2017: Putting Kauaʻi on the Map

CNN

HBO Vice News

Engadget

Taiwan Public Television
Renewable Energy on Kauaʻi

44.4% of Kauaʻi’s power was produced from renewable sources in 2017
Renewable Progress: 2017-2018

- TESLA Dispatchable PV Project
  - Operational March 2017

- AES Dispatchable PV
  - Lāwaʻi: 20 MW x 5 hours storage
    - (December 2018)
  - PMRF: 14 MW x 5 hours storage
    - (December 2019)

When complete: 65% of evening peak power will come from Solar
## Renewable Future: Energy Storage

### 2018 TOP 10 Utility Energy Storage Rankings

<table>
<thead>
<tr>
<th>Rank</th>
<th>Utility Name</th>
<th>Annual Watts/Per-Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kauai Island Utility Cooperative</td>
<td>415.3 W/C</td>
</tr>
<tr>
<td>2</td>
<td>Tucson Electric Power</td>
<td>50.0 W/C</td>
</tr>
<tr>
<td>3</td>
<td>Maui Electric</td>
<td>36.5 W/C</td>
</tr>
<tr>
<td>4</td>
<td>San Diego Gas &amp; Electric</td>
<td>31.7 W/C</td>
</tr>
<tr>
<td>5</td>
<td>Glendale Water &amp; Power</td>
<td>22.9 W/C</td>
</tr>
<tr>
<td>6</td>
<td>American Samoa Power Authority</td>
<td>20.4 W/C</td>
</tr>
<tr>
<td>7</td>
<td>Hawaii Electric Light Company</td>
<td>16.4 W/C</td>
</tr>
<tr>
<td>8</td>
<td>Southern California Edison</td>
<td>11.1 W/C</td>
</tr>
<tr>
<td>9</td>
<td>Green Mountain Power</td>
<td>10.6 W/C</td>
</tr>
<tr>
<td>10</td>
<td>City Utilities of Springfield, MO</td>
<td>8.8 W/C</td>
</tr>
</tbody>
</table>
Renewable Energy Mix

Fuel Mix 2010
- HYDRO 9%
- OIL 91%

Fuel Mix 2017
- OIL 56%
- SOLAR 23%
- BIOMASS 12%
- HYDRO 9%
Pumped Storage Hydro

- Engineering and environmental studies on-going
- Integrated irrigation delivery, hydro electric, and energy storage project
- 25 MW size, 15% of Kauaʻi’s energy
- Infrastructure improvements help DHHL, KAA, DLNR
Community Based Renewable Energy

• Up to 3 megawatts total
• Designed for customers unable to access rooftop solar
  • Renters, apartments, roof condition/placement, etc.
• RFP to be issued in July
  • Award(s) by end of 2018
• Subscription process pending details of award(s)
Renewable Resources

Pu‘u Ōpae Pumped Storage Hydro
AES/PMRF Solar plus Storage and Microgrid
KAA Hydro
Pioneer Solar
Gay & Robinson Hydro
McBryde Solar, Port Allen
McBryde Hydro, Wainiha
KIUC Anahola Solar
Kapa‘a Solar
KIUC Waiahi Hydro
Tesla Solar plus Storage
Green Energy Team
MP2 Solar
KIUC Kōloa Solar
AES Solar plus Storage
McBryde Hydro, Kalāheo
Rates

• KIUC has not had a general rate increase since 2009
• 2019 rates are expected to be about the same as 2018
• Likely 2030 rates will also be around the same as today
  • Inflation increases offset by generation savings
Rate Differential Comparison

Year: 2003
- HECO: 68.8%
- MECO: 35.2%
- HELCO: 10.1%

Year: 2017
- HECO: 17.6%
- MECO: 1.2%
- HELCO: -0.9%
Patronage Capital

- KIUC will retire $3.2 million in patronage capital related to 2017 financial results.

- Since formation KIUC has returned over $37 million to our members.
Resiliency

- Kauaʻi’s efforts post ʻIniki (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 Līhuʻe circuit
  - Hurricane resistance headquarters
  - Satellite phones
  - AMI and outage management system

- Power plants not exposed to storm surge and have black start capabilities
Member Services - SmartHub

- **Manage Payment Methods**
- **View and monitor energy usage to find ways to reduce energy and save**
- **Receive notifications when bill is available or when payments are made**
- **View Bill Online**
- **Send messages to notify us of account and service issues**
- **Online and Mobile Access**

Smart hub
Member Services – Energy Wise

Energy Efficiency:
- Home visits
- Lighting Program
- New efficient appliance replacement rebate program
- Qualifying member appliance replacement program (QMARP)
- Appliance meter tester program
- Commercial retrofit program

Water Heating:
- Heat pump water heater rebate program
- Solar water loan program
- Solar water heater rebate program
Co-op Connections

www.connections.coop
Co-op Connections

Healthy Savings Discounts

Touchstone Energy® Cooperative's 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 computer vision, hearing, lab work & imaging, and chiropractor visits. Best of all, these great benefits are available at your fingertips.

connections@kiuc.coop
ANNUAL MEETING
FINANCIAL REPORT

Fiscal Year Ended December 2017

July 25, 2018
Financial Results - 2017

- Solid year financially
- Clean audit report
- Met loan covenants
- Increased equity

KUIC to return $3.2M to co-op members

Kauai Island Utility Cooperative will begin issuing $3.2 million in 2017 patronage capital retirement checks to cooperative members next week.

Patronage capital is money that the cooperative has left over after paying all of its expenses and meeting its lenders' expectations for financial stability. At the end of the year, each member’s patronage capital account is credited according to the amount the member paid for electricity. This is the member’s equity in KUIC.

We had excellent financial results in 2017, which allows us to exercise one of the fundamental benefits of being a not-for-profit cooperative that is owned by the members it serves–KUIC Chairman Allan Smith said.–A rural electric cooperative exists solely to provide its members with electricity. In a co-op, margins don’t belong to the company; they belong to the individual members who paid money on their monthly bills.
Times Interest Earned Ratio – YTD December 2017
KIUC stand-alone

Times Interest Earned Ratio (TIER)

- RUS Minimum
- 2017 Actual
Equity Ratio – December 2017
KIUC stand-alone

Equity as a % of Assets

33.1%

Liabilities as a % of Assets

66.9%
# Balance Sheet Summary – December 2017

KIUC Consolidated

<table>
<thead>
<tr>
<th></th>
<th>12/31/2017</th>
<th>83%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Utility Plant</td>
<td>311.0</td>
<td></td>
</tr>
<tr>
<td>Other Investments</td>
<td>2.3</td>
<td>1%</td>
</tr>
<tr>
<td>Current Assets</td>
<td>47.4</td>
<td>13%</td>
</tr>
<tr>
<td>Deferred Debits</td>
<td>11.8</td>
<td>3%</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td><strong>372.5</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

|                        | 30%  |
| Controlling Equity Interest | 110.5 |
| Non-Controlling Equity Interest | 20.4  |
| **TOTAL EQUITY**          | **130.9** |

|                        | 52%  |
| Long-term Debt, (less Current Maturities of 15.2) | 192.8 |
| Post-Retirement Benefits Obligation               | 0.6  |
| Asset Retirement Obligation                       | 2.5  |
| Current Liabilities                               | 34.0 |
| Deferred Credits                                  | 11.8 |
| **TOTAL LIABILITIES**                             | **241.6** |

|                        | 100% |
| **TOTAL EQUITIES AND LIABILITIES**                | **372.5** |
Key Results Comparison – YTD December 2017
KIUC Consolidated

Key Results

<table>
<thead>
<tr>
<th>In Millions</th>
<th>2016 Actual</th>
<th>2017 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Revenue</td>
<td>143.5</td>
<td>147.8</td>
</tr>
<tr>
<td>Commodities Expense</td>
<td>57.3</td>
<td>60.6</td>
</tr>
<tr>
<td>Expenses</td>
<td>79.8</td>
<td>79.0</td>
</tr>
<tr>
<td>Non Operating Margins</td>
<td>0.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Net Margin</td>
<td>6.6</td>
<td>9.0</td>
</tr>
</tbody>
</table>

2016 Actual | 2017 Actual
Percentage of Total Revenue – YTD December 2017

KIUC Consolidated

TOTAL REVENUE
$147.8 million
Debt Service

Weighted Average Cost of Debt

Interest Rate

Average Interest Rate

Years: 2002 to 2017
Mahalo!