

# Georgia Plan Design Options

## Georgia Stakeholder Meeting

Atlanta, GA  
January 14, 2015

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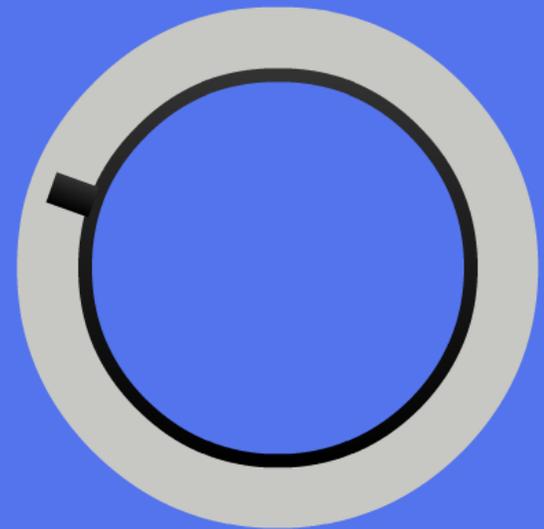


# Background

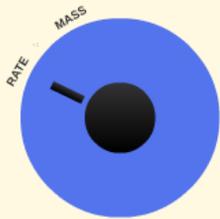
- Final rules for new, modified, existing sources summer 2015.
- State Plans Due 2016–2018
- Opportunity to Prepare

# Clean Power Plan

Plan design options



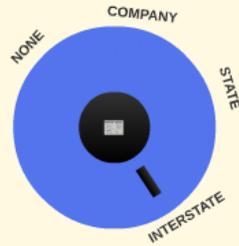
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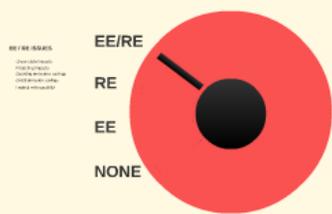
### Compliance Obligation



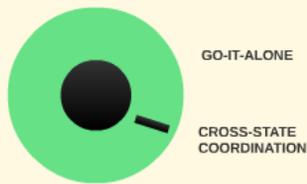
### Markets



### EE / RE



### State Coordination



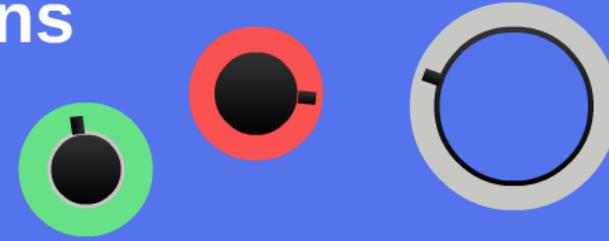
## State Values

- Reliability
- Low-cost power
- Fuel diversity
- Risk management
- Co-pollutant effects
- Legal authority
- Administrative ease



# Clean Power Plan

## Plan design options



### Portfolio

- Compliance obligation on EGU's and other units
- Other market participants (e.g., wind, solar, hydro, etc.)
- Only emissions in portfolio of regulated sources
- Dispatch of EGU's through FOC markets

### EGU Only

- Emission obligations on EGU's
- Compliance by other units
- Other market participants

NO

## Go It Alone

- Achievable state emission goals
- Simplicity
- Legal, political hurdles

### State Commitment

- Compliance obligation on EGU's and the state
- State goals not tied to EGU performance alone
- EGU's flexibly enter or exit the market
- State commitments are state enforceable
- State subject to others state plan modification

### REGIONAL PLAN

- State subject to inter-state system
- Regional compliance
- Substantial cross-state cooperation create distribution, including enforcement strategies, etc.

NONE

## State Coordination

- Grid is regional
- Impact of choices by other states
- Reduce compliance costs, Create revenue
- Credit cross-state impacts
- Reduce market volatility (e.g., price shocks)

### SERVICE TERRITORY

- Utility compliance system-wide
- Grants flexibility to EGU's in the system
- Flexibility for EGU's outside the service territory?

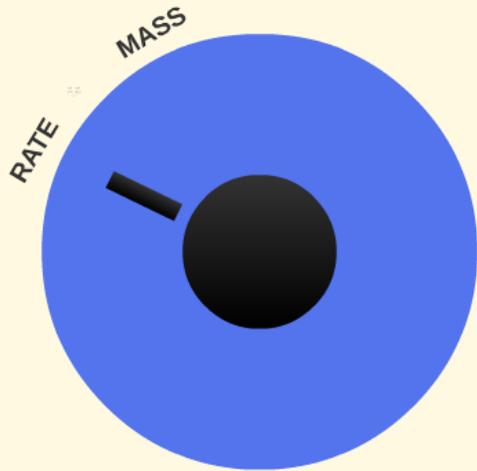
### COMMON ELEMENTS

- Substantial cross-state cooperation create distribution, including enforcement strategies, etc.
- Potential role for EPA

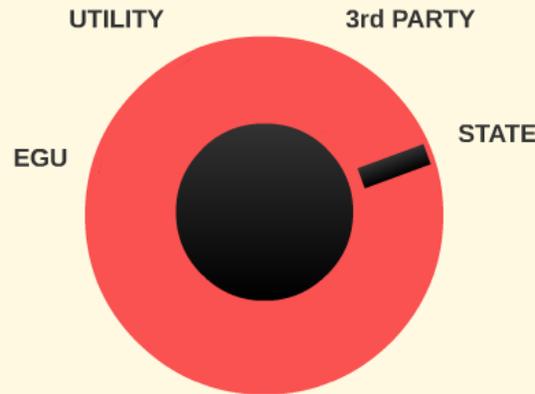
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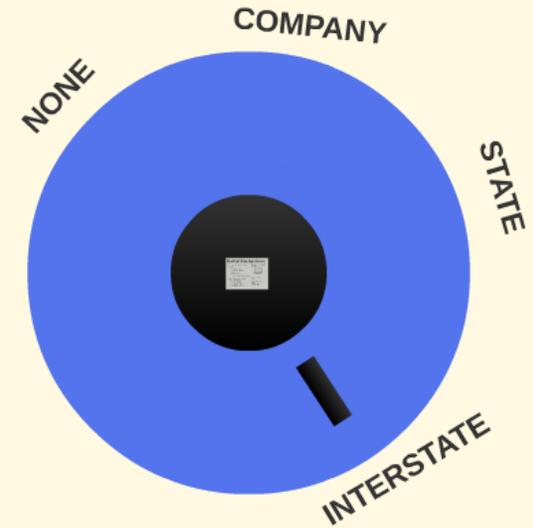
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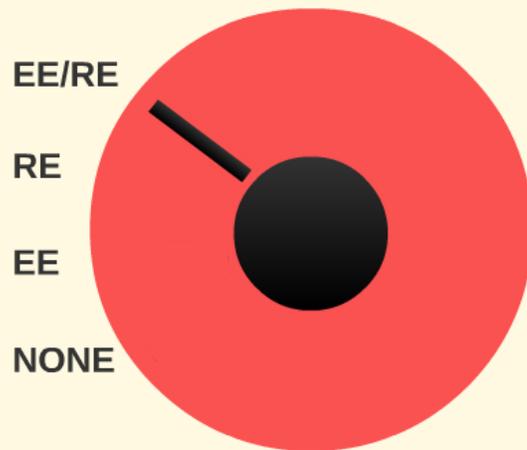


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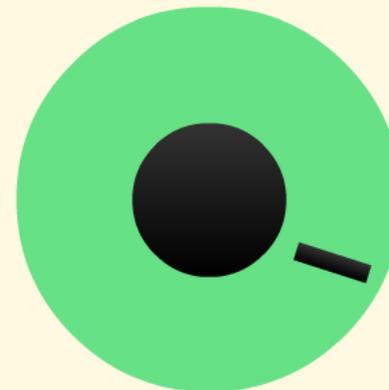


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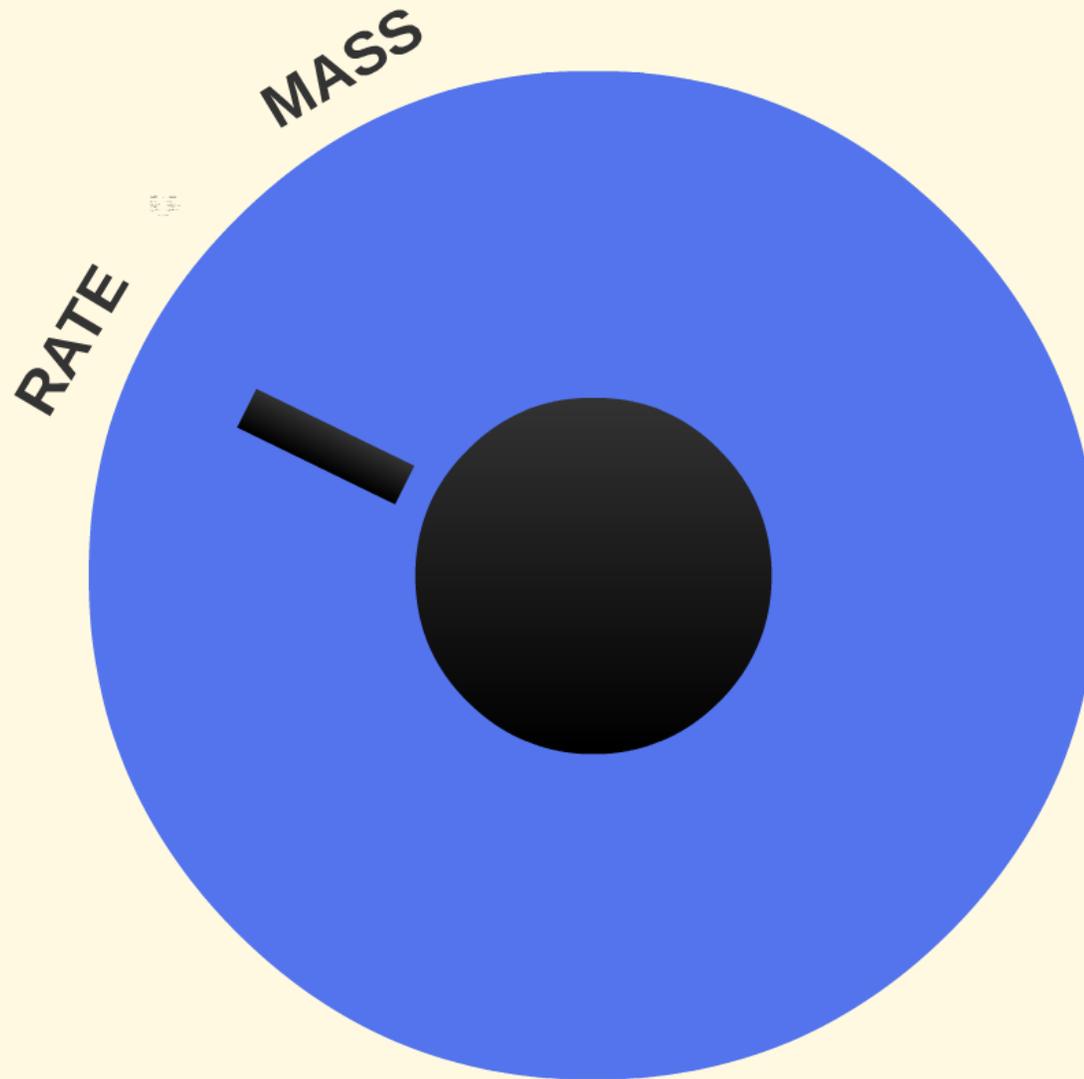
EE / RE ISSUES  
 Cross-state impacts  
 Projecting impacts  
 Counting emissions savings  
 Credit emissions savings  
 Federal enforceability



# State Coordination



# *Rate / Mass*



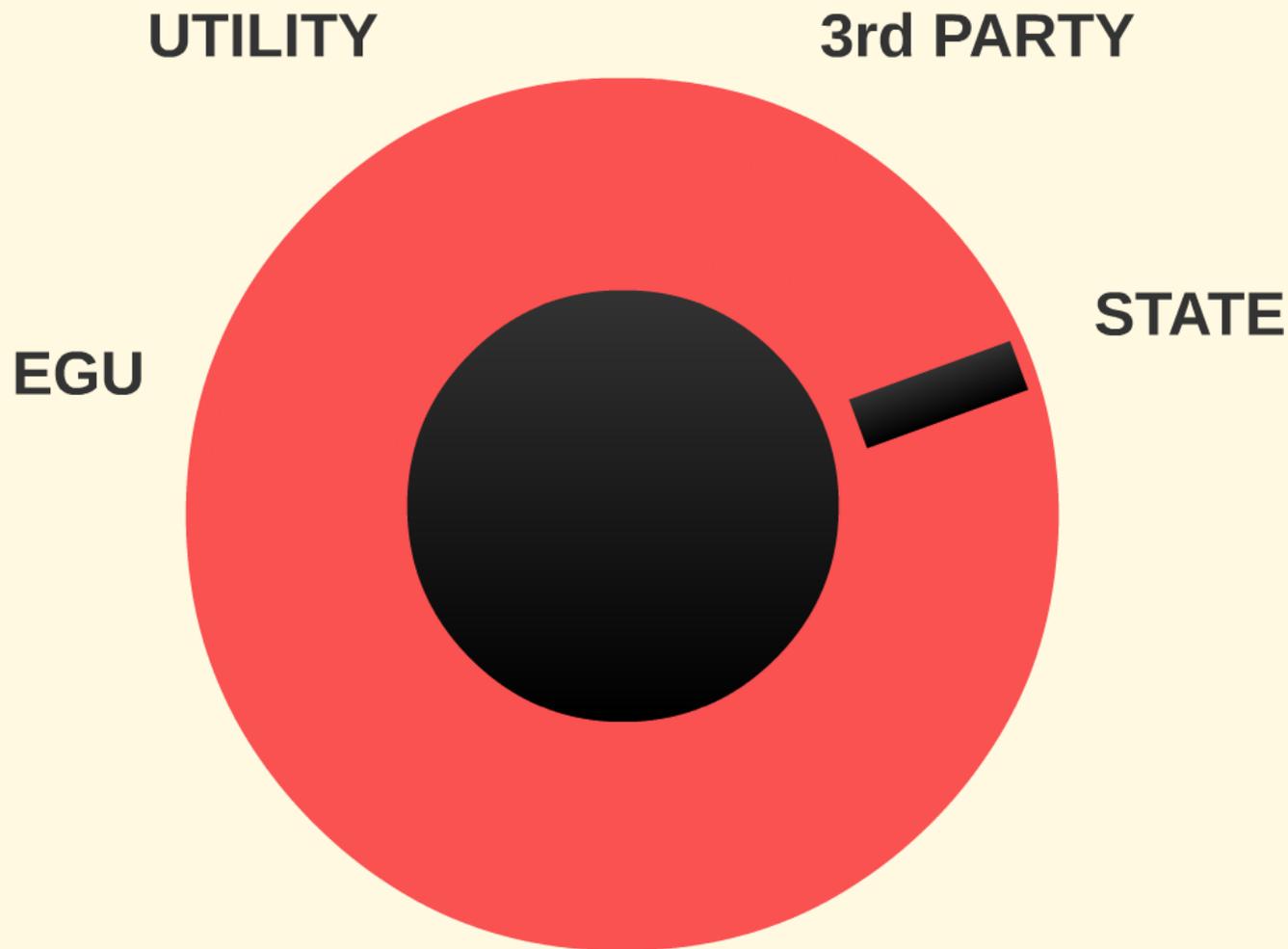
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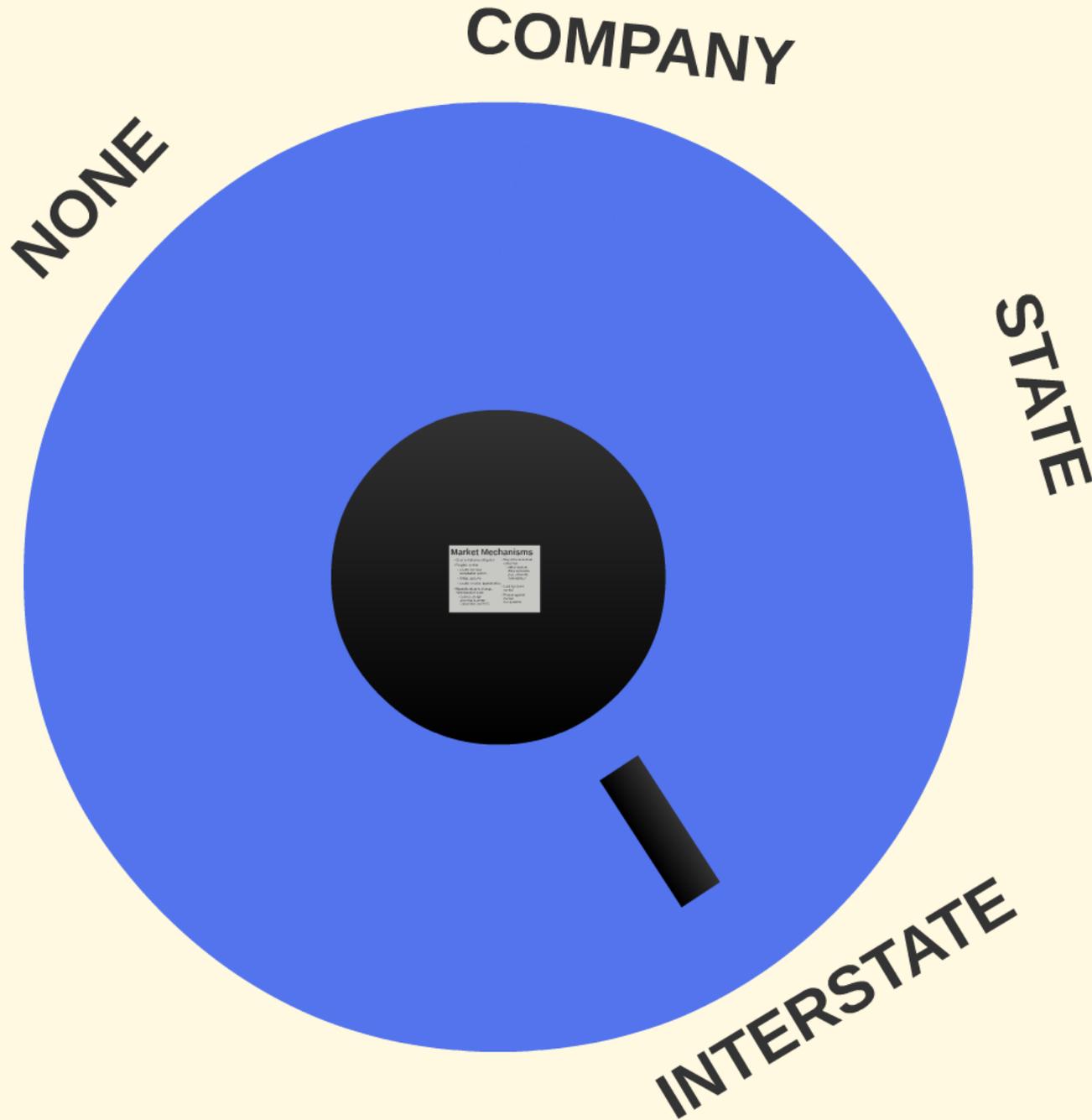
# MASS

- lbs. CO<sub>2</sub>/ MWh
  - Credits for EE/RE (EMV, projections, enforceability)
  - More administrative req'ts
- tons of CO<sub>2</sub>
  - Emission limit inherently accounts for EE/RE effects
  - Fewer administrative req'ts
- Role of new sources?

# *Compliance Obligation*



# Markets



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# Market Mechanisms

- Clear compliance obligation
- Fungible credits
  - *Create low-cost compliance options*
  - *Bridge systems*
  - *Create revenue opportunities*
- Naturally adapt to change, Administrative ease
  - *Leaves energy planning to power companies and PSC*
- May drive undesired outcomes
  - *Other tools to drive outcomes (e.g., diversity, renewables)*
- Less top-down control
- Protect against market manipulation

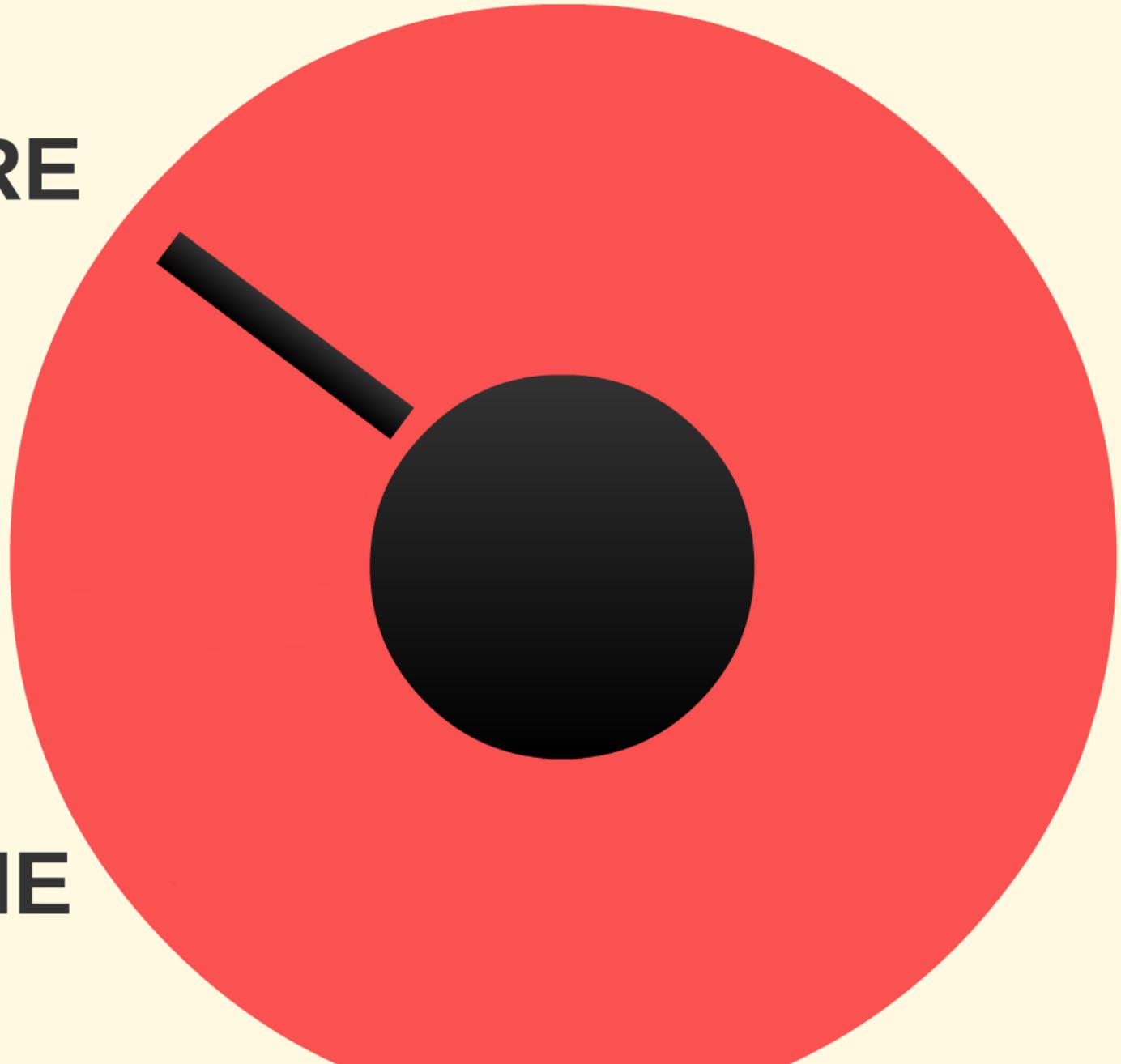
# *EE / RE*

**EE/RE**

**RE**

**EE**

**NONE**



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# EE / RE ISSUES

Cross-state impacts

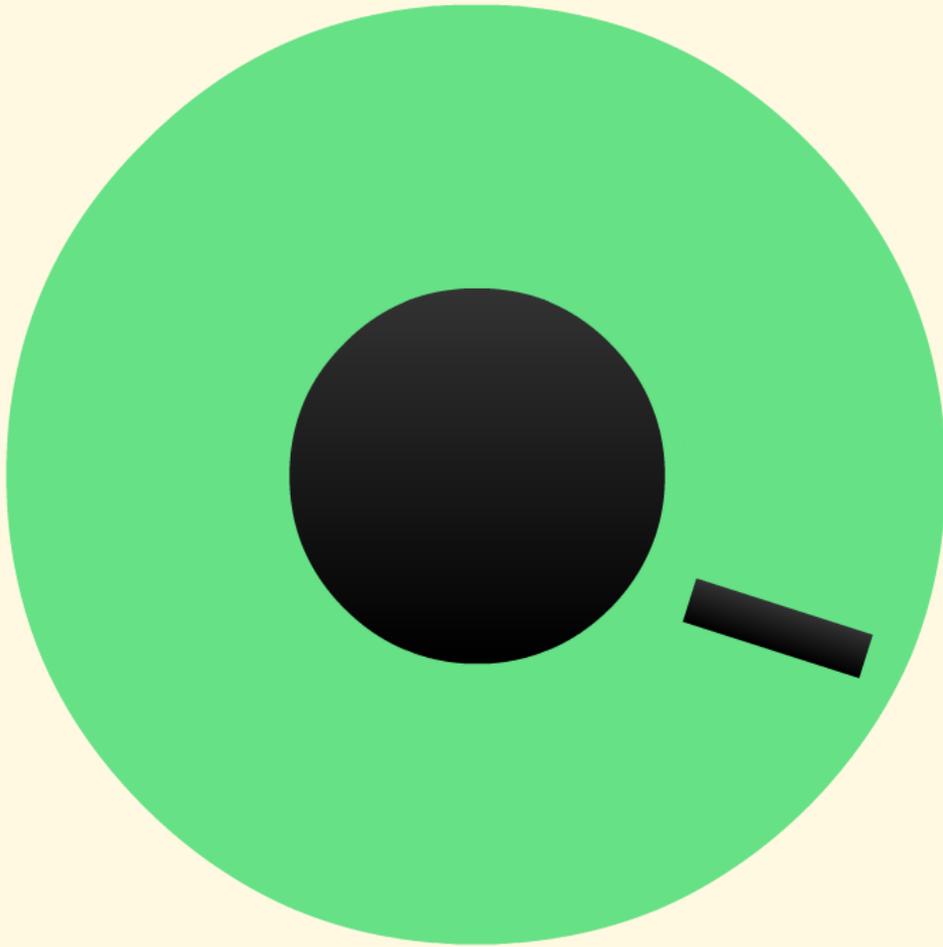
Projecting impacts

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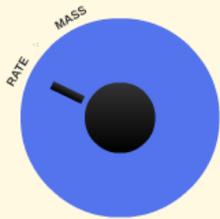
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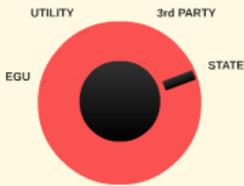
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**CROSS-STATE  
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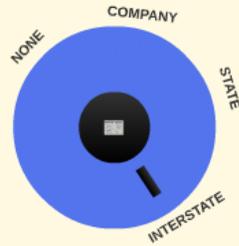
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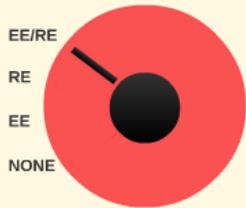


### Markets



### EE / RE

EE/RE ISSUES  
 • Over distribution  
 • Under distribution  
 • Quality of service  
 • Distribution losses  
 • Energy efficiency



### State Coordination



GO-IT-ALONE  
 CROSS-STATE COORDINATION

## State Values

- Reliability
- Low-cost power
- Fuel diversity
- Risk management
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- Legal authority
- Administrative ease



# Clean Power Plan

## Plan design options



### Portfolio

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### EGU Only

- Emission obligations on EGU's
- Compliance by other units
- Other market participants
- Other emissions targets

NO



## Go It Alone

- Achievable state emission goals
- Simplicity
- Legal, political hurdles

### State Commitment

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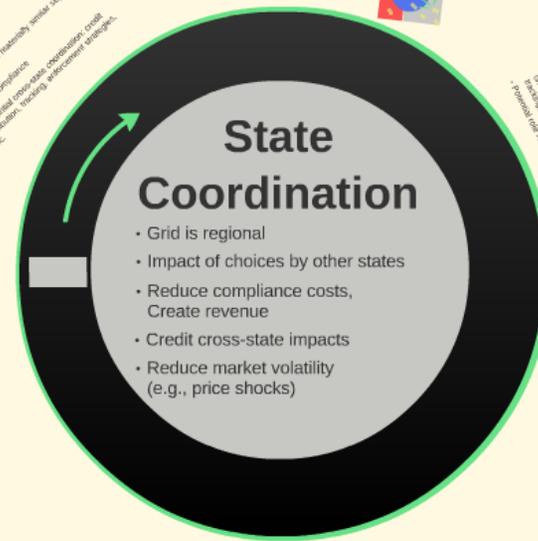
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### REGIONAL PLAN

- Some elements of reliability, similar systems
- Regional compliance
- Regional coordination, cooperation, create distribution, include enforcement strategies, etc.

NONE



## State Coordination

- Grid is regional
- Impact of choices by other states
- Reduce compliance costs, Create revenue
- Credit cross-state impacts
- Reduce market volatility (e.g., price shocks)

### COMMON ELEMENTS

- Emission obligations on EGU's and other units
- Compliance by other units
- Other market participants
- Other emissions targets
- Potential role for EPA



NO

## EGU only

- Entire obligation on EGUs
- Compliance by every EGU achieves state goals
- Clear enforcement target

## Portfolio

- Compliance obligation on EGUs and other entities
- State goals not met by EGU performance alone
- Other entities may include utility, power company, 3rd party EE administrator, agency
- Utility develops a portfolio of measures to meet emission targets
- Oversight of EGUs outside PSC purview

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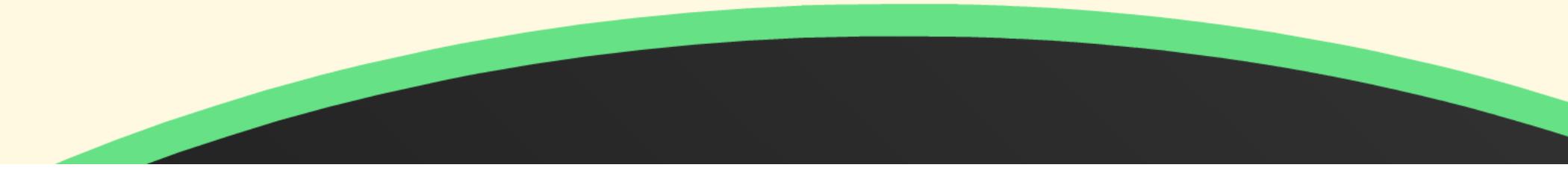
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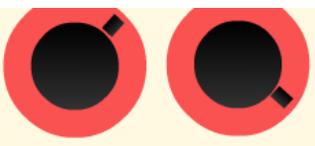
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- Joint submittal or materially similar separate plans
- Regional compliance
- Substantial cross-state coordination: credit distribution, tracking, enforcement strategies, etc.

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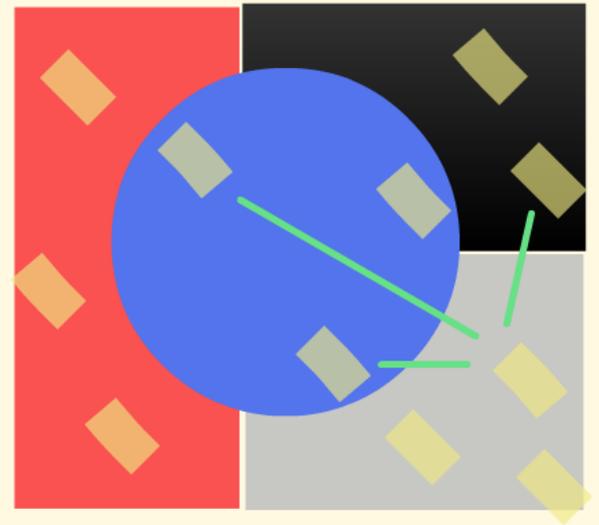


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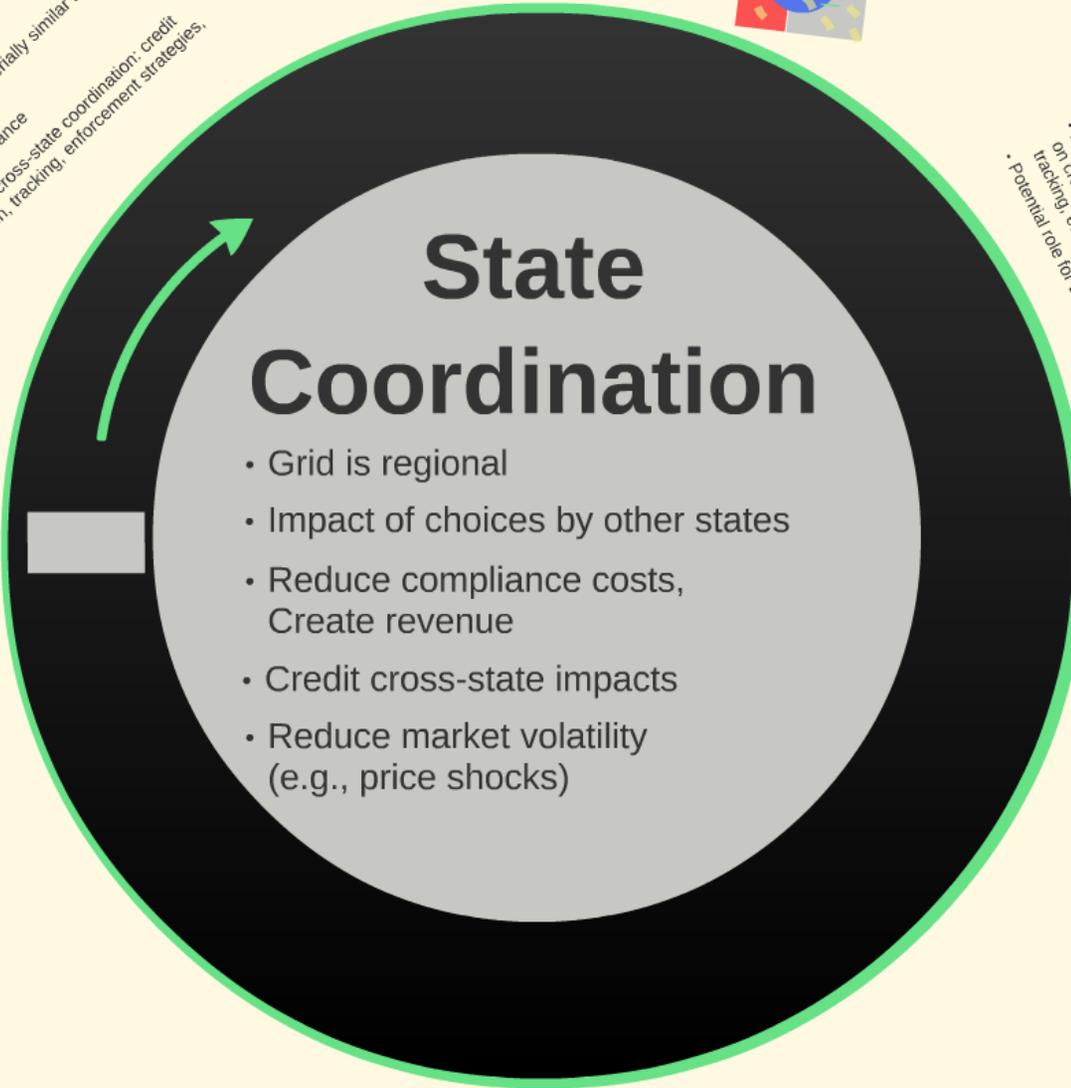


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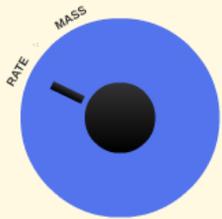
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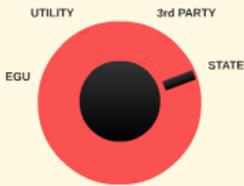
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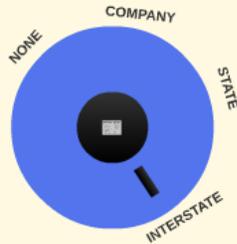
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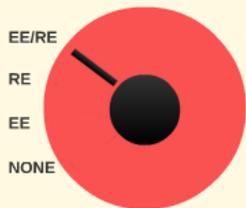


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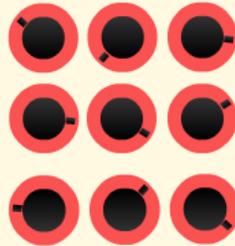
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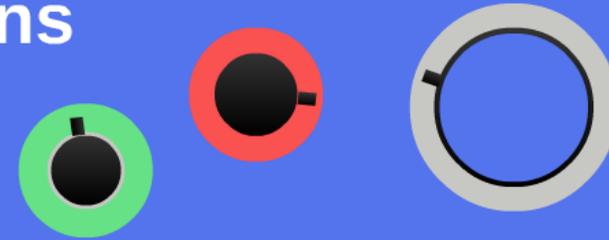
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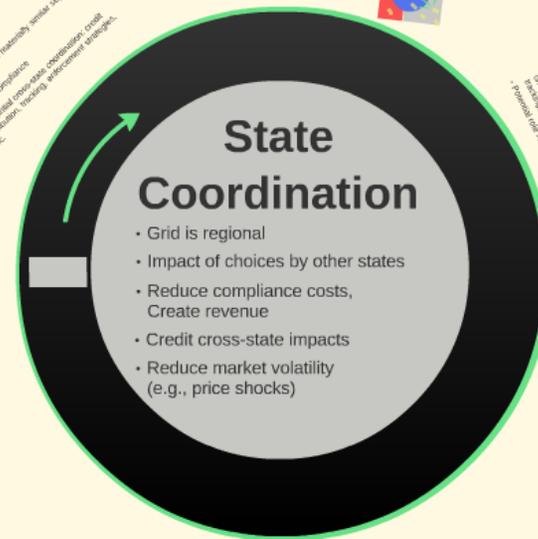
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