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State Guides to Utility Energy Efficiency Planning

Webinar | January 30, 2020 2-3PM EST



Save the Date: October 5-7, 2020

Southeast Energy Summit

Areas of Work



Energy Efficiency
Policy



Built
Environment



Energy Efficient
Transportation



Regional
Investments

<https://www.seealliance.org/initiatives/energy-efficiency-policy/policy-state-profiles/>

Agenda

Utility Landscape

Existing Policies for Energy Efficiency

Utility Energy Efficiency Planning Process

Opportunities for Third-Party Engagement

Next Steps for the Series of State Guides

Questions + Discussion

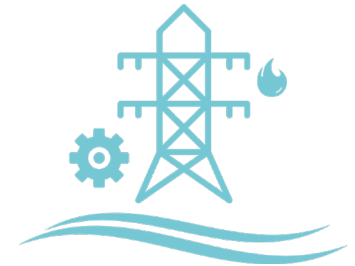
Utility Landscape

Utility Landscape

- Investor-owned utilities (IOUs), municipal utilities, and electric membership corporations (cooperatives)
- State-owned: Santee Cooper (SC)
- Federal-owned: TVA (TN)

Electric Utilities in North Carolina

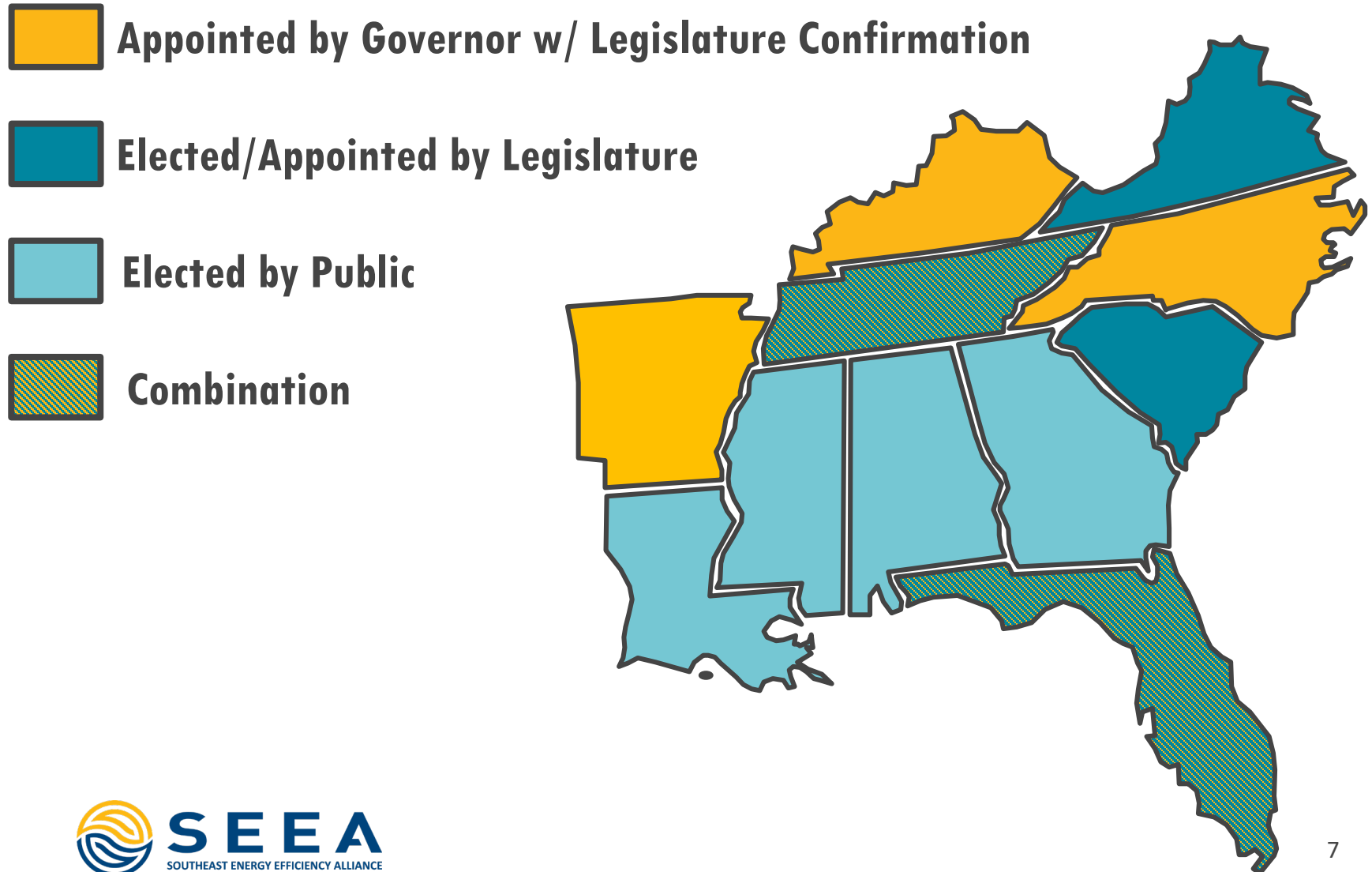
Type of Provider	Quantity	Percentage of NC Customers Served
Investor-Owned Utilities	3	68.27%
Electric Membership Corporations	32	21.22%
Municipal Utilities	33	10.51%



Five Largest Utilities in North Carolina

Utility Name	Type of Provider	Revenue (Thousand USD)	Sales (MWh)	Number of Customers	Average Price (cents/kWh)
Duke Energy Carolinas	IOU	4,868,514.4	59,210,842	2,005,333	8.22
Duke Energy Progress (NC)	IOU	3,575,788.0	38,361,581	1,411,441	9.32
Dominion North Carolina Power	IOU	389,688.0	4,400,786	121,085	8.85
EnergyUnited	Coop.	269,841.0	2,723,294	129,872	9.91
Fayetteville Public Works Commission	Municipal	215,894.0	2,082,629	81,991	10.37

Public Service Commissions



Public Service Commissions

State	# of Public Service Commissioners
Alabama	3
Arkansas	3
Florida	5
Georgia	5
Kentucky	3
Louisiana	5
Mississippi	3
North Carolina	7
South Carolina	7
Tennessee	5 (TVA Board: 9)
Virginia	3

Consumer Advocate Organizations

- Alabama Assistant Attorney General, Utilities Division
- Arkansas Attorney General's Office, Consumer Utility Rate Advocacy
- **Florida Office of Public Counsel**
- Georgia Public Interest Staff
- Kentucky Attorney General's Office of Rate Intervention
- Mississippi Attorney General's Public Advocacy Division
- **North Carolina Public Staff**
- **South Carolina Office of Regulatory Staff**
- Virginia Senior Assistant Attorney General, Insurance and Utilities Regulatory Section

Other Relevant Agencies

- **Alabama** Department of Economic & Community Affairs – **Energy Division**
- **Arkansas** Department of Environmental Quality – **Energy Office**
- **Florida** Department of Agriculture & Consumer Services – **Office of Energy**
- **Georgia** Environmental Finance Authority – **Energy Resources Division**
- **Kentucky** Energy & Environment Cabinet – **Office of Energy Policy**
- **Louisiana** Department of Natural Resources – **State Energy Office**
- **Mississippi** Development Authority – **Energy & Natural Resources Division**
- **North Carolina** Department of Environmental Quality – **Division of Energy, Mineral, & Land Resources**
- **South Carolina** Office of Regulatory Staff – **Energy Office**
- **Tennessee** Department of Environment & Conservation – **Office of Energy Programs**
- **Virginia** Department of Mines, Minerals, & Energy – **Division of Energy**

Poll Question 1

Existing EE Policies

Existing Policies for Energy Efficiency

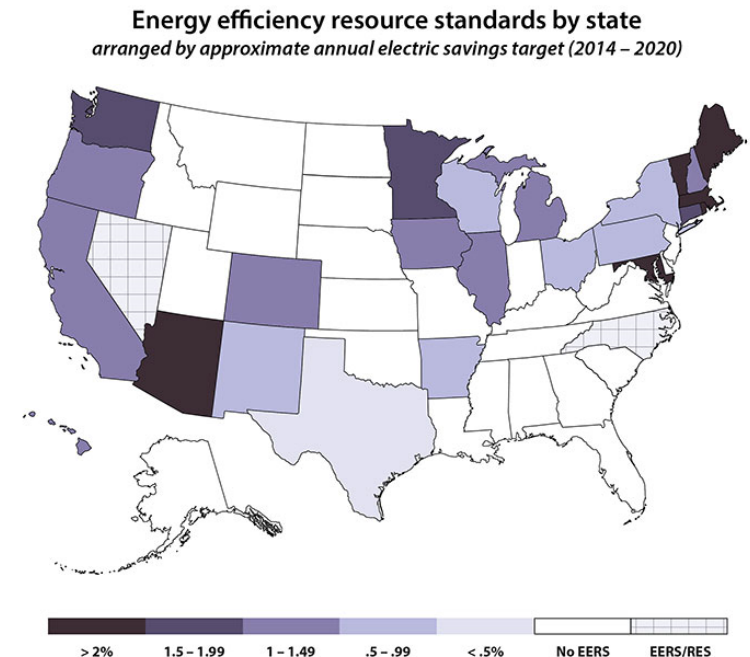
1. Energy Efficiency Resource Standards
2. Utility Business Model Policies
3. Cost-effectiveness Policies
4. Integrated Resource Planning
5. Program Participation Policies



1. Energy Efficiency Resource Standards (EERS)

- Arkansas Mandatory EERS
 - Energy Conservation Endorsement Act (1977) authorizes the Commission to require and monitor utility EE programs
 - Rules for Conservation and Energy Efficiency Programs (2007) required Quick Start EE Programs
 - Commission set first mandatory savings targets in 2010; triennial revisions

Year	Electric Utilities	Gas Utilities
2011	0.25%	0.20%
2012	0.50%	0.30%
2013	0.75%	0.40%
2014	0.75%	0.40%
2015-2018	0.90%	0.50%
2019	1.0%	0.50%
2020-2022	1.20%	0.50%



Map source: <https://aceee.org/topics/energy-efficiency-resource-standard-eers>

Required savings based on a percentage of baseline sales from previous year

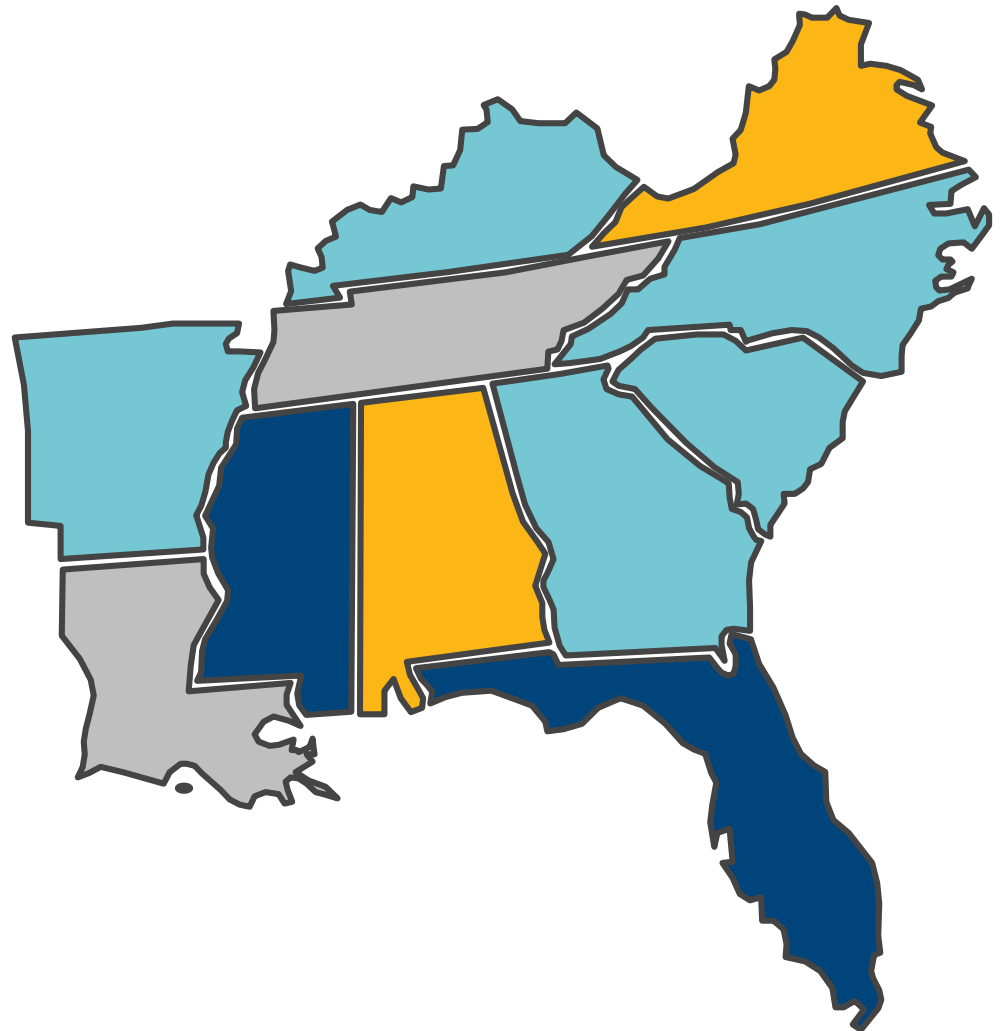
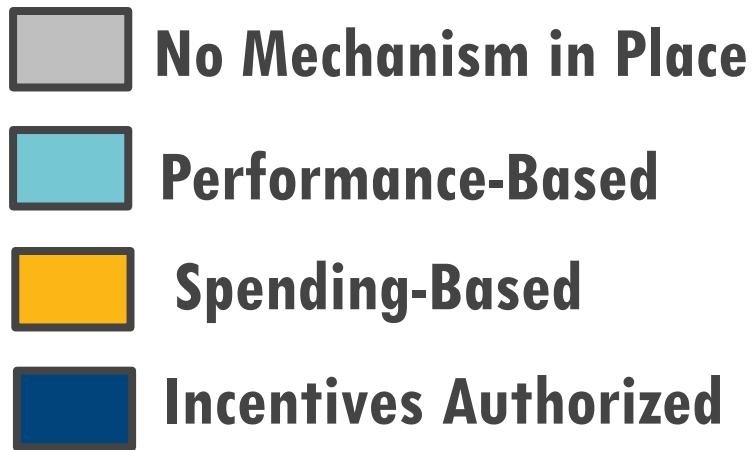
2. Utility Business Model Policies

Three-Legged Stool

- A. Performance Incentives
- B. Direct Cost Recovery
- C. Lost Revenue Recovery




2 (A) Performance Incentives



2 (A) Performance Incentives

- Performance incentives can be mandatory or voluntary
 - Mandatory incentives are most successful for advancement of EE
- Incentives can be performance-based or spending-based
 - Performance-based incentives often yield better results for EE
- Incentives are often tiered and capped at a certain level; some have a minimum threshold

Arkansas Performance Incentives

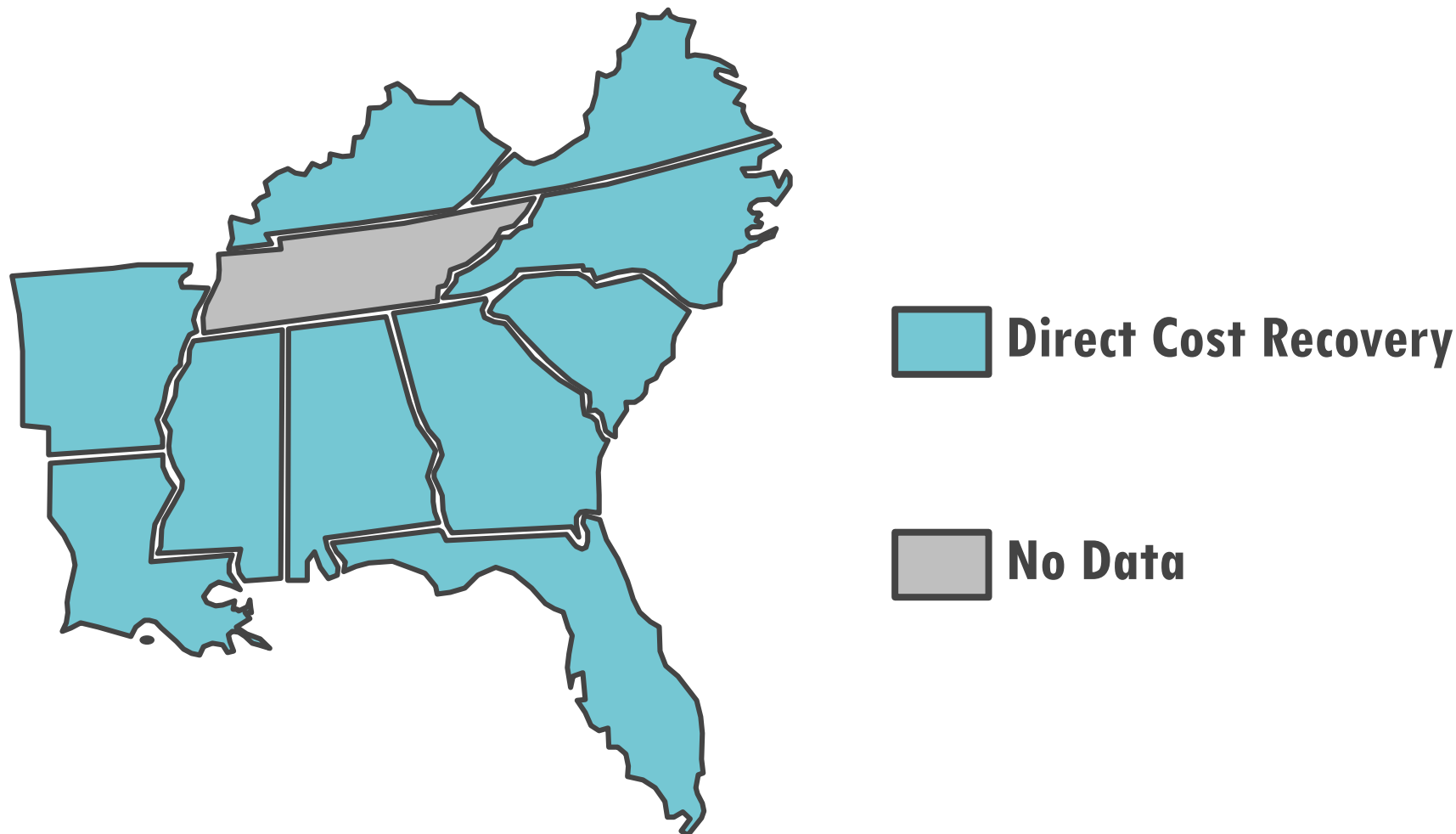


Achieved Savings (as % of target)	Incentive (based on TRC)	Cap (% program budget)
80%	10% of shared savings	4%
90%	10% of shared savings	5%
100%	10% of shared savings	6%
110%	10% of shared savings	7%
120%	10% of shared savings	8%

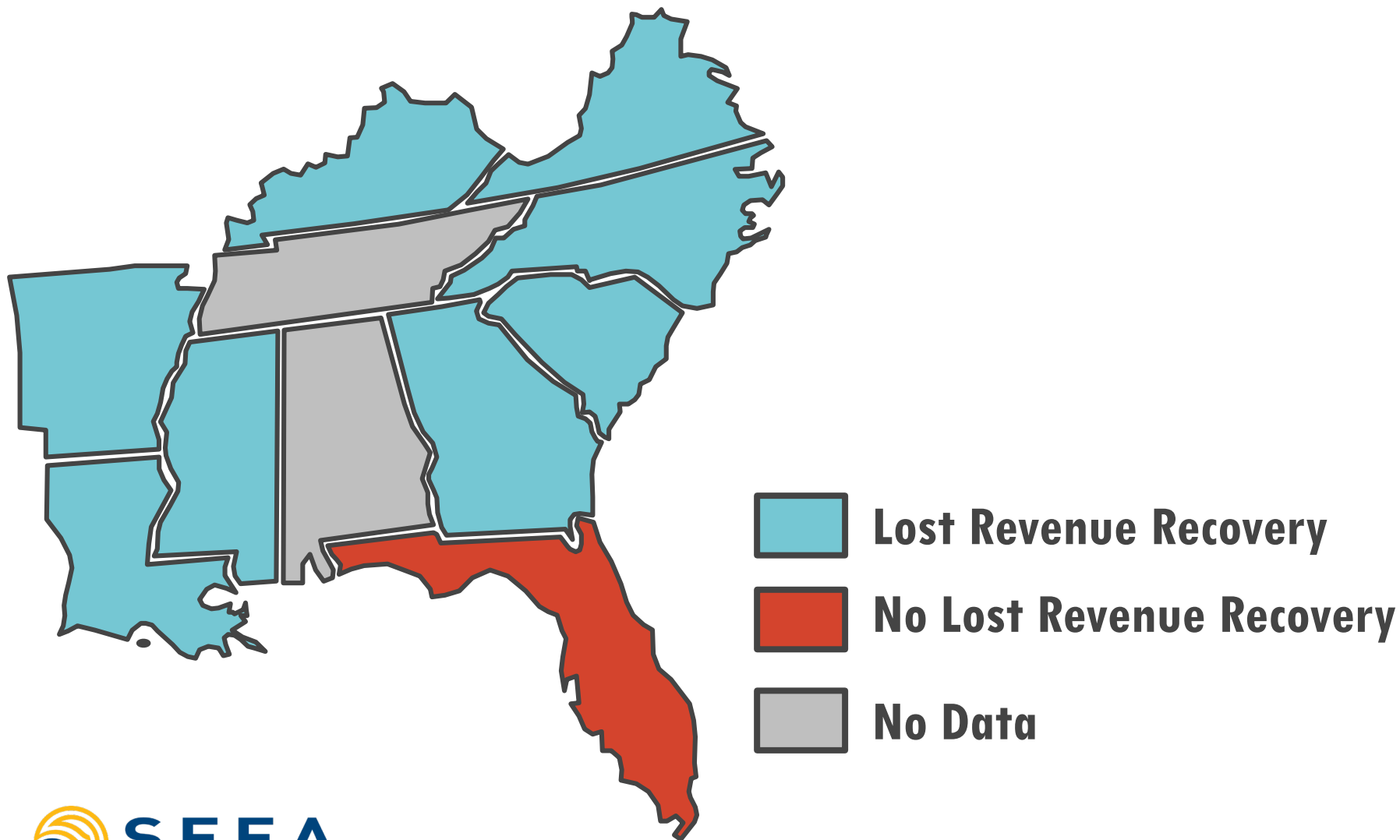
\$5M

\$500K

2 (B) Direct Cost Recovery



2 (C) Lost Revenue Recovery



2 (B &C) Cost Recovery



- Direct Cost Recovery

- Allows utilities to recover costs incurred from providing EE programs
- Direct costs are typically recovered in base rates or rate riders



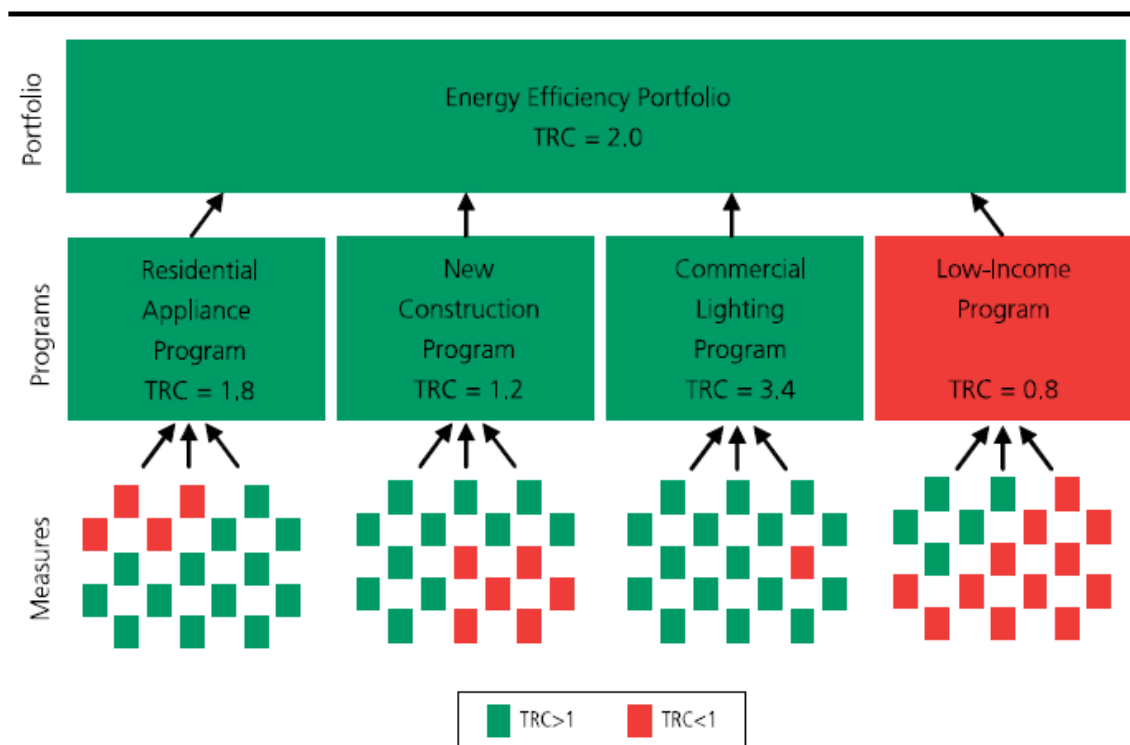
- Lost Revenue Recovery

- Allows utilities to recover revenue that was lost due to EE measures
- Lost revenue recovery can be accomplished by:
 - Decoupling utility revenue from sales
 - A lost revenue adjustment mechanism (LRAM) such as lost contribution to fixed costs (LCFC)



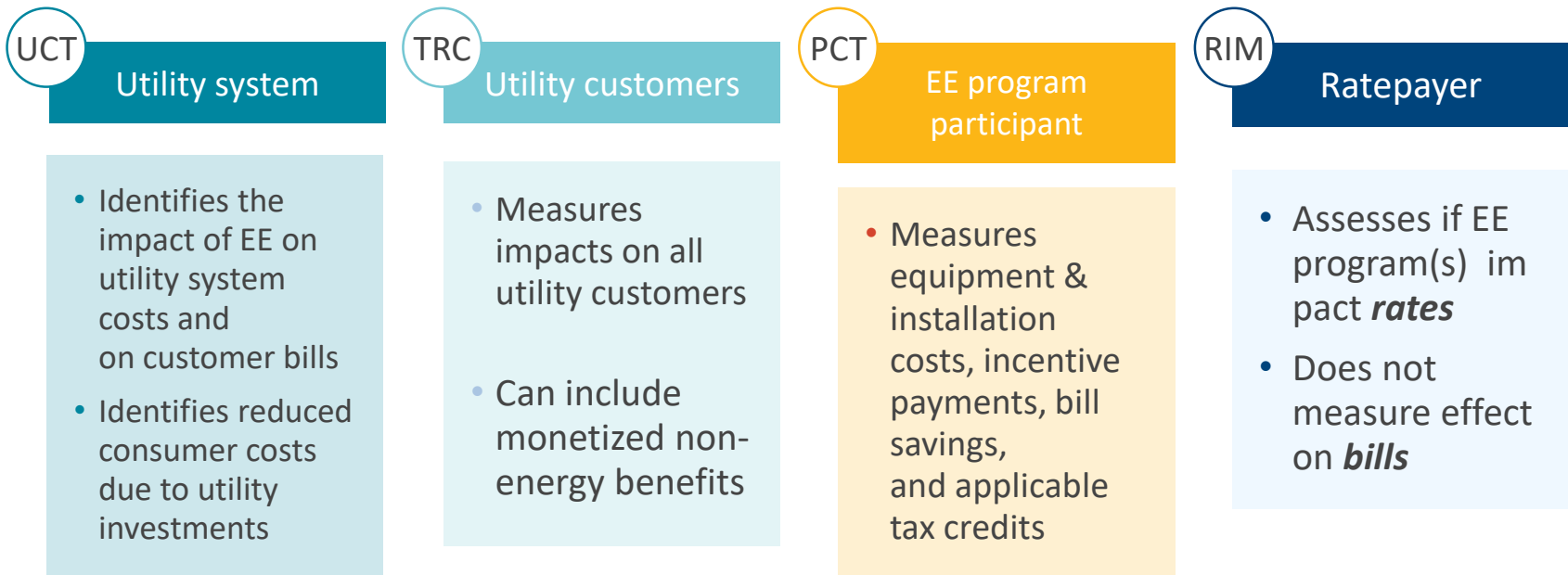
3. Cost-Effectiveness Testing

- Commission decides (a) what tests are used and how they are prioritized and (b) at what level the tests are applied (measure, program, or portfolio).



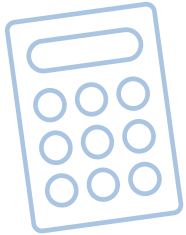
Source: Understanding Cost-Effectiveness of Energy Efficiency Programs, National Action Plan for Energy Efficiency (2008)

3. Cost-Effectiveness Testing

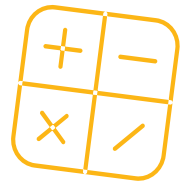


UCT: Utility Cost Test | TRC: Total Resource Cost Test
PCT: Participant Cost Test | RIM: Ratepayer Impact Measure Test

3. Cost-Effectiveness Testing



State	Primary Test(s)	Secondary Test(s)
Alabama	No established cost-effectiveness tests	
Arkansas	TRC	UCT, PCT, RIM
Florida	RIM	TRC, PCT
Georgia	TRC	UCT, PCT, SCT, RIM
Kentucky	TRC	UCT, PCT, RIM
Louisiana	TRC	UCT, PCT, RIM
Mississippi	TRC, UCT, PCT, RIM	
North Carolina	TRC	UCT, PCT, RIM
South Carolina	UCT	TRC, RIM
Tennessee	TRC	UCT, RIM
Virginia	TRC, UCT, PCT, RIM	



TRC: Total Resource Cost Test | **UCT:** Utility Cost Test | **PCT:** Participant Cost Test
SCT: Societal Cost Test | **RIM:** Ratepayer Impact Measure Test




3. Cost-Effectiveness Testing

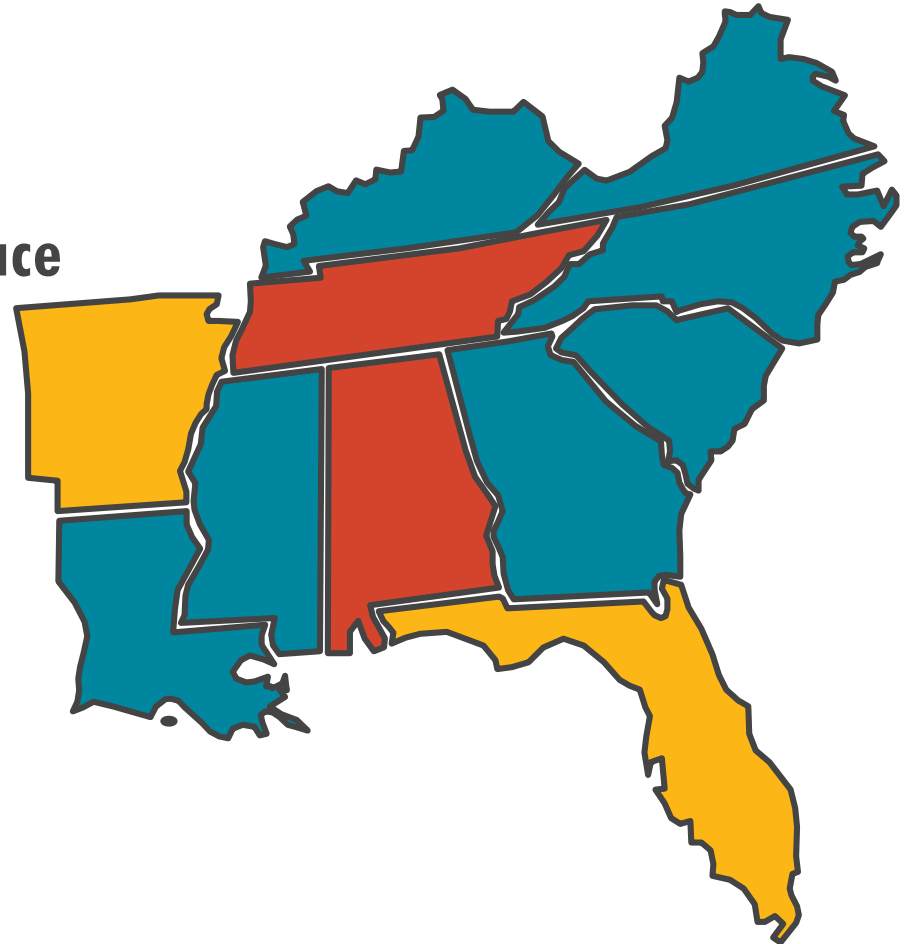
- The **National Standard Practice Manual (NSPM)** by the National Efficiency Screening Project provides a framework for non-biased cost-effectiveness assessments of energy resources
- The NSPM presents 6 universal principles that lay the groundwork for a “Resource Value Test” that evaluates cost-effectiveness from the regulatory perspective
- Arkansas PWC and IEM completed an NSPM Case Study in 2018; it found many inconsistencies in the quantification of costs/benefits & assumptions in testing
- Arkansas PSC accepted the Case Study in 2019 and directed PWC & Staff to address inconsistencies

Universal Principles	
Efficiency as a Resource	Recognize that energy efficiency is a resource.
Policy Goals	Account for applicable policy goals.
Hard-to-Quantify Impacts	Account for all <i>relevant</i> costs and benefits, including hard-to-quantify impacts.
Symmetry	Ensure symmetry across all relevant costs and benefits.
Forward-Looking Analysis	Apply a forward-looking, long-term analysis that captures incremental impacts of energy efficiency.
Transparency	Ensure transparency in presenting the analysis and the results.

Source: NSPM 3-Page Overview

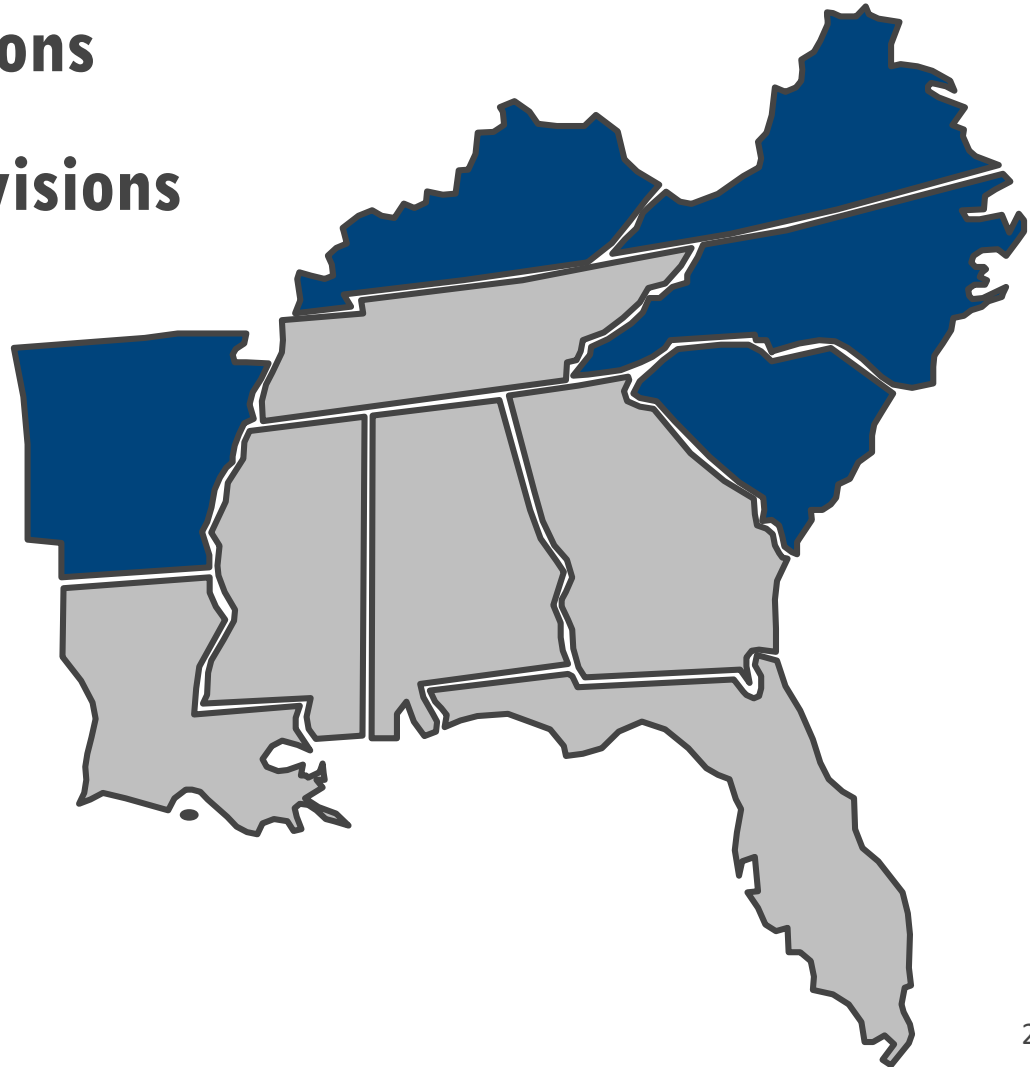
4. Integrated Resource Planning

-  **IRP Requirements in Place**
-  **Limited IRP Requirements**
-  **No IRP Requirements in Place**



5. Program Participation Policies

-  **Opt-out provisions**
-  **No opt-out provisions**



Industrial Opt-out

5. Program Participation Policies

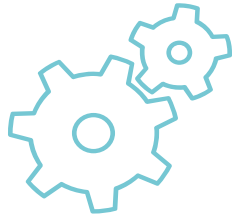
- Industrial opt-out
 - Allows large customers to opt-out of EE programs
 - May lead to a rise in system costs if industrial-level EE is not achieved
 - Avoidance of capturing industrial-level savings may require additional generation
- Commercial self-direct
 - Allows large customers to control some or all of their EE program fees
 - Often available for commercial customers that are too small to qualify for opt-out
- Tariffed on-bill (TOB) provisions
 - Allow utilities to recover the costs of installing EE measures via customer bills
 - Yields energy and economic savings for consumer; improves system reliability
 - South Carolina Code explicitly authorizes IOUs to implement TOB programs



Poll Question 2

Utility EE Planning Processes

EE and/or DSM Program Approvals

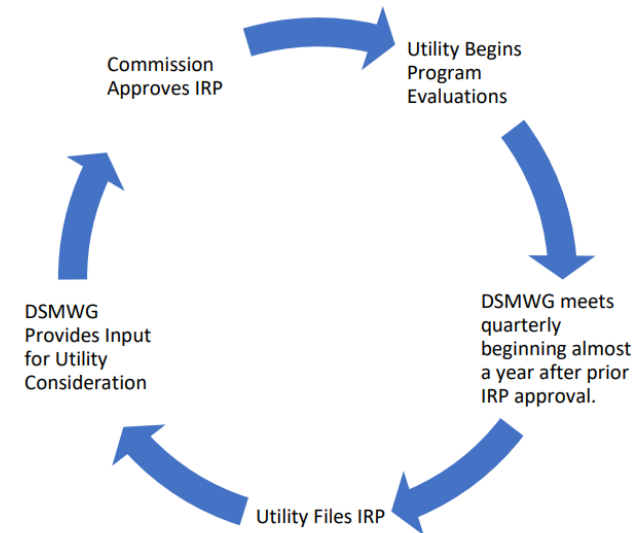


- EE/DSM programs generally approved in individual program or plan filings
 - Sometimes part of IRPs
- Common to require annual updates on programs
- Cost recovery rider approval is generally a stand-alone proceeding

Other common formal proceedings that affect EE include target-setting, avoided cost, rate riders, rate cases, and more.

Integrated Resource Planning

- **Arkansas** utilities undergo informal IRP every 3 years
- **Florida** utilities file 10-year site plans every 5 years
- **Georgia** files a 20-year plan every 3 years
- **Louisiana** utilities file 10-year plans every 4 years
- **Mississippi** just developed joint EE and IRP rules – after two IRP cycles, the Commission will evaluate the rules
- The **SC** Energy Freedom Act requires utilities to present multiple resource and cost scenarios, including scenarios with higher levels of energy efficiency and renewable energy, in their IRPs.
- **Virginia** IRPs forecast 15 years into the future with the goal of promoting “reasonable prices, reliable service, energy independence, and environmental responsibility”



Poll Question 3

Opportunities for Third-Party Engagement

Formal Proceedings



- **Public Hearings**

- **Arkansas** utilities facilitate Stakeholder Committee meetings throughout the IRP process and sets public hearings in EE Docket 13-002-U
- Formal proceedings in **Florida** typically allow for public input through hearings or written comments in FEECA goal-setting and DSM plan approvals
- **Georgia** allows for public comment on the first day of most proceedings
- **North** and **South Carolina** hold at least 1 public hearing during IRP process
- **Louisiana** requires that utilities hold 1 stakeholder meeting before IRPs are submitted and 1 meeting after the proposed IRP
- New **Mississippi** rules require 2 public workshops before the utility files IRP
- **TVA** solicits public feedback on its IRP through events allowing public participation
- **Virginia** mandates that the SCC give reasonable notice to the public for all proceedings

- **Party to a Proceeding**

- Parties with a demonstrated interest can intervene in formal proceedings

Other Means of Public Engagement

- Stakeholder Engagement/Working Groups

- Georgia develops EE/DSM portfolio with the DSM Working Group
- Arkansas Parties Working Collaboratively
- Duke Energy Progress/C Carolinas Stakeholder Group
- Virginia now requires Dominion & APCo to host stakeholder groups
- TVA Energy Efficiency Information Exchange & IRP Working Group

- Ex parte communications

- Informal, often educational, communications between commissioner & constituent
- Typically disallow the discussion of topics currently or soon to be before the Commission



Poll Question 4

Resources & Next Steps

- Go to Initiatives → Energy Efficiency Policy for State Utility Profiles
- Go to Resource Center for Quarterly Highlights and Archived Webinars

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FOR ALL.



BECOME A MEMBER



FIND A RESOURCE

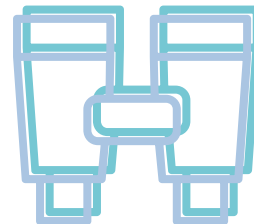


UPCOMING EVENTS

2020 Regulatory Outlook

- Florida DSM plans expected soon
- Georgia Power DSM WG kick-off for 2022 IRP
- Louisiana EE Final Rules anticipated; program plans to be filed
- South Carolina
 - Duke Energy Carolinas EE Rider filing by March 1
 - Duke Energy Progress EE Rider filing by August 1
 - Dominion IRP anticipated by March 1
- Dominion Virginia DSM final order expected in June

Stay tuned for more upcoming proceedings



Questions

Thank You

Email Emme at eluck@seealliance.org with additional questions or comments.



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