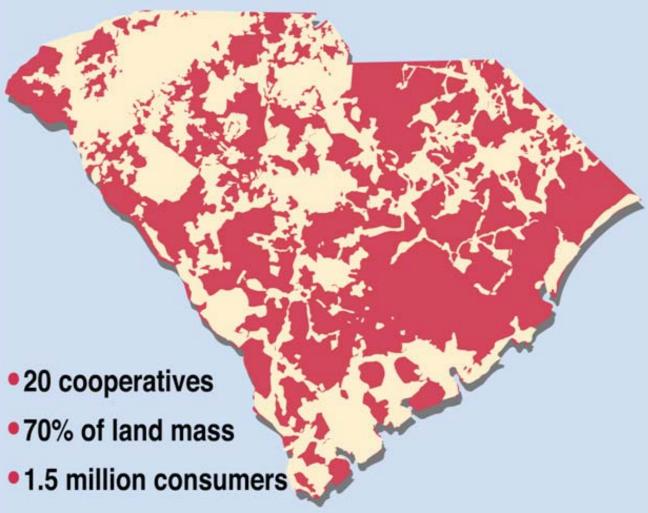


#### **Electric Cooperatives of South Carolina**





### S.C. Co-op Challenges

- Current generation mix
- Growth
- Housing
- Illiteracy
- Income

#### Woman's story highlights struggles for energy relief



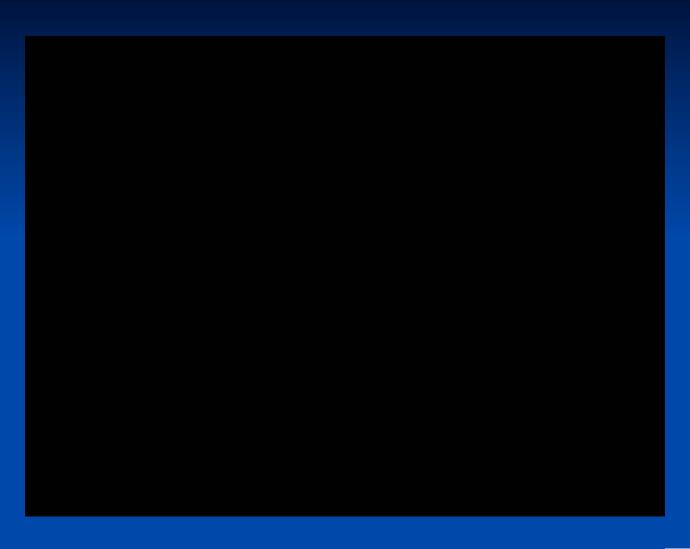
TIM KIMZEY/TIM.KIMZEY@SHJ.COM

#### Buy photo

Frances Sanders of Gaffney talks about the help she received to renovate and weatherize her home recently. Labor and new equipment provided by an energy efficiency pilot program is expected to cut Sanders' utility bill in half.

GoUpstate.com







#### Two Paths to the Future

We are nearing the fork in the road.



#### Path One: Nuclear



#### Cost to Build

Current Generation: \$753 / kW

New Natural Gas: \$2,599 / kW

New Nuclear: \$5,000 / kW

#### Path Two: Energy efficiency and clean energy





#### Linda Butler's Savings

\$ 518 December 2008

\$ 95 December 2009

\$ 423 saved

TOTAL DUE NOW	\$ 95.00
AFTER DUE DATE PAY	\$ 96.42

E POWER COST ADJUSTER IS .00500 2010 DISCONNECT/RECONNECT TRIP CHAF D \$35 BEFORE 4 PM AND \$70 AFTER 4 PM.

1.5% will be added to any balance remaining ate. Service may be discontinued if payment

# Unprecedented investment in energy efficiency

- Weatherize homes
- Replace resistance heating
- Replace old heat pumps



#### Three targets

	Homes	Megawatt- hours saved per year
Weatherization	160,000	290,000
Replace resistance heating	60,000	550,000
Replace old heat pumps	32,000	183,000
		1,023,000

10% Reduction in Residential Use

## Energy efficiency retrofits \*and\* other residential programs

Forecast for 2020	Residential total
Energy (megawatt-hours)	13,344,000
Goal save 20%	X 0.20
Energy efficiency savings	2,668,800
(megawatt-hours)	

20% Reduction in Residential Use

#### **Core Member Transaction**

I.D. of Homes to be Audited

Energy Audit by BPI Certified Auditor Review of Audit Results

Decision as to Cost
Effectiveness

3a Deselect

Falls outside of Cost

Effectiveness

### Loan Processed

Consumer-member (landlord/tenant)
Education
re: savings/loan

Member Pays
On-bill
1/3
2/3

"Co-op" Pays Contractor Post-Retrofit
Audit by BPI
Certified Auditor
(Approved list)

Selection of Contractors (Approved list?)

Work proceeds based on audit specs

1 or 2 out of 3 Strategies

#### S.C. Results

#### when fully implemented

- Energy savings
  - 2,700,000 megawatt-hours per year.
- Consumer savings
  - \$270 million per year.
- Reduced CO<sub>2</sub> emissions
  - up to 2.4 million metric tons per year.
- Thousands of jobs
- Avoid paying for ½ of a nuclear plant

### Private/public partnership. A way to provide the capital for loans.

- Rural Energy Savings Program (Rural Star)
   H.R. 4758 and S. 3102
- Up to \$4.9 Billion
  - ■\$750 million for S.C.
- RUS lends to co-ops >> co-ops lend to members for upgrades >> members repay co-ops on the power bill >> co-ops repay RUS

#### Rural Star Benefits

- Reduce burden on low-income families
- Reduce demand for electricity
- Reduce environmental impacts
- Create jobs
- Preserve capital for sustainable technology
- Combines co-op's need, member's need and America's need.

#### Two Paths to the Future

We are nearing the fork in the road.



