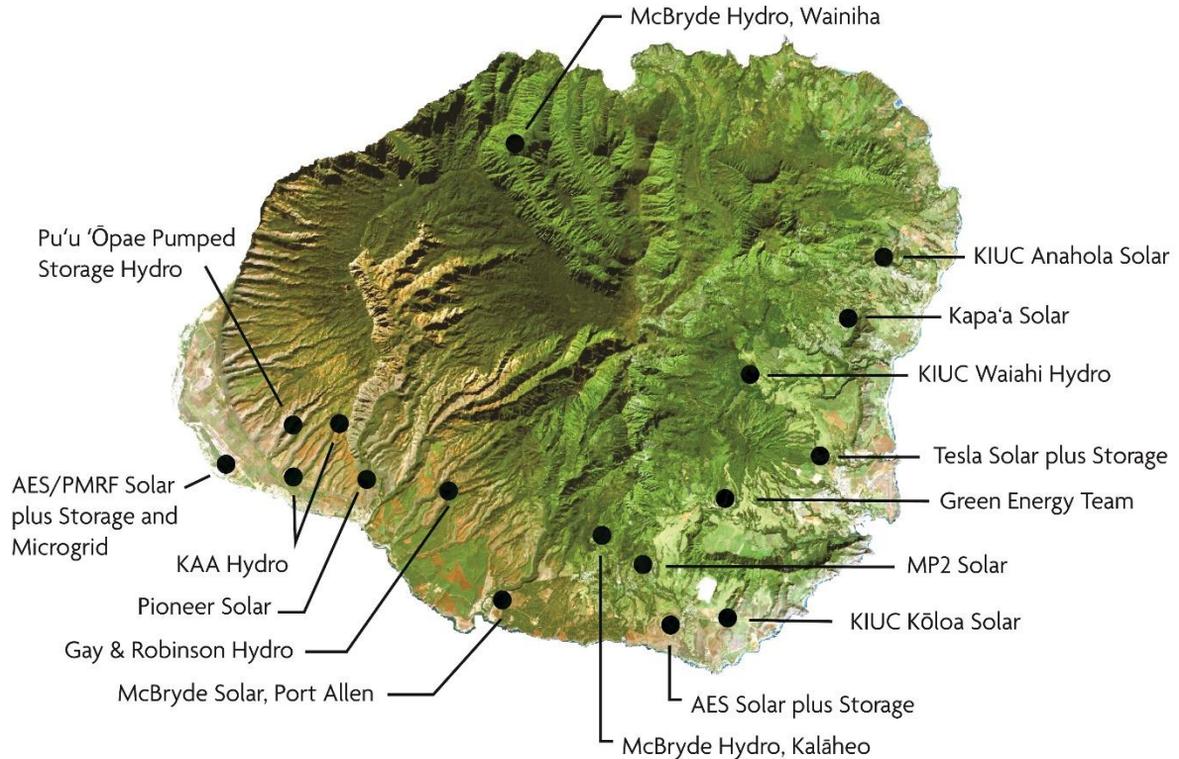




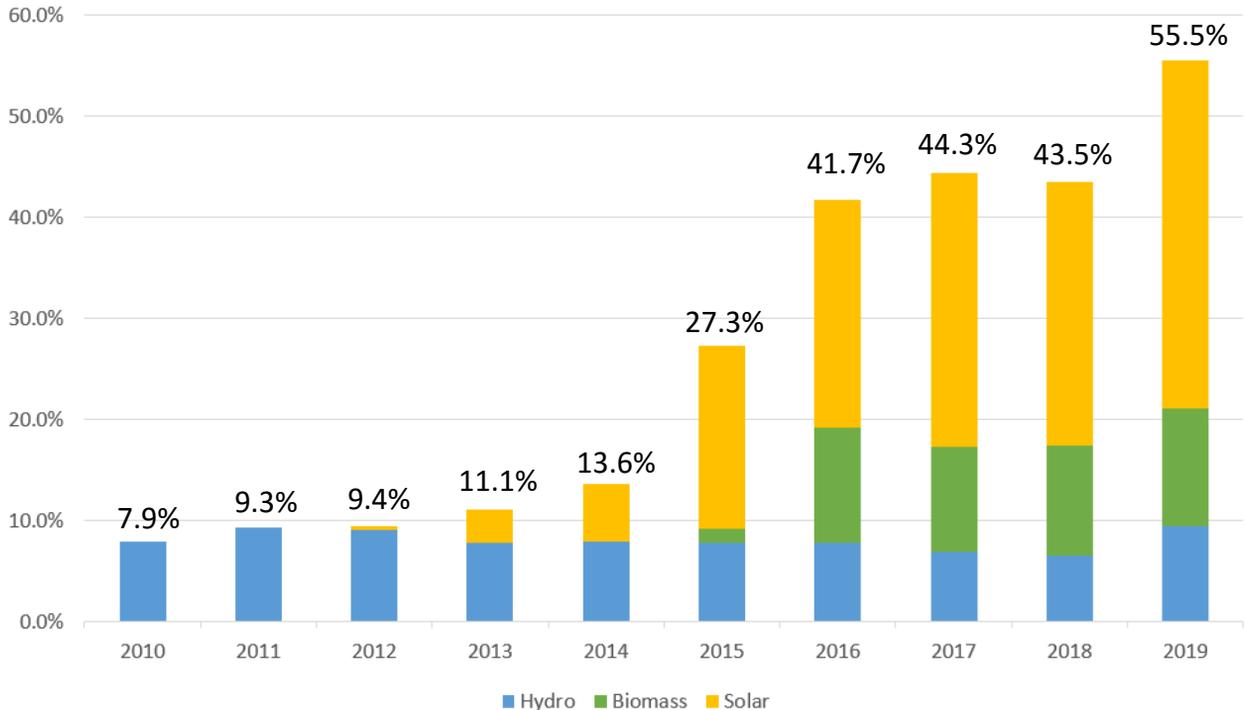
# KIUC Annual Meeting

July 31, 2019

# Renewable Energy on Kaua'i



# Renewable Energy on Kaua'i

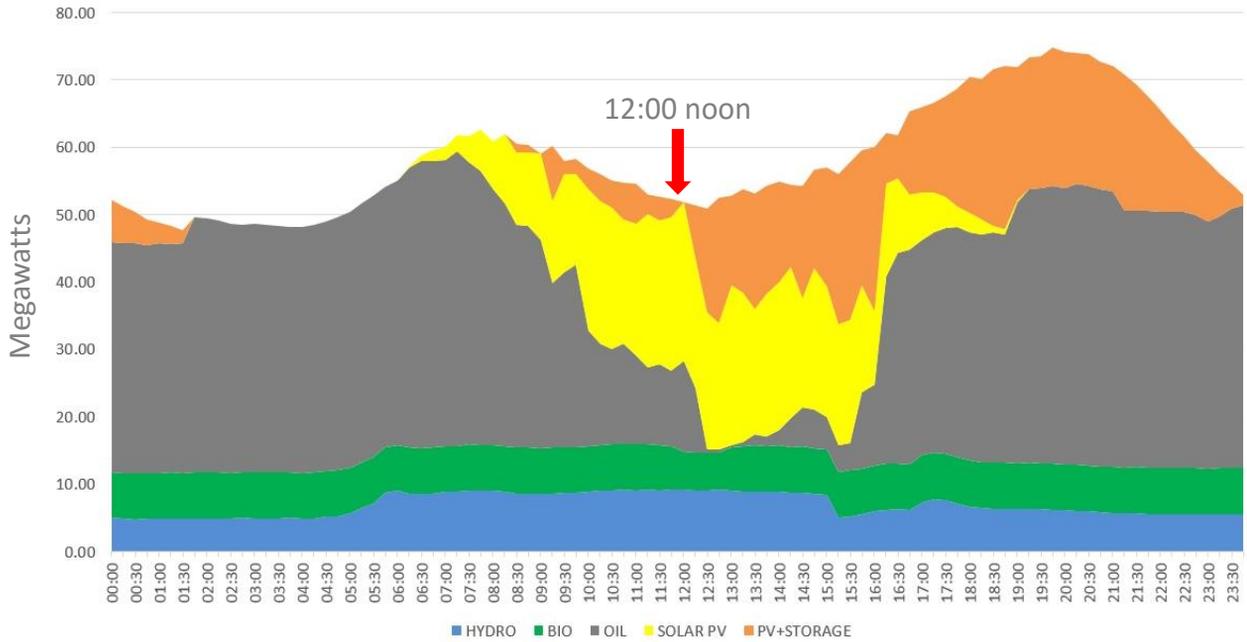


# AES Lāwa‘i 20 MW PV 100 MWh Storage



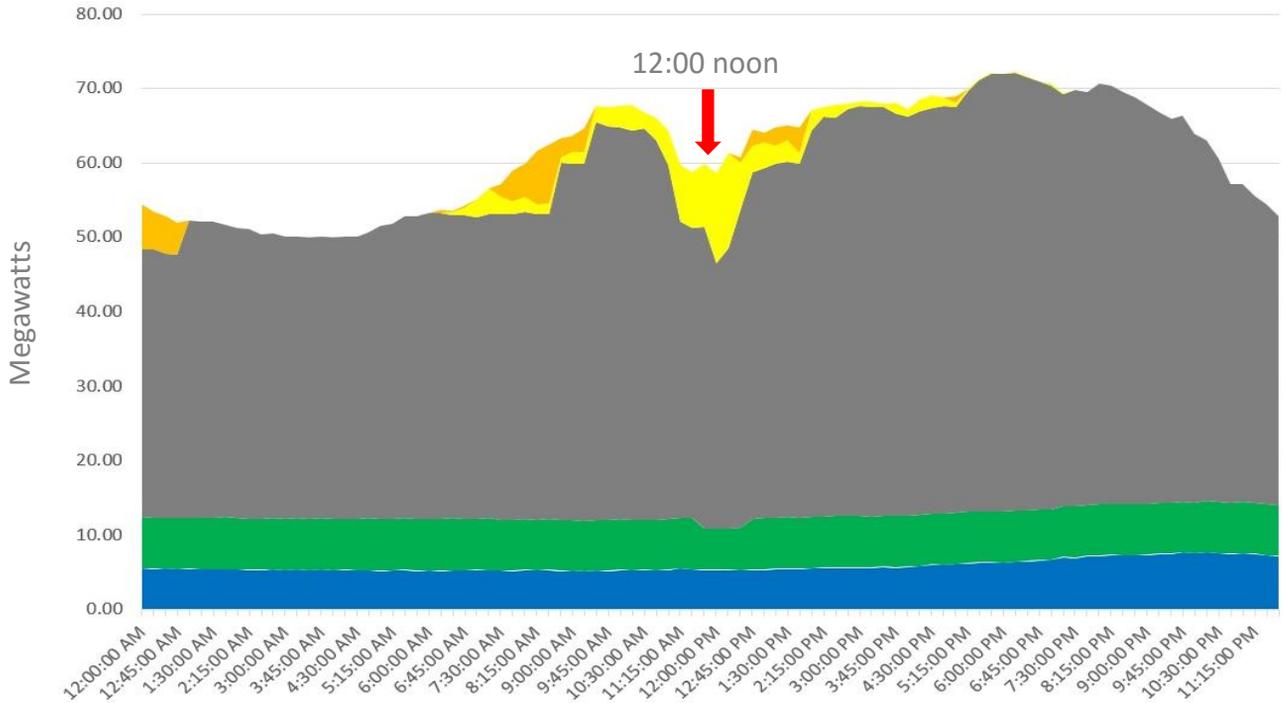
# Renewable Energy on Kaua'i

KIUC Daily Dispatch June 19, 2019



# Renewable Energy on Kaua'i

KIUC Daily Dispatch June 23, 2019



# Coming Soon..

- AES PMRF - 14 MW PV 70 MWh storage
  - Construction in progress
  - Expected completion mid-2020
  - Facility can be “islanded” to serve PMRF if needed



# Coming Soon..

- West Kauaʻi Energy Project – 25 MW
  - Pumped storage hydro
    - First in the world to use solar
  - Allows DHHL to open land for new agricultural homesteads
  - Provides irrigation water for Agribusiness Development Corporation and Kekaha Ag Association tenants

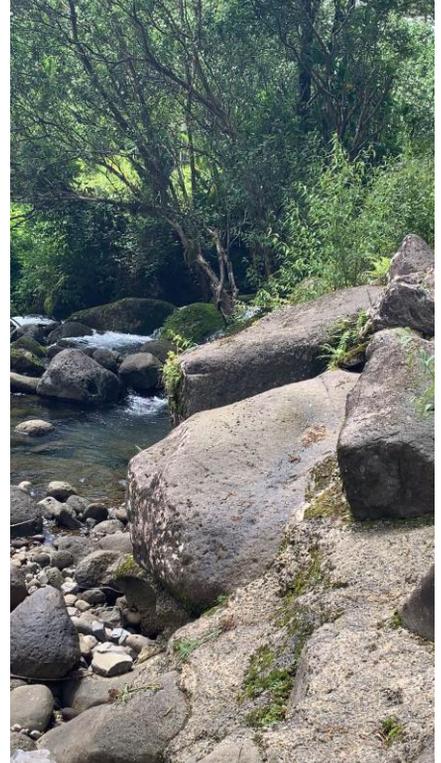
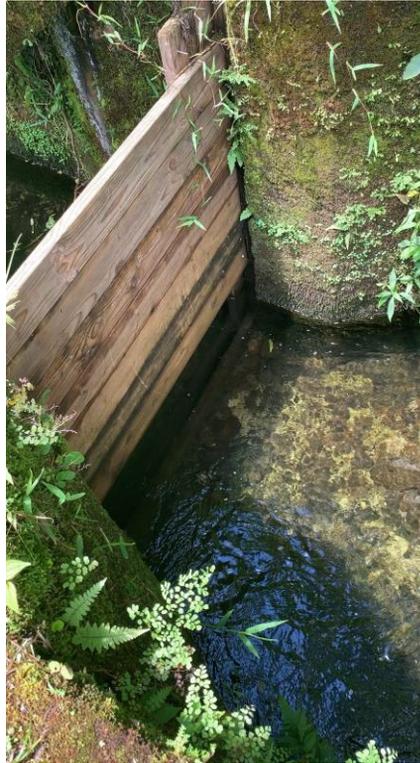
*Will bring KIUC to 82 percent renewable*

# Waiahi Hydro Plants

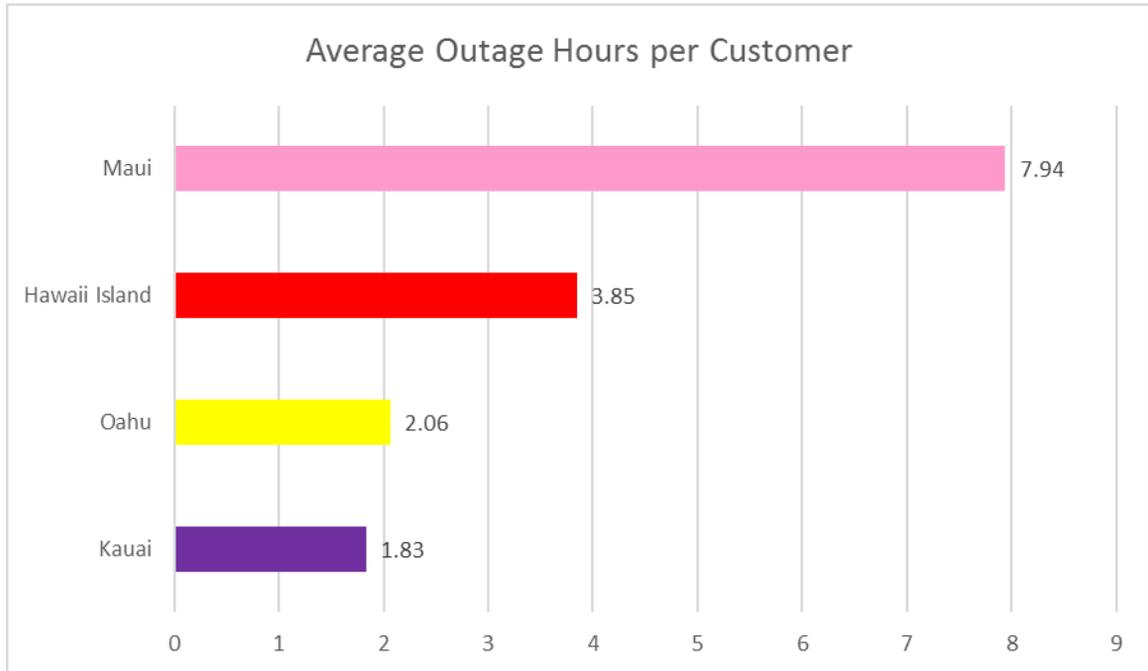
- KIUC uses the water to generate renewable electricity for the benefit of its member-owners
  - *Produces up to 1.5 megawatts*
  - *Lowest cost generation source*
  - *Contributes to State mandate: 100 percent renewable by 2045*
  - *Displaces 675,000 gallons of diesel annually*
  - *Saves \$1.75 million annually versus price of diesel fueled generation*

***Upper Waiahi has been upgraded and modernized to achieve maximum efficiency***

# Waiahi Hydro Plants

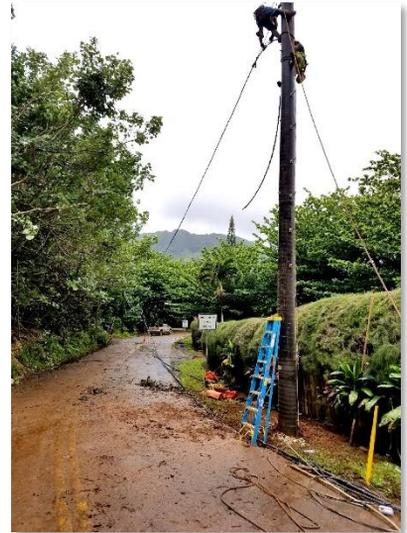


# Reliability - 2018



# Resiliency

- Kaua'i's efforts post 'Iniki (1992) and Iwa (1982) include:
  - 80% of transmission circuits are steel poles
  - 20% remaining circuits have storm guys on wood poles
  - Increased size standards for all wood poles
  - Hardened Līhu'e circuit
  - Hurricane resistant headquarters
  - Satellite phones
  - AMI and outage management system
- Power plants not exposed to storm surge and have black start capabilities
- KIUC has signed MOU with HECO for mutual aid



# Resiliency

## April 2018 floods

- Customers out at peak: 14,000
- Customers restored within 24 hours: 90 percent
- Total overtime hours logged (hourly employees): 515.5
- Total damage: \$368,000
  - *FEMA reimbursement amount pending*

## Hurricane Lane

- Total damage: \$59,279
- Total approved FEMA reimbursement: \$38,599

***As a cooperative, KIUC can apply for FEMA reimbursement of up to 75 percent of eligible costs***

# What about rates?

- KIUC rates vs. Hawai'i's investor owned utility (HECO)
  - 2002 (June)\*
    - O'ahu +72%, Maui +43%, Hawai'i +13%
  - 2019 (June)
    - O'ahu +8.5%, Maui (1.3%), Hawai'i (5.6%)

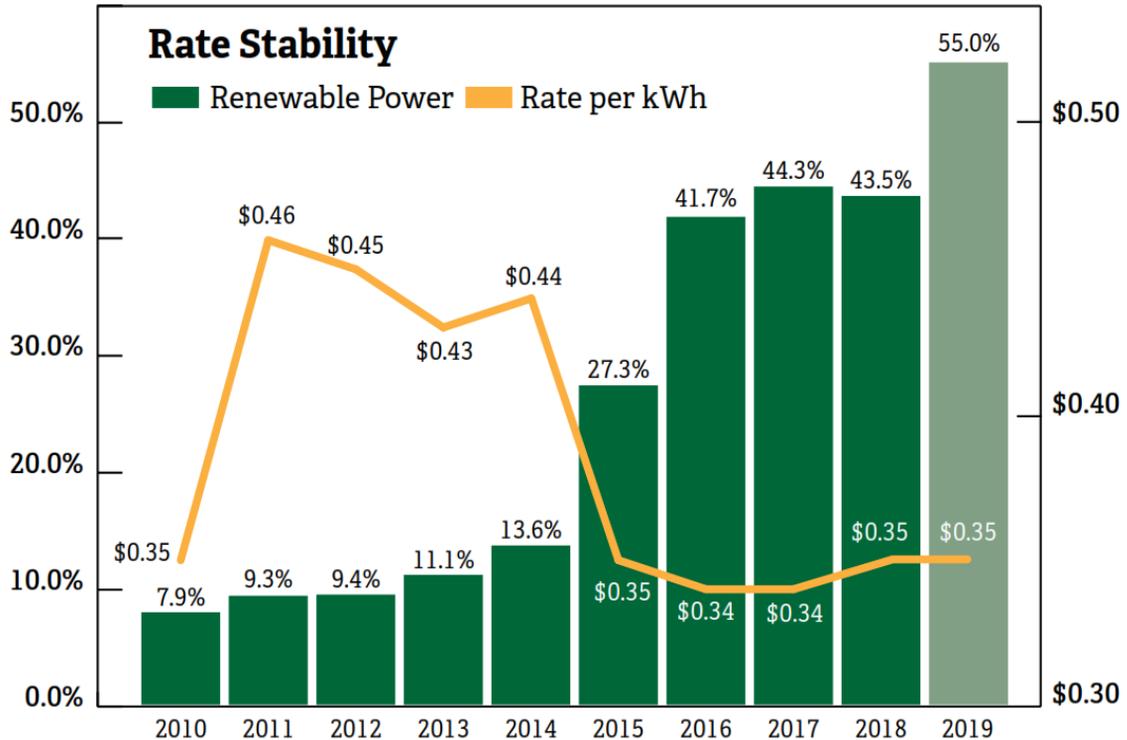
\*Source: Hawai'i PUC Annual Report

# Rates

- KIUC has not had a general rate increase since 2009
- 2019 rates are expected to be about the same as 2018
- Lower cost renewables replacing higher priced, volatile diesel

***2018 Tesla plant savings versus diesel: \$708,000***

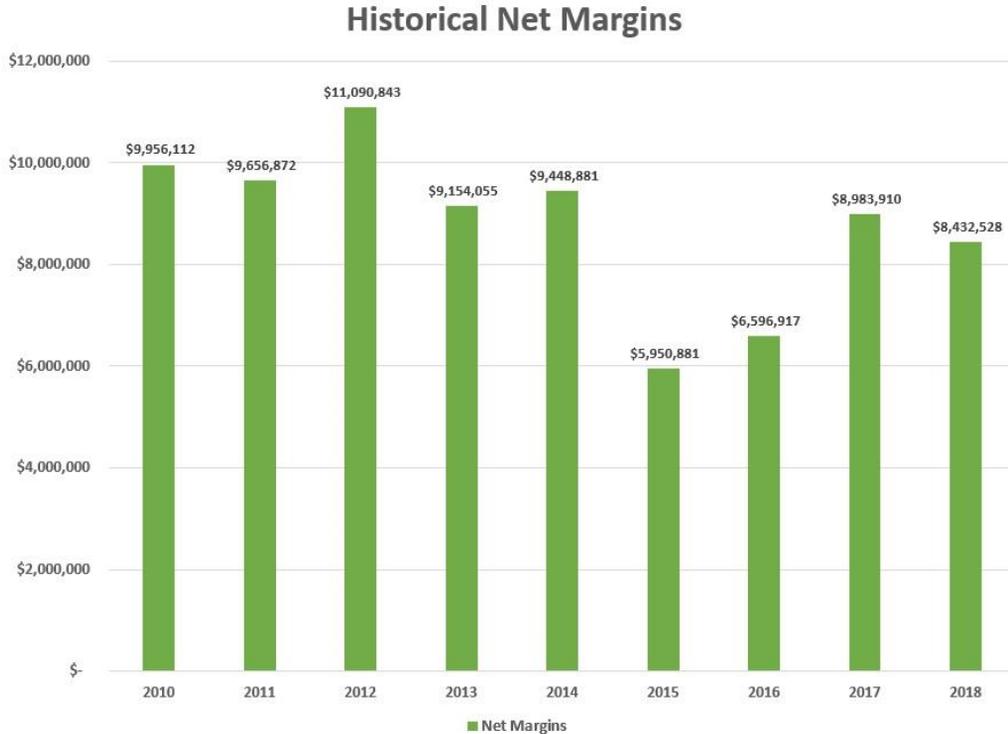
# Renewables and Rates



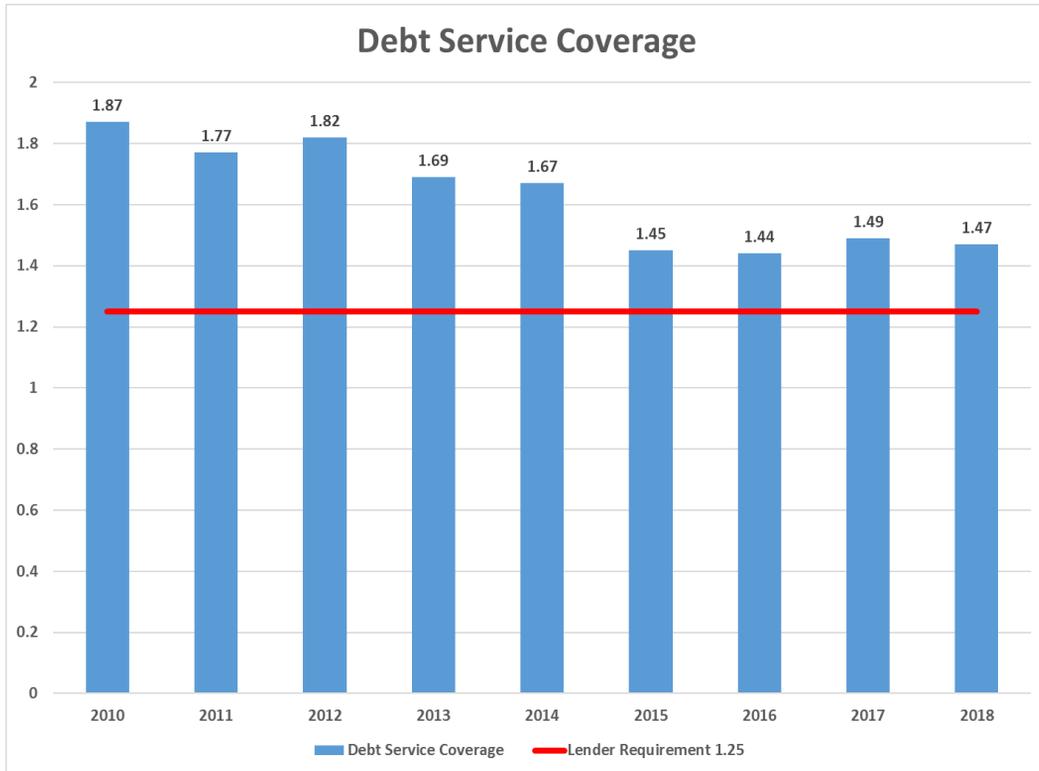
# 2018 Financial Results

- KIUC Continues to be a financially healthy company
  - Consistently makes a small amount of margin
  - Earns enough money to continue to be credit worthy
  - Puts its own skin in the game by reinvesting margins

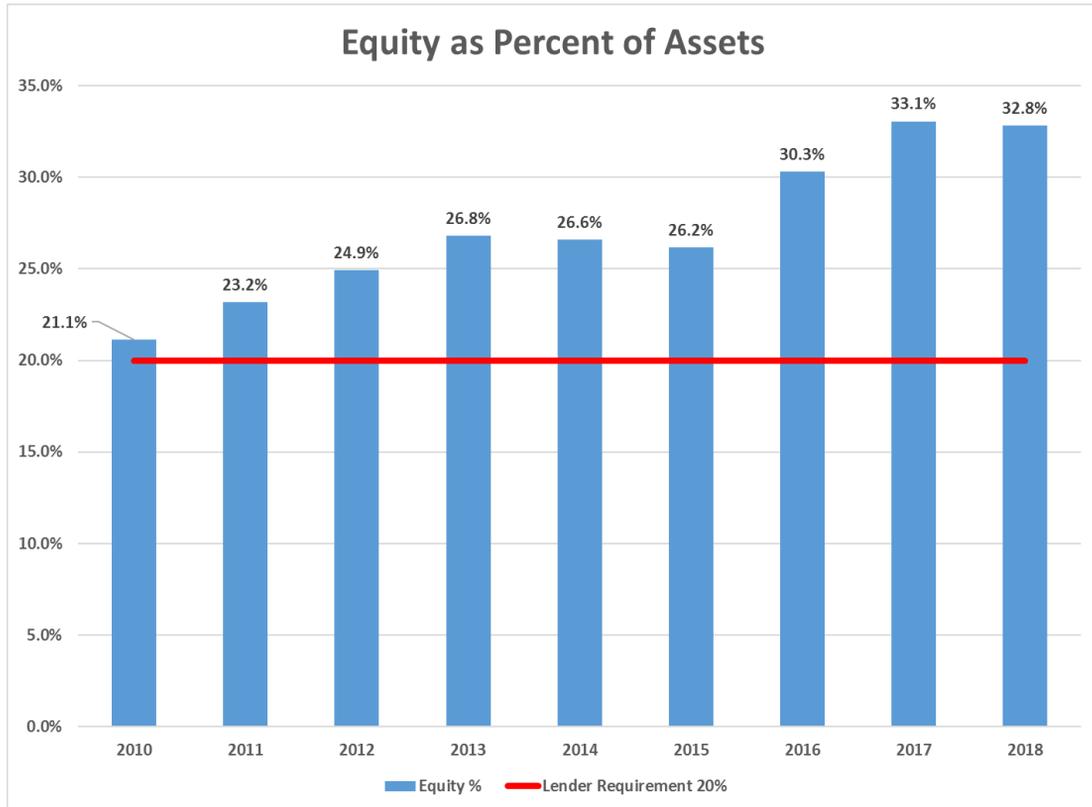
# Consistently Positive Results



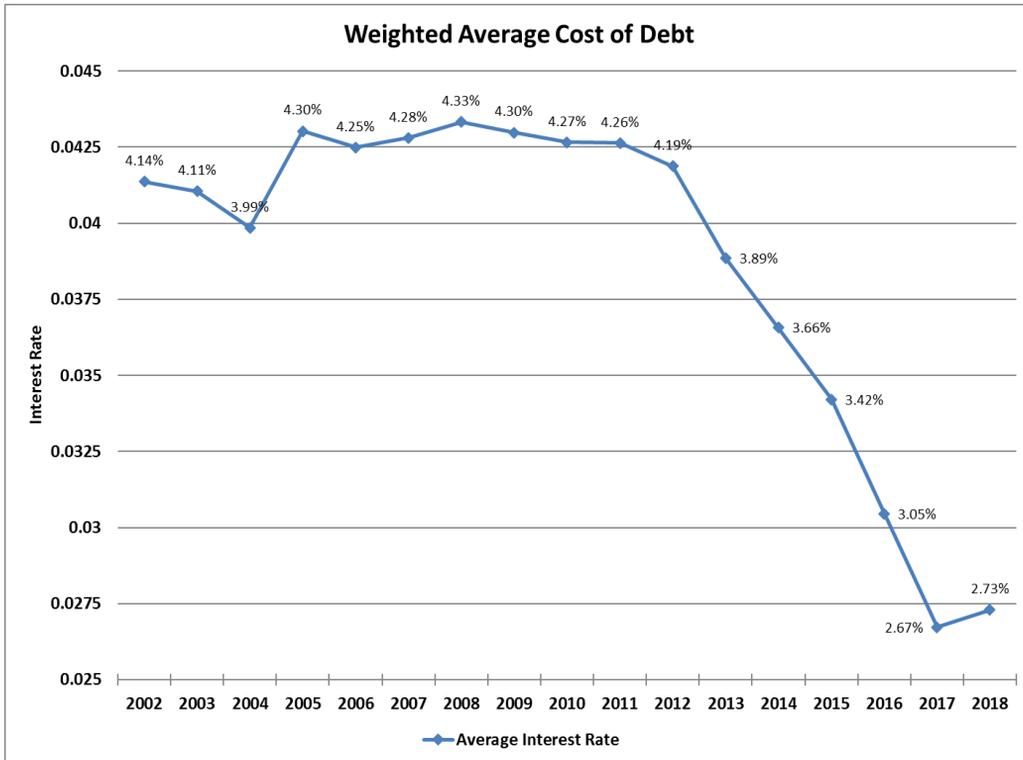
# Credit Worthy



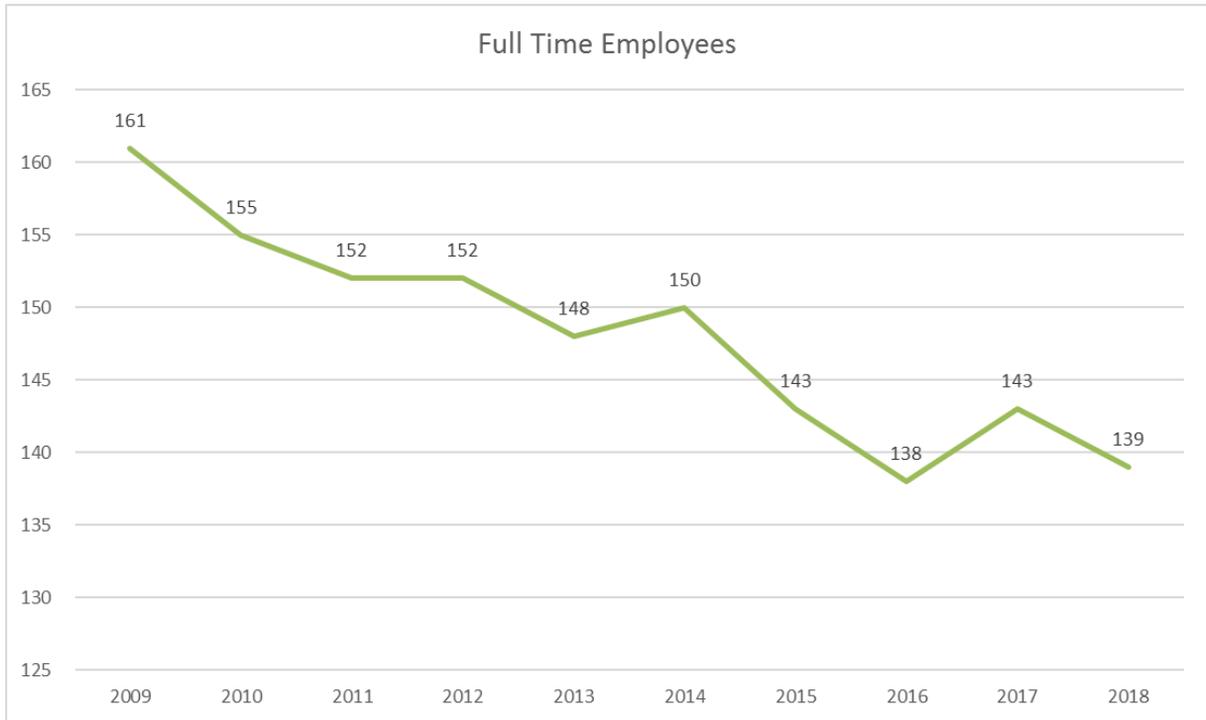
# Prudent Reinvesting



# 2018 Financial Results



# 2018 Financial Results



# Patronage Capital

- KIUC has retired \$2.5 million in patronage capital related to 2018 financial results.
- Since formation KIUC has retired \$40 million to our members in patronage capital retirements.



# Strategic Plan



- Adopted January 2017
- Updated previous plan adopted in 2008
- Goals for renewables, reliability, cost containment, financial management

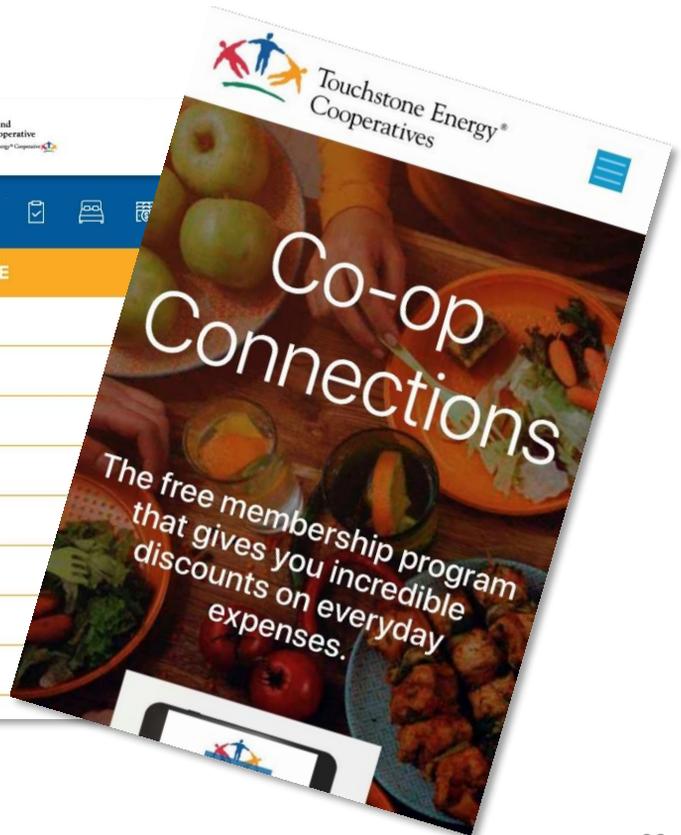
# Strategic Plan – Progress Report

- Renewable generation: 70 percent by 2030
  - *AES PMRF and the West Kauai Energy Project will bring us to 80 percent by 2025*
- Reliability factor of 99.96
  - *Improved by 50 percent in 2018*
- Maintain financial stability
  - *Rate stability, debt service, equity, personnel costs*
- Address climate change
  - *Since 2010, reduction of 20 million gallons of diesel per year*

# Co-op Connections

## Healthy Savings Discounts

Touchstone Energy® Cooperatives' Co-op Connections® Program helps you save more and live healthier every day! Our highly successful prescription discount program is now joined by discounts on dental vision, hearing, lab work & imaging & chiropractor visits. Best of all, you get all these great benefits for FREE!



# Questions?

# Mahalo!

