINCIPLES

“The guiding principles developed for the 2011 rate change (amended to include a principle dealing with rate competitiveness) continue to inform the 2015 rate change”

*These guiding principles are true at wholesale & retail*

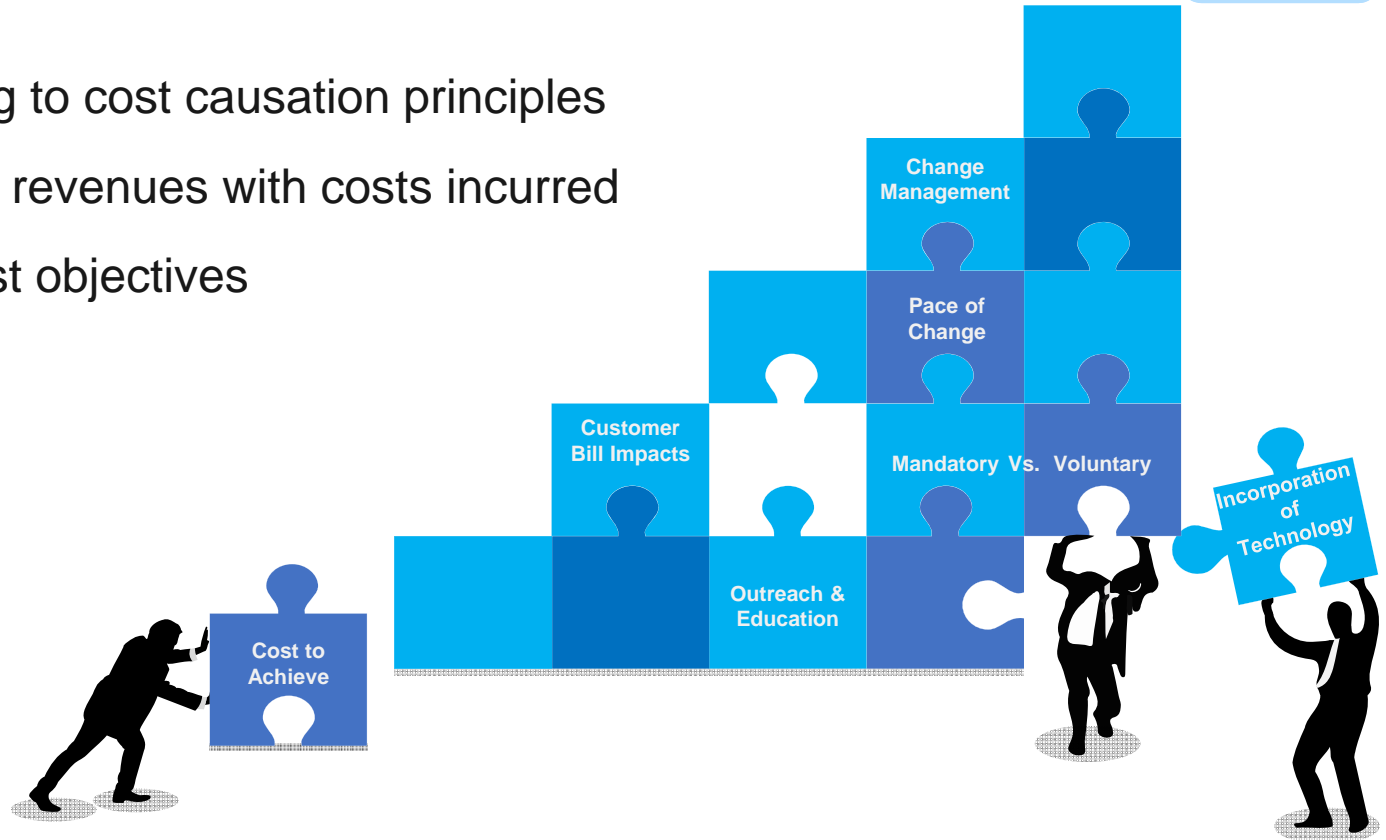
Cost of Service Fiscal Year 2013

A Summary of Wholesale Cost of Service Methodologies and Results

October 31, 2014

# Rate Design

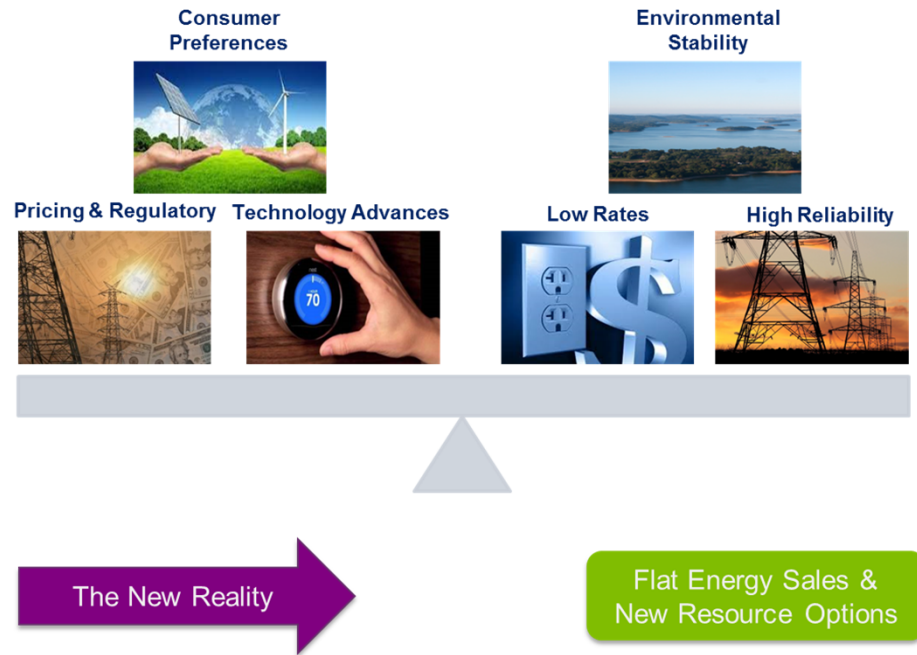
- According to cost causation principles
- Matching revenues with costs incurred
- Least cost objectives





# The Changing Marketplace

# The Market is Changing



The utility industry is entering a world of enhanced competition and choice, which presents opportunities for utilities that embrace and adapt to the change.

# Cross-Subsidization - Example



ELECTRIC

**12k = 0**  
miles/yr.                  Gallons of gas



GAS

**12k / 20 = 600**  
miles/yr.                  approx. MPG                  Gallons of gas

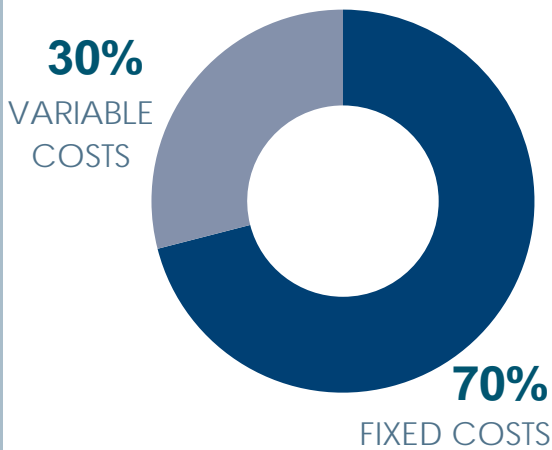
California Gas Tax = **39.5 (¢/g)**

CONTRIBUTION TO ROAD FUND	
ELECTRIC	$0 \times 39.5(\text{¢/g}) = \$0.00/\text{yr.}$
GAS	$600 \times 39.5(\text{¢/g}) = \$237.00/\text{yr.}$

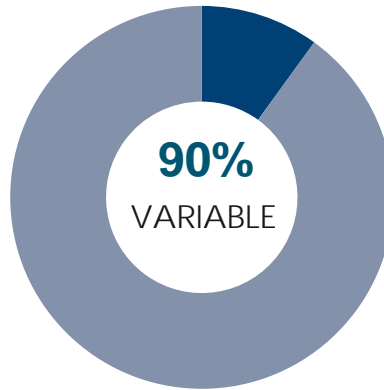
States exploring other revenue mechanisms to ensure fairness

# Improving Pricing

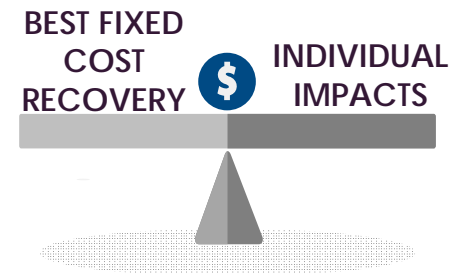
Cost to Serve a Residential Customer



What a Residential Customer Pays



Future: Pricing That Better Reflects Costs



Managed, incremental improvements over time

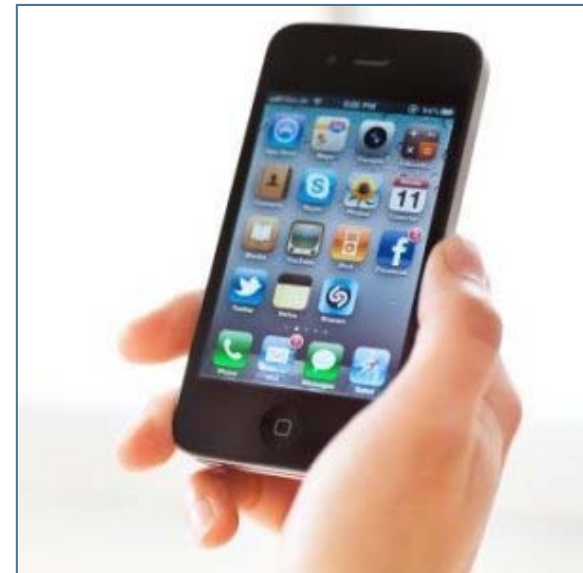


# Bill Comparison: Electricity vs. Cell Phones

## Electric Bill

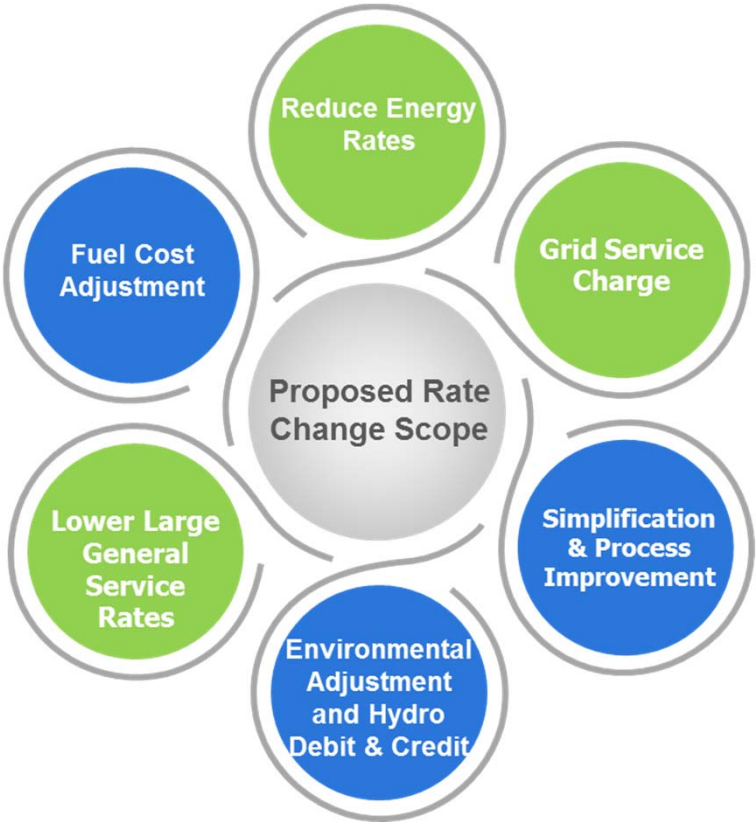


## Cell Phone Bill



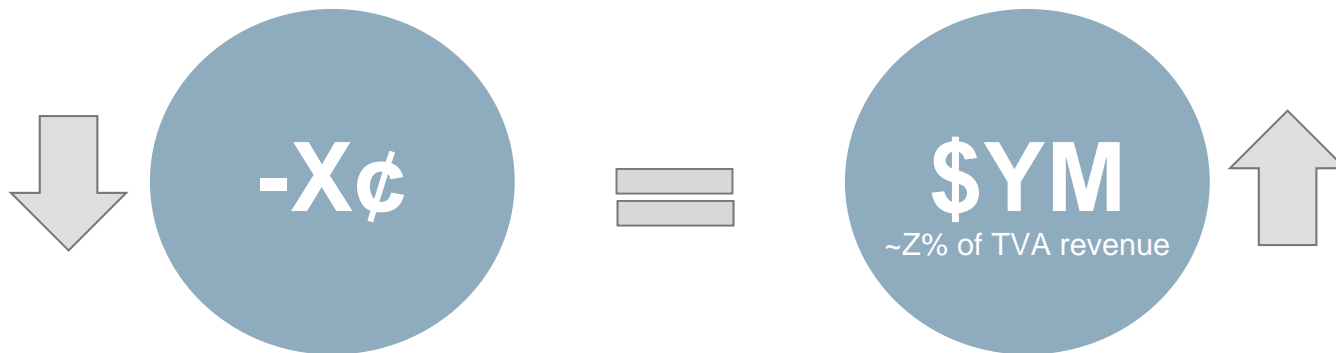
While an electric bill is driven by customer usage, cell phone bill charges are fixed

# Standard Service Rate Change Discussions



# Standard Service Rate Change Proposal

## Proposed Wholesale Change



**Reduce Energy Charge**

**Grid Service Charge**

Reduce energy charge and introduce a grid service charge to maintain revenue neutrality

# The Value of the Grid

***TVA's grid  
strengthens the  
communities we  
serve***

99.999%

Highly reliable and resilient, delivering energy with 99.999% reliability.



Fuels modern life, from lighting to air conditioning to computers.



Keeps the Valley's economy working, allowing factories, office buildings and small businesses to thrive, which means a higher standard of living.



Enables customer renewable solutions with reliable on-demand access to grid services.

# More Accurate and Modern Pricing



Keeps rates low



Ensures fairness in rates



Brings more bill stability



Allows companies and consumers to make more informed investment decisions

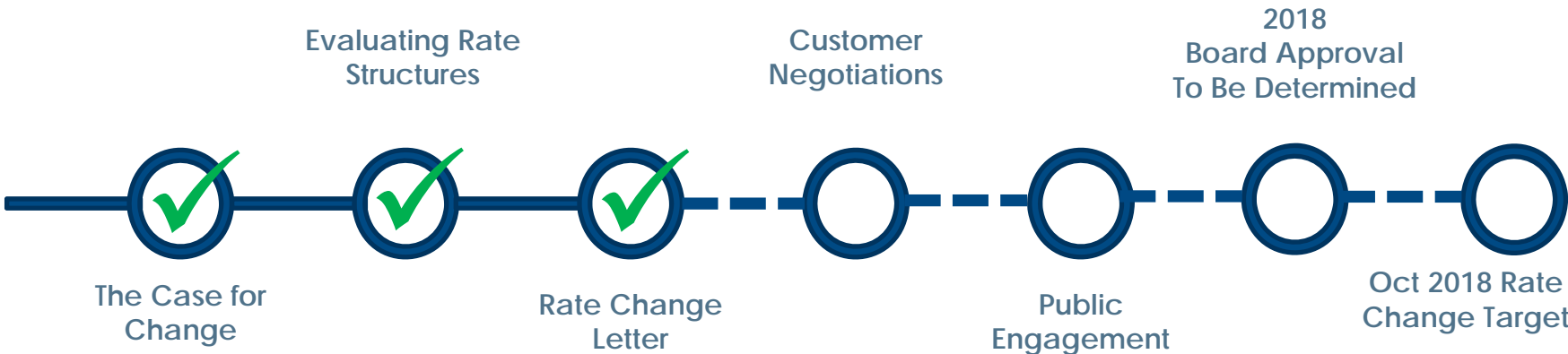


Better reflects the value of the grid



Stimulates economic growth

# Path Forward





# EnergyRight® Solutions Community Weatherization Assistance

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Frank Rapley, Senior Manager,  
EnergyRight® Solutions for the Home

# EnergyRight<sup>®</sup> Solutions

## EnergyRight<sup>®</sup> Solutions Objective

Partner with customers to provide products and services that best meet the needs of the Valley through:



### Programs

Customer centric programs and service offerings to help customers holistically manage their energy usage



### Pricing

An economic and sustainable portfolio that optimizes the system for the Valley



### Partnerships

Position TVA and LPCs as Trusted Energy Advisors



# TVA Energy Efficiency Information Exchange

TVA Energy Efficiency Information Exchange (EEIX) is a stakeholder group focusing on Low Income energy efficiency assistance

- Grew out of last TVA Integrated Resource Plan
- Diverse stakeholder group composed of advocates, academia, local power companies (LPCs), state energy offices, city government, and the Tennessee Valley Public Power Association
- Active throughout 2016 and 2017
- Objective: Study low income energy equity issues and launch a sustainable outreach program Valley-wide in 2018
- First Initiative: Support Tennessee Weatherization Assistance Program (WAP) with new technology platform and other assistance
- Next Steps: Regional focus on LPC and community programs for low income energy issues (regional groups)

# Community Weatherization Assistance

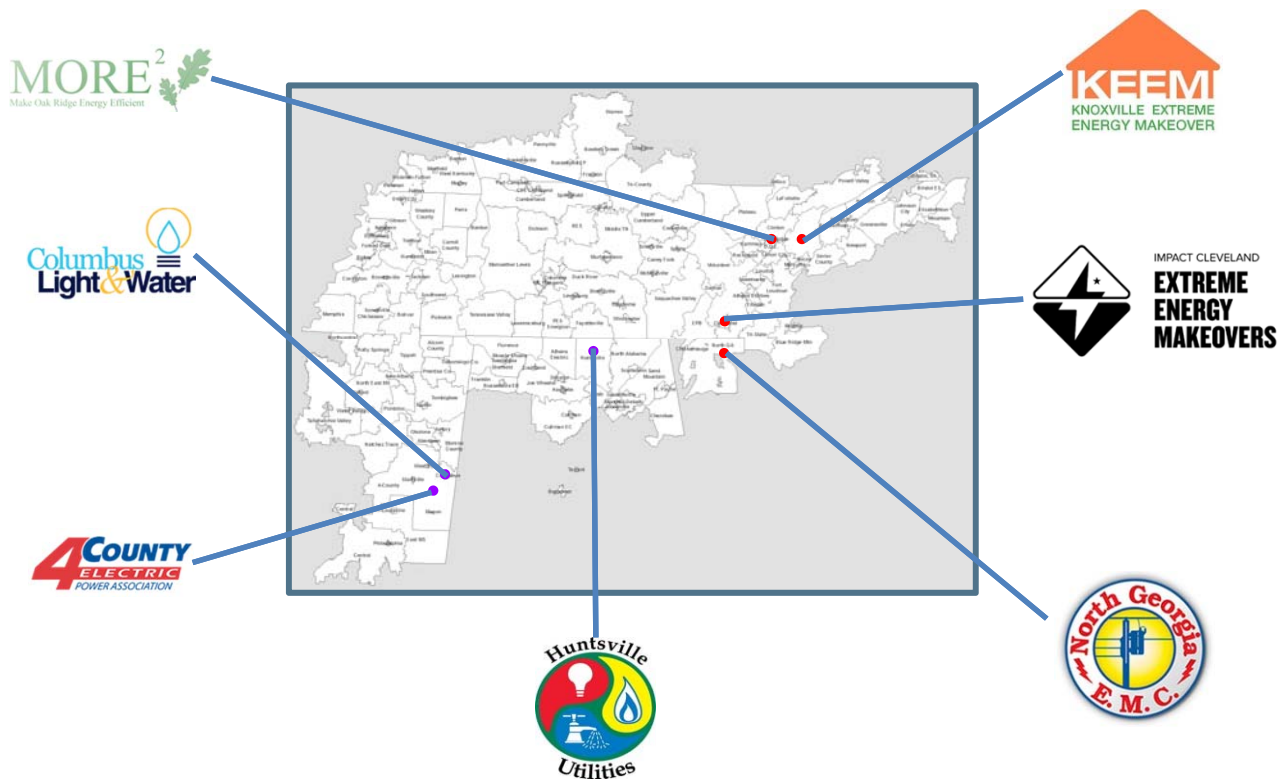
- Grew out of the work of the EEIX and the success of the EPA Extreme Energy Makeover projects
- Goal is to create opportunities for partnership with LPCs, states, human resource agencies, and local non-profits to help bring more solutions for low income customers and promote energy equity in the Valley



“My favorite part of this whole process is helping homeowners, being around other organizations that are all coming together for the good of the community.”

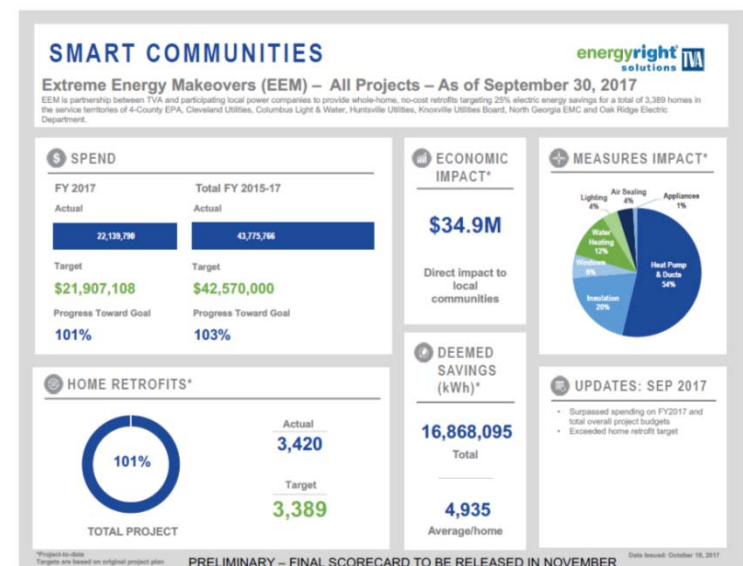
“It was an answered prayer when they walked through my door. I couldn’t believe something good would ever happen to me.”

# Extreme Energy Makeover Projects



# Extreme Energy Makeovers Results

- Total Homes Retrofitted **3,420**
- Total Annual Savings (kWh) **16,868,095**
- Avg. Savings/Home (kWh) **4,935**
- Total Spend: **\$42,570,000**
- Direct Economic Impact **\$34,900,000**



## Weatherization Assistance Program Support

Support State of Tennessee Weatherization Assistance Program with new technology platform and training, technical, and implementation assistance

- State needed additional capacity to spend all federal WAP and LIHEAP funds
- Needed more trained auditors, inspectors, and contractors
- No centralized IT system to provide real-time data to the state
- TVA built a system based on its eScore platform
- Streamlines WAP administrative and field processes
- Builds capacity to fully utilize multiple funding sources
- Pilots completed in Memphis and Chattanooga
- Statewide deployment scheduled for June 2018
- Creates capacity to leverage additional funding

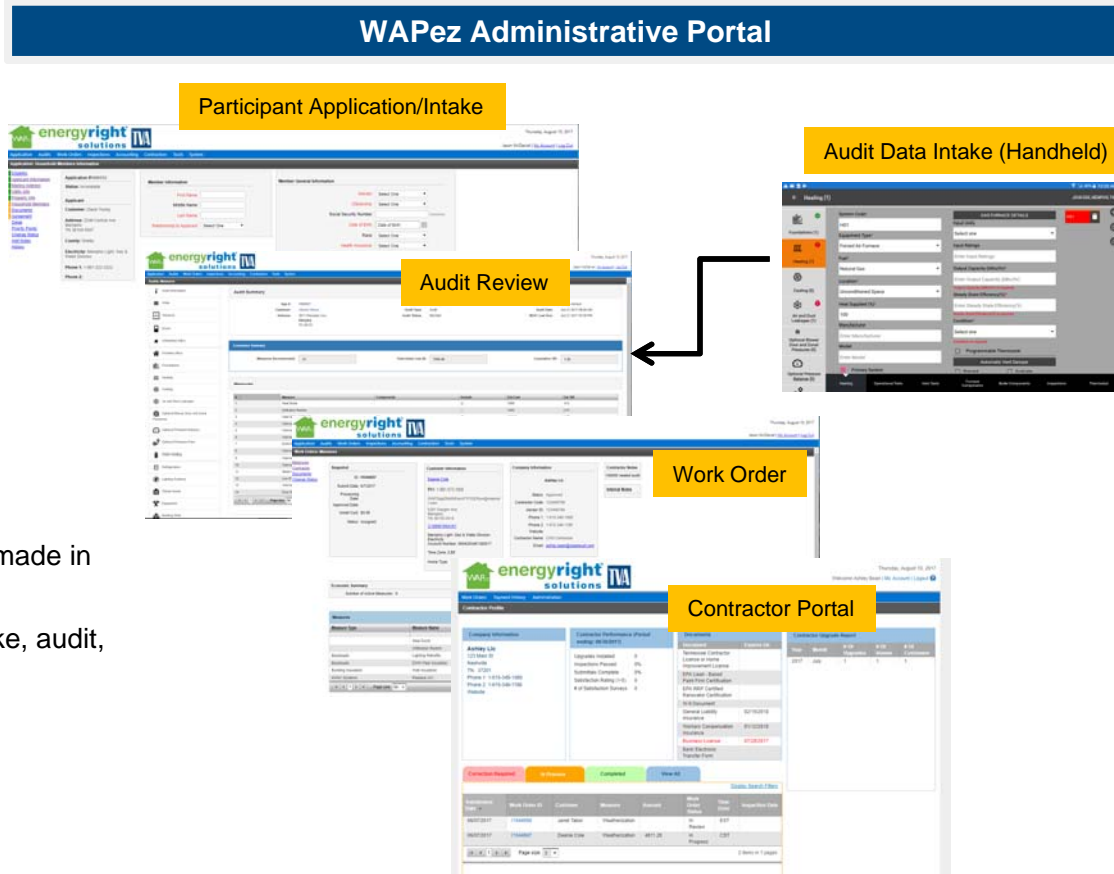


# WAPez Technical Platform

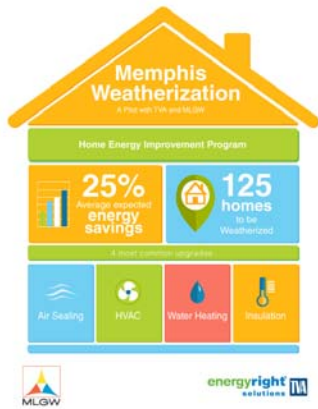
# WAPez

## WAPez Technical Platform

- Built on eScore Tech Model
- Comprehensive participant intake
- Streamlined data collection from field
- Real-time updates into central portal
- NEAT/MHEA efficiency calculations made in cloud as soon as audit is complete
- Eliminates duplicate databases (intake, audit, NEAT/MHEA, etc.)



# WAPez Test Pilot – Memphis TN (MLGW)



## TVA WAP PARTNERSHIP PILOT



### Memphis Home Energy Improvement Project (HEIP) – As of September 30, 2017

HEIP is a partnership between Memphis, Light, Gas & Water (MLGW), TVA, and CLEARresult to demonstrate implementation of a new technology platform that streamlines delivery of the Department of Energy's Weatherization Assistance Program standards, software, and requirements in the TVA service territory. HEIP objectives are to provide home retrofits to approximately 125 income-qualified households in the MLGW service territory and to offer energy education to participants and the general public.

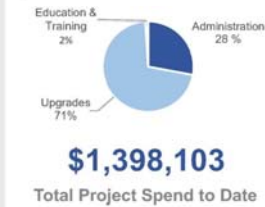
#### HOME RETROFITS\*



#### ECONOMIC IMPACT\*



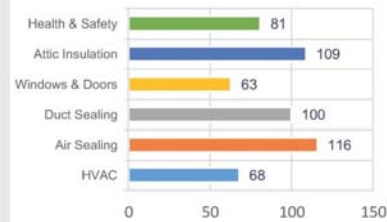
#### Project Spend



#### EDUCATION OUTCOMES



#### MEASURES\*



#### HIGHLIGHTS

- 163 total applications received
- 38 applicants disqualified due to income or health & safety issues

\*Project-to-date

Date Issued: September 29, 2017



# EPB Chattanooga WAPez Test Pilots



75 Homes

## Background

- EPB successfully managed a low income project similar to Extreme Energy Makeover (EEM)
- Demonstrated growing commitment to serving low income communities
- EPB partnered with local WAP agency implementer in Hamilton County to serve homes on its waiting list (Southeast Tennessee Human Resource Agency)
- EPB performed audits and managed contractors using WAPez tool

## HIGHLIGHTS

- Quickly ramped up and exceeded original number of homes
- Established relationship with SETHRA
- Helped serve clients on SETHRA WAP waiting list (resulting in additional recruitment)
- SETHRA received award of excellence from TN Association of Human Resource Agencies based on EPB/SETHRA partnership

Project	LPC	Homes Completed	Target Homes	% Complete	Budget
Home Energy Upgrades (HEU)	EPB	75	55	136%	\$0.54M



## Other Low Income Initiatives



**CAC** Knoxville - Knox County  
Community Action Committee  
*Helping People. Changing Lives.*



### Knoxville CAC

- Testing WAPez using data collected through standard WAP program and KUB Round It Up program participants
- TVA funded a training facility at Knox CAC to provide weatherization certification training within the Valley

### Energy Efficiency Workshops

- Energy efficiency workshops were very popular in EEM
- Low cost way to engage low income
- Positive influence on community
- ERS plans to expand energy efficiency workshop offerings in the future



# Energy Efficiency and Health Benefits



## Green & Healthy Homes Initiative®

- **Non-Profit with a Mission** to break the link between unhealthy housing and unhealthy families by creating and advocating for healthy, safe and energy efficient homes
- Raised \$250 million to support partners in 22 states
- Opportunity for partnerships in the Tennessee Valley
- **Pay for Success** grant to Le Bonheur Children's Hospital (Memphis) focuses on intervention benefitting low income, asthmatic children (through home-based interventions)

### KEEM Co-Benefit Study

Multi-Year study of Knoxville Extreme Energy Makeover participants

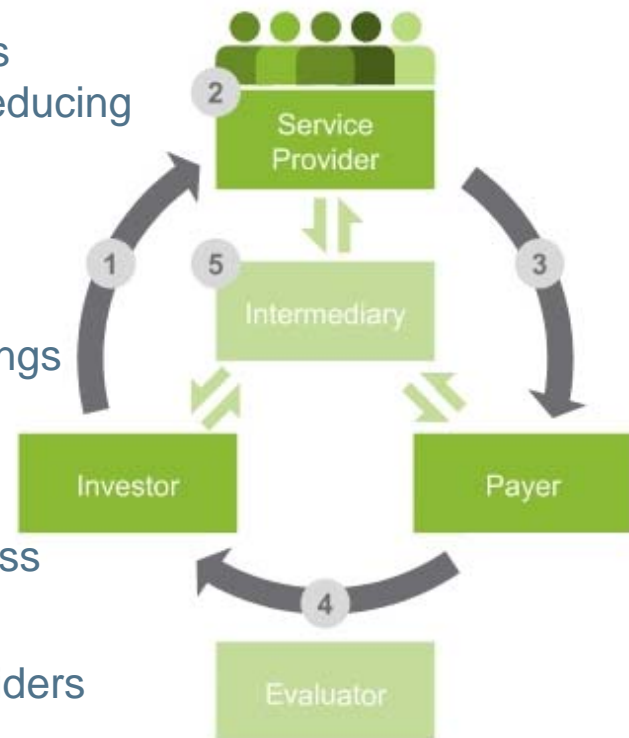
Feedback from participants on significantly improved health benefits (reduction of oxygen dependence, improved respiratory health, etc.)

Study conducted by Three3 through a grant by Robert Woods Johnson Foundation (*Three3 conducts research and educational programming to promote the integration of environmental, social, and economic sustainability*)

## Green & Healthy Homes Initiative (GHHI)

GHHI's Pay-For-Success business model attracts investment in low income households aimed at reducing their medical costs

- Service Providers perform upgrades and remediation in the home
- Payer retains a share of the medical cost savings and repays the Investor following Evaluation
- Technology pilot in Mississippi in FY18
- TVA is working with GHHI to develop a business case for a pilot in Tennessee
- TVA and LPCs could function as Service Providers









# RERC Discussion

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# Discussion Questions

Guiding principles TVA currently uses to design wholesale rates:

- Rates must cover costs
- Rates track cost of service
- Rates must send pricing signals
- Rates must balance precision with simplicity
- Rates must be stable
- Rates must be competitive and affordable

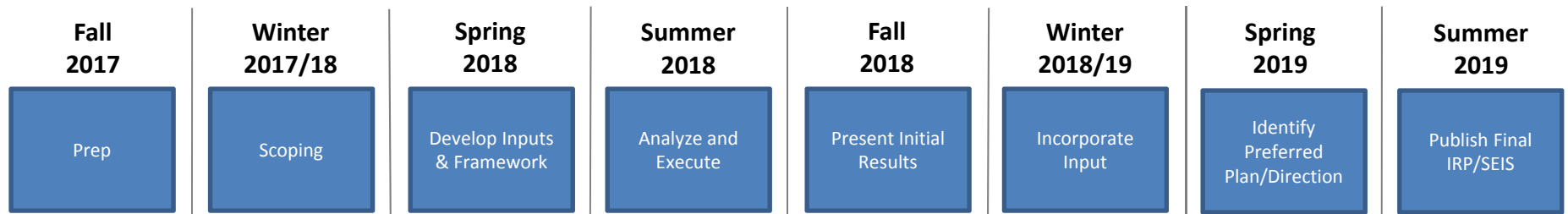
1. What other principles should TVA consider when designing wholesale rate changes?
2. What mechanisms are useful for TVA to engage Valley Stakeholders in the discussion of wholesale rate changes over time?



Adjourn for Lunch Break  
Meeting to reconvene at 1:15



# Expected 2019 IRP Timeline



# Public Listening Session

- **Public participation is appreciated**
- **This is a listening session; responses are typically not provided**







# RERC Discussion and Advice

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Wrap Up and Adjourn

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*Thank you and please travel safely!*

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## APPENDIX

# Balancing Rates and Debt

Favorability and Flexibility Beginning in FY21

