Curtis Wynn
President, NRECA
President & CEO Roanoke Electric Cooperative

Equitable Solutions to Rural Energy Burdens
NRECA Presidential Platform

• Rapid pace of change

• Three key realities:
  1. The market-driven future of the electric utility industry
  2. The future will demand sustainability and efficiency.
  3. The future will require grid flexibility.

• Acknowledge, Act, Lead Together
The Business Case for Reducing Energy Burdens

Roanoke Connect broadband deployment is the primary enabler of all of the above; creating cost savings for Roanoke EC and our member-consumers, while reducing carbon emissions.
The Business Case for Reducing Energy Burdens

- **0-5k Projects**: 14% of Projects, Average $2,588
- **5k-10k Projects**: 75% of Projects, Average $7,690
- **10k+ Projects**: 11% of Projects, Average $13,263
# The Business Case for Reducing Energy Burdens

<table>
<thead>
<tr>
<th>COST / SAVINGS</th>
<th>One (1) Participant</th>
<th>1,000 Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity We Don't Sell</td>
<td>($2,762)</td>
<td>($2,762,000)</td>
</tr>
<tr>
<td>REC Upgrade Investment</td>
<td>(6,182)</td>
<td>(6,182,000)</td>
</tr>
<tr>
<td>Program Operation Cost</td>
<td>(770)</td>
<td>(770,000)</td>
</tr>
<tr>
<td>Electricity We Don't Buy (Demand Savings)</td>
<td>$10,622</td>
<td>$10,622,000</td>
</tr>
<tr>
<td>Payments from Member-Owners (Bill Tarrifs)</td>
<td>6,182</td>
<td>6,182,000</td>
</tr>
<tr>
<td>Program Operation Cost Recovered</td>
<td>200</td>
<td>200,000</td>
</tr>
<tr>
<td>20 Year Savings</td>
<td>$7,290</td>
<td>$7,289,858</td>
</tr>
</tbody>
</table>

*These numbers do not account for propane and other fuel conversions to electricity – “beneficial electrification”.*
The Business Case for Reducing Energy Burdens

- Cooperative’s tariff on-bill financing energy efficiency program
  - 450 + participants
  - 40% of inquiries can’t fully participate due to health and safety concerns

- Still leaves many member-owners unable to “fully participate”
The Business Case for Reducing Energy Burdens

• Community Solar
  • A community solar farm or garden is a solar power installation that accepts capital from and provides output credit and tax benefits to individual and other investors.
  • In some systems you buy individual solar panels which are installed in the farm after your purchase. [Wikipedia]
The Business Case for Reducing Energy Burdens

Roanoke SolarShare

- Installed ‘pilot’ solar garden at headquarters facility – unsubscribed by member-owners
- Four (4) upcoming solar/battery projects that will include a community solar offer
  - Purposely developed on minority landowner properties
  - Identified via Roanoke’s Sustainable Forestry and Land Retention Project
- Neighbors helping neighbors
  - Individual and philanthropic donations will purchase output from community solar
  - Credits will be used cover the cost to rectify health and safety issues for nearly 800 dwellings at ~$2,000 each
- Fundraising goal: $1.7m
The Business Case for Reducing Energy Burdens

**Smart Energy Savings Devices**
- Each thermostat & water heater control installation is saving REC approximately $170 and $77 per year respectively
- Over 1,000 thermostats installed
- Over 850 water heater controls installed

**Roanoke Connect Broadband**
- Smart energy savings devices justify monthly credits for participating in demand response programs
- Free installation of devices and broadband equipment
- $44.99 monthly subscription is well below market price for broadband

**System Automation**
- Increasing system resiliency and
- Lowering wholesale power costs
  - Voltage reduction
  - Line loss
Questions?