Twenty Electric Cooperatives Test On-bill Financing as an Acquisition Strategy

ACEEE Energy Efficiency as a Resource Conference

September 27, 2011

Patrick Keegan
Assistance from Ron Calcaterra of Central Electric Power Cooperative,
Mike Couick of Electric Cooperatives of South Carolina





Electric Co-ops Test On-bill Financing as an Acquisition Strategy

OUTLINE

- Rural Electric Cooperatives
- Co-ops Begin Efficiency from a Different Model
- View of Efficiency from SC
- The Road to On-bill Financing
- Help My House Pilot



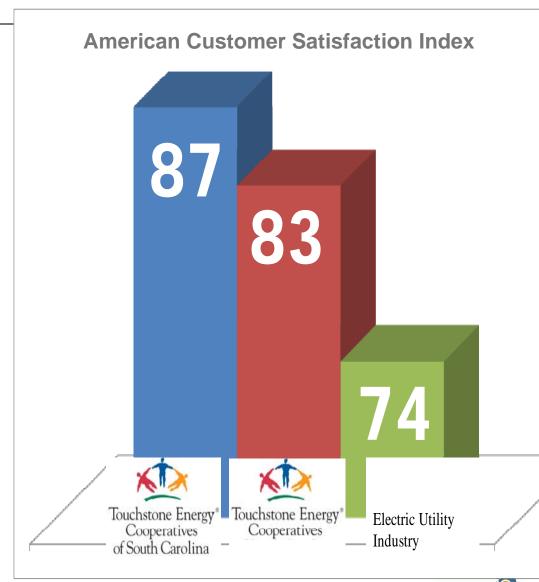


Rural Electric Cooperatives vs IOU's

| Investor-owned Utility | | Rural Electric Cooperative | |
|------------------------|-----------------------------------|----------------------------|---|
| 0 | Owned by stockholders | 0 | Owned by members |
| 0 | 202 IOU's in U.S. | 0 | 877 Co-ops in U.S. |
| 0 | Efficiency can reduce profits | 0 | Non-profit |
| 0 | Regulated by PUC, often by EEPS | 0 | Occasionally regulated by PUC and EEPS. Always regulated by elected Board |
| 0 | Self-generate or wholesale market | 0 | Self-generate or access wholesale market thru "G&T's" |
| 0 | DSM planning structured | 0 | DSM planning self-directed |

What Drives Co-ops

- Member owners
- Member Satisfaction
 - price/kWh
 - a sense of working together



Efficiency Requires New Business Model

- Old Model. To keep rates low:
 - Grow energy sales
 - Improve load factor
- New Model
 - Growing energy sales will not keep rates low. New coal generation over \$2000/kW. Nuclear is even more.
 - Efficiency less costly but requires a shift in thinking



Development Model for Efficiency

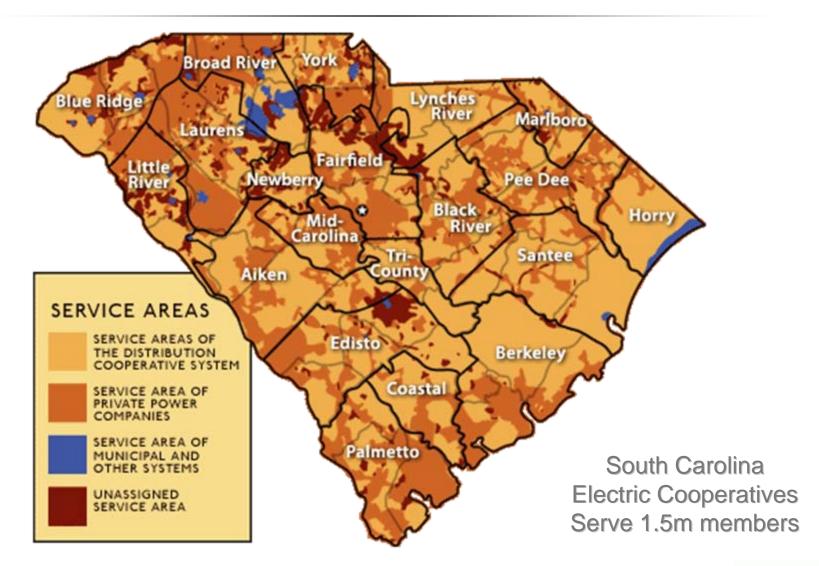
Co-ops tend to be smaller, staff have broader experience

| | Number | % of customers |
|-----------------------------|--------|----------------|
| IOU's | 202 | 68% |
| Municipal Utilities | 2008 | 15% |
| Rural Electric Cooperatives | 877 | 13% |

- May work with their G&T's
- May build on experience with load management

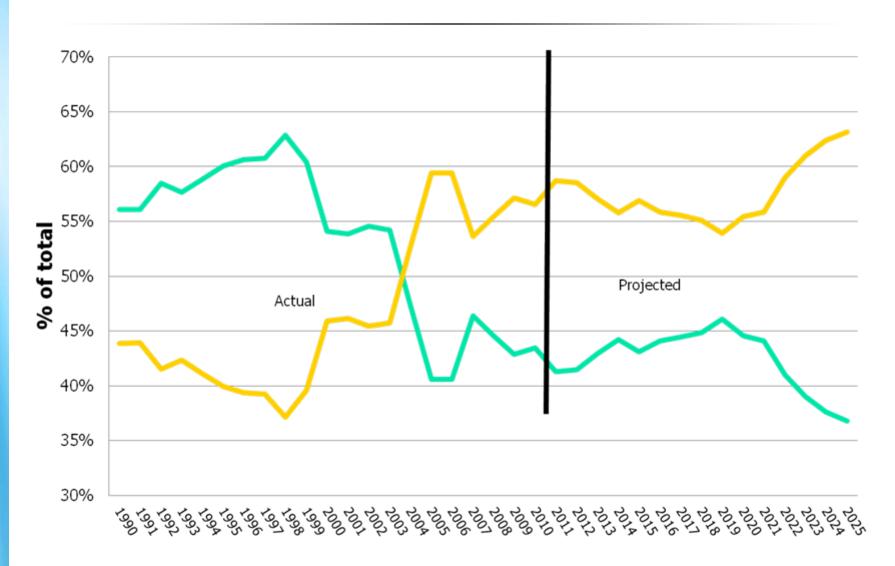


Distribution Cooperatives in South Carolina





Demand & Energy Costs as a % of Central Electric Total Costs





Central's Efficiency Perspective

Central Experience

- Load management experience
- Pilot programs

Central's Overarching Efficiency Objectives:

- Increase the energy efficiency of residential consumers (reduce residential use by 10%)
- Reduce the residential class overall cost of energy and per-unit wholesale power cost.
- Maintain or increase retail members' satisfaction with their cooperative (both participant and non-participant)



Energy Efficiency: South Carolina Co-op Perspective

- Need for EE
 - Load Resource Balance
 - 2007 EE Assessment
 - Targets for EE
- High participation requires 50% incentive
 - Low income, credit issues require financing
- Managing Peak
 - Cost of power
 - Load factor and rate impacts
 - Great experience with load management
- A Natural Question
 - Can load management be implemented alongside EE?



The Road to On-bill Financing

- Rural Electric Cooperatives
 - Not wedded to rebate programs
 - Familiar with financing, nationally and locally
- South Carolina legislation
- Rural Energy Savings Program federal legislation
- EESI (Environment and Energy Study Institute) support, Doris
 Duke Foundation
- REDLG Loan (USDA Rural Economic Development Loan and Grant Program



Key Organizations for South Carolina On-bill Financing Pilot

- Central Electric Power Cooperative (Central)
- Electric Cooperatives of South Carolina (ECSC, or "Statewide")
- 8 Participating Cooperatives (Aiken, Black River, Broad River, Horry, Palmetto, PeeDee, Santee, Tri-County)
- Environmental and Energy Study Institute



Pilot Program Vision

- On-bill Financing Pilot Objectives:
 - Establish a record for South Carolina to see if it works
 - Begin development of a template for scalability
 - Determine how a full-scale RESP can best be structured to meet the overarching objectives



Help My House Pilot

- Central and Statewide lead implementation
- Ecos selected to assist Central, Statewide and the participating cooperatives
 - Integral Analytics, Advanced Energy
- Carton Donofrio selected to assist in marketing and market research
- ▶ 8 Co-ops opt in
 - Lead local implementation
 - Conduct outreach
 - Serve as Energy Advisers to participants



Pilot Program Teams and Advisory Groups

CEO's of Central, Statewide

Program Manager

Steering Committee

Ecos and Subs

Leadership Team

Implementation Team

Advisory Groups
Auditing

Consumer Marketing

IT/Billing

Loan Processing

Impact Analysis

Full RESP Program Design



Help My House Pilot Program Features

- Target of 100 Homes in 8 Participating Co-ops
- Financing 2.5%, up to 10 years, no credit check
- Measure screening criteria: positive cash flow
- Research Emphasis
 - Impact analysis focuses on cost-effectiveness
 - Market research
- Full BPI-certified audit + REM Design run
- Test-out 100% of homes



Help My House Pilot Program Status (as of 9/27)

- Auditors, contractors selected and trained
- Energy advisers trained
- Targeting above avg energy use, high bills
- 136 walk through audits completed
- 65 comprehensive audits completed
- 48 loan applications received
- Participants are collecting bids, selecting contractors, work is getting underway



Early Results: The First 14 Loans

Loan Amount

- Average loan = \$7200
- Range = \$4400 to \$8900

Measures

- ► HVAC upgrades: 12 of 14
- Air sealing: 12 of 14
- Attic insulation: 11 of 14
- Duct sealing: 11 of 14
- Many repairs to windows, ductwork



Some Early Observations

- Eight participating Co-ops require more time for planning and start-up
- Good capacity in SC among Co-ops, contractors, auditors
- Aggressive outreach is needed, Co-ops lack resources for this
- Process will have to be streamlined to scale up and to serve urgent energy needs (a broken AC or heat pump)
- Pilot is testing the commitment of Co-ops to energy efficiency



For More Information

Pat Keegan 720-331-0018 pkeegan@ecosconsulting.com

