

# PERFORMANCE BASED REGULATION (PBR)

## STAKEHOLDER WORKGROUP MEETING #6

### VIRGINIA DEPARTMENT OF ENERGY

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**March 28<sup>th</sup>, 2025**



# STAKEHOLDER GROUP

- Advanced Energy United
- Appalachian Power
- Appalachian Voices
- Chesapeake Climate Action Network
- Clean Virginia
- Climate Action Alliance of the Valley
- Commission on Electric Utility Regulation
- Current Energy Group
- Data Center Coalition
- Department of Energy
- Department of Environmental Quality
- Dominion Energy
- Great Plains Institute
- Office of Attorney General
- Old Dominion Committee for fair Utility Rates
- Natural Resources Defense Council (NRDC)
- New Virginia Majority
- NRG Energy
- Pacific Economics Group Research LLC
- Pacific Northwest National Laboratory
- Plan RVA
- Regulatory Assistance Project (RAP)
- Rocky Mountain Institute (RMI)
- Secure Solar Futures
- Sierra Club Virginia Chapter
- Solar United Neighbors
- Southern Environmental Law Center VA
- The Nature Conservancy
- The Virginia Grassroots Coalition
- Virginia Association of Counties
- Virginia Energy Consumer Alliance
- Virginia Energy Purchasing Governmental Association
- Virginia Committee for Fair Utility Rates
- Virginia League of Conservation Voters
- Virginia Manufacturers Association
- Virginia Municipal League
- Virginia Organizing
- Virginia Poverty Law Center



# AGENDA

## Meeting #6

- Welcome
- Summary of responses to Survey #2
- Regulatory Assessment
  - Summary of the responses
  - Discussion
- Final comments and Exercise
- Next Steps and Closing



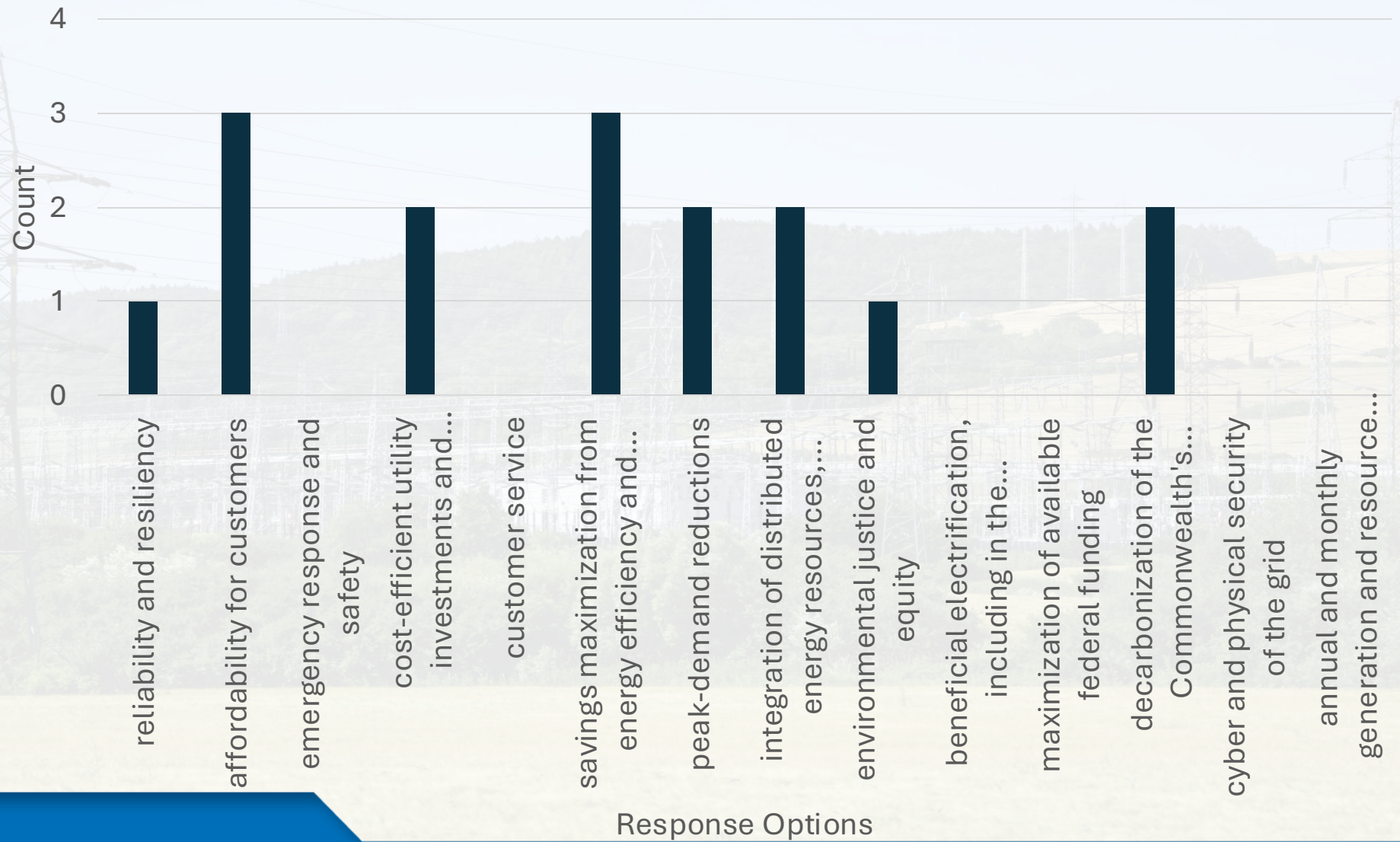
# SURVEY #2

## REFLECTIONS ON EMERGING INTERESTS REGARDING POTENTIAL APPLICATION OF PBR AND ALTERNATIVE RATEMAKING MECHANISMS IN VIRGINIA. RESPONSES

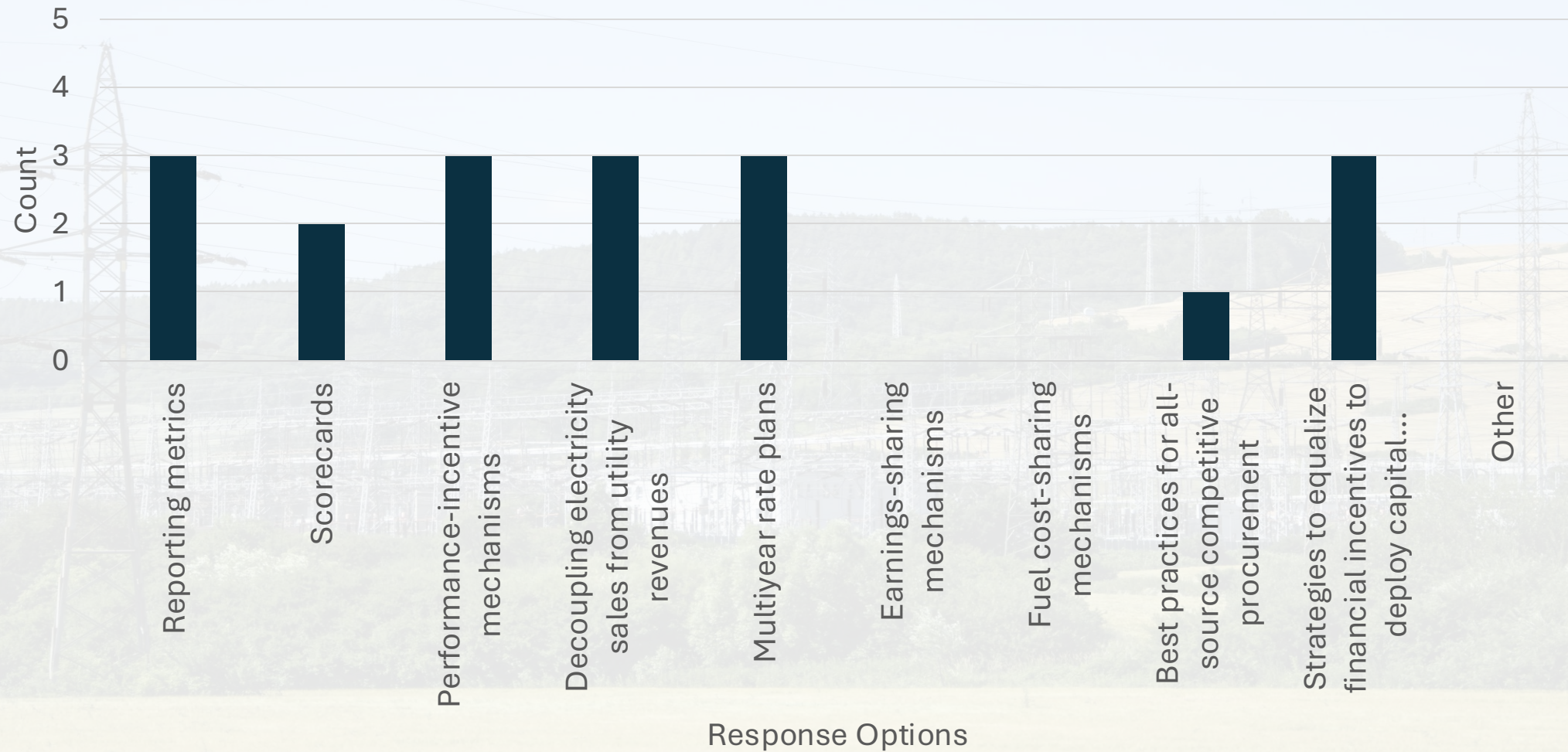
### Performance Areas in Legislation

Electricity decarbonization
Savings maximization from energy efficiency and exceedance of statutorily required savings levels
DER integration and speed of interconnection
Beneficial electrification
Environmental justice and equity
Affordability for customers
Peak demand reductions
Cost-efficient utility investments and operations
Reliability and resiliency
Emergency response and safety
Cyber and physical security of the grid
Annual and monthly generation and resource needs in addition to hourly generation and resource needs on the 10 hottest and coldest days of the year
Customer service
Maximization of available federal funding

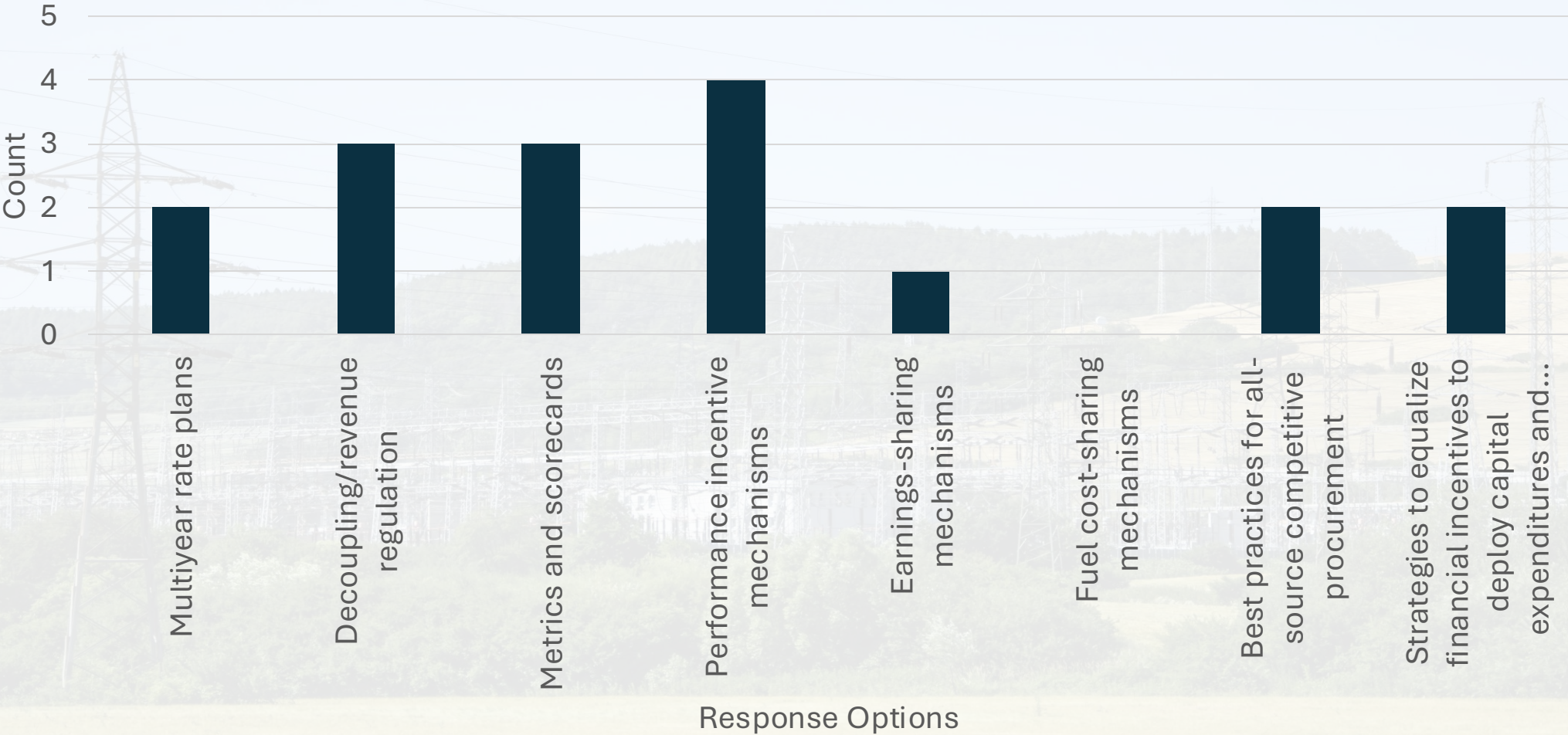
Which of the following performance areas do you think need attention in Virginia and might be addressed by implementing PBR or alternative regulatory tools? (select up to 3)



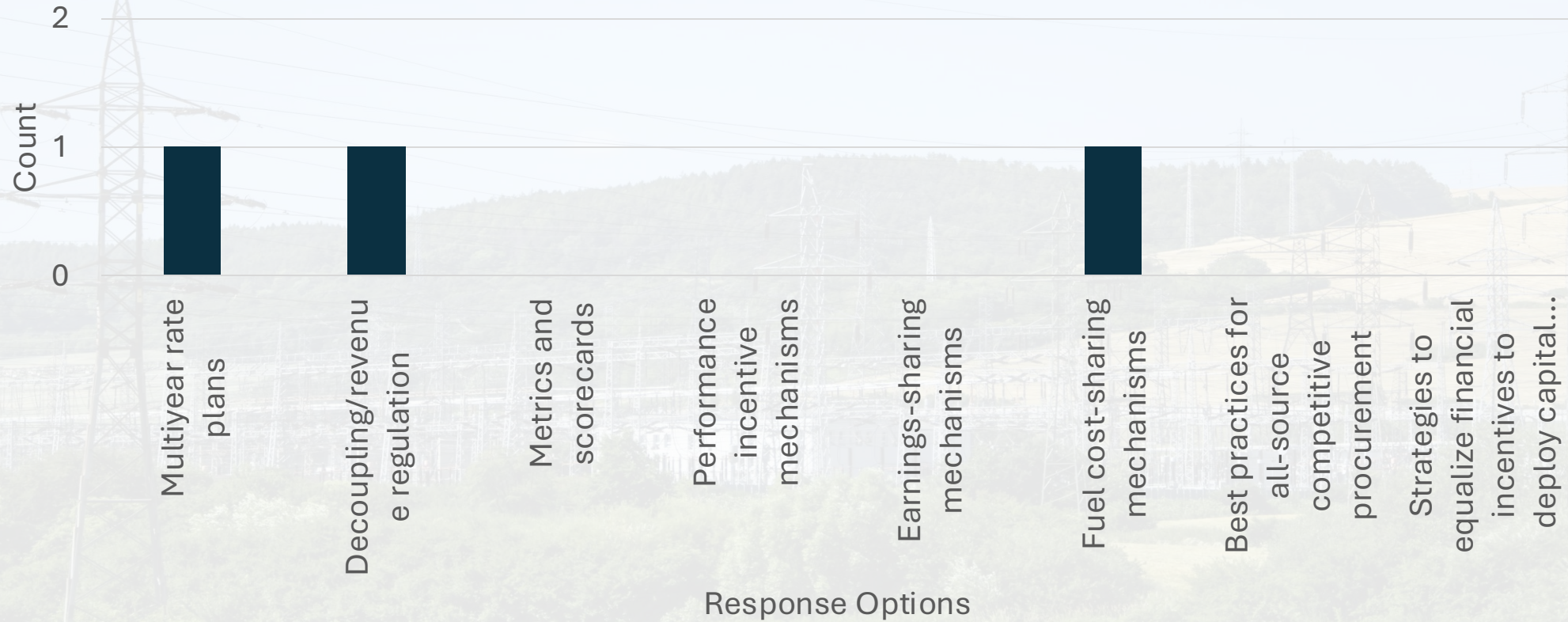
Which of the PBR mechanisms discussed in Workshop 5 do you want to learn more about? (select up to 3)



Which PBR tool(s) or other alternative ratemaking mechanism(s), if any, do you think could improve regulatory outcomes for Virginia’s electric utilities?



Which of the PBR mechanisms discussed in Workshop 5 do you think might not be suitable for Virginia's electric utilities? (Select upto 2)



# REGULATORY ASSESSMENT RESPONSES

## Summary



# REGULATORY ASSESSMENT RESPONSES

## Total Responses

22

## Total Responding Organization

11

Performance Areas Evaluated by Respondents

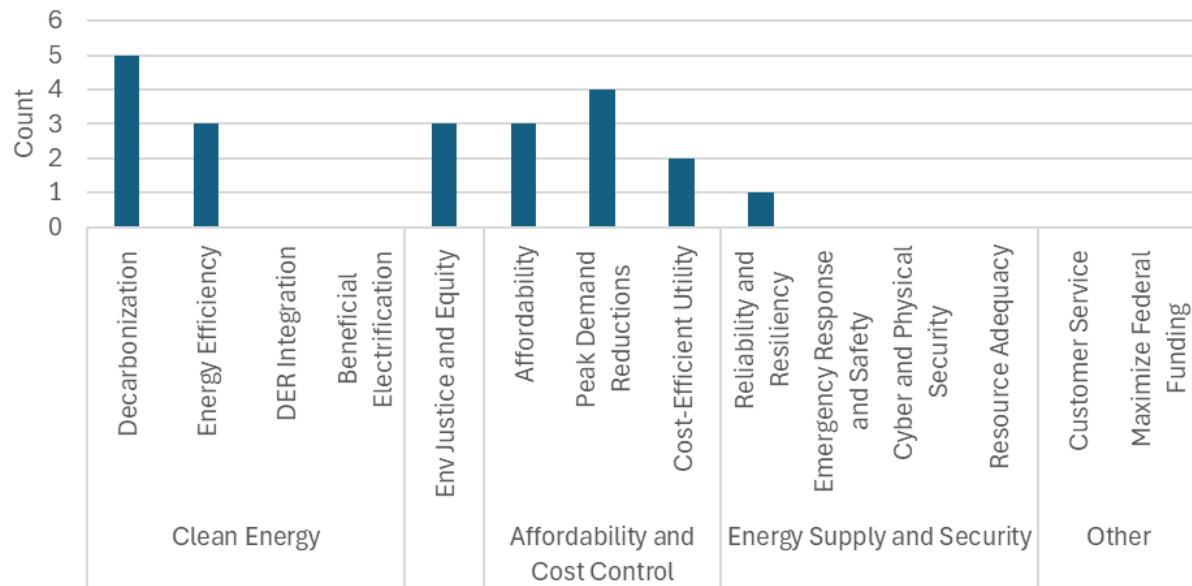


Chart Labels	Performance Areas in Legislation
Decarbonization	Electricity decarbonization
Energy Efficiency	Savings maximization from energy efficiency and exceedance of statutorily required savings levels
DER Integration	DER integration and speed of interconnection
Beneficial Electrification	Beneficial electrification
Env Justice and Equity	Environmental justice and equity
Affordability	Affordability for customers
Peak Demand Reductions	Peak demand reductions
Cost-Efficient Utility	Cost-efficient utility investments and operations
Reliability and Resiliency	Reliability and resiliency
Emergency Response and Safety	Emergency response and safety
Cyber and Physical Security	Cyber and physical security of the grid
Resource Adequacy	Annual and monthly generation and resource needs in addition to hourly generation and resource needs on the 10 hottest and coldest days of the year
Customer Service	Customer service
Maximize Federal Funding	Maximization of available federal funding



# ELECTRICITY DECARBONIZATION

## Overall

Fuel Cost Recovery RAC does not promote decarbonization as carbon emitting fuel costs are borne by customers

RPS compliance costs through deficiency payments are merely a pass-through to ratepayers and do not incentivize decarbonization

The VCEA framework is relatively new. Due to how new the legislation is additional time is needed to see how the program influences APCo and Dominion going forward.

Latest IRP demonstrates that there is still incentive within the system to build new gas-fired generators without consideration to demand side management and energy efficiency

Utilities' pursuit of decarbonization in the form of energy efficiency and increased renewable generation ultimately disincentivizes decarbonization as it drives up energy costs and results in carbon leakage from the manufacturing sector, which harms the EITE sector relying on high and stable energy consumption to sustain its production processes.

## IRPs

2024 IRP did consider certain policies that reduce carbon emissions, such as the VCEA, the RPS, and the EPA 111(b) and 111(d), or the possibility of VA rejoining RGGI, or beginning a different carbon allowance program by 2030

more of a reporting exercise than a true plan

## Performance adjustments--EE target

results in greater energy savings by the utility company, lowering its carbon emissions

current construct does not appear to incent achievement or overachievement for all utilities

## RACs--General

Cost trackers or RACs overall do not provide an incentive to reach decarbonization but can weaken rate containment

## RACs-- Fuel Cost recovery

lack of a disincentive to penalize overuse of carbon emitting fuels

IOUs have no incentive to use less fuel. This can result in using more carbon-based fuel.

## RACs – RPS Compliance

Deficiency payments in § 56-585.5 are permitted to be passed through to ratepayers which at best is neutral

## RACs-- Capital Costs

If the utility pursues a carbon-emitting capital project (ex. combined cycle gas or combustion turbine) for higher ROE, it serves as a negative. Similarly, if a utility can earn more value for shareholders by pursuing zero-carbon capital projects such as onshore wind or solar, it serves as a neutral or slightly positive mechanism.

RACs for combined cycle gas and gas peaker plants directly disincentivize electricity decarbonization.

If the cost of capital projects were recovered in the rate base, the risk of recovering the cost would fall more to the Company, and less to the ratepayers.



# PEAK DEMAND REDUCTIONS

## Overall

Current structure and the high use of RACs have little impact

Current peak demand riders are effective when customers choose to participate and result in cost savings. Largely out of utilities' control since DSM and peak shaving programs are voluntary.

## ROE Determinations

Currently, ROE determinations justify capital investments in expensive carbon-emitting generation resources.

Lends itself to gold-plating investments and seeking ever increasing load growth

ROE greater than the cost of borrowing creates a capital bias for utilities

## Rate Reviews

There are currently earnings adjustments opportunities related to: reliability, generating plant performance, customer service, and operating efficiency.

Backward-looking earnings adjustments in VA does not impact peak demand reduction

No DR mechanisms in base rates

Lack of a decoupling mechanism in between rate cases creates a disincentive for the utilities to invest in energy efficiency

## RACs--General

Disincentivize cost containment by allowing utility to recover costs outside of base rates.

Should only be permitted to account for unforeseen costs that were reasonably incurred (not planned capex)

Need to evaluate whether utilizing the RACS available would collectively tend toward achieving VCEA goals and mandates generally

VA has a DR RAC for high-energy customers

Increases utility capital bias through infrastructure investments over energy efficiency and demand response

## RACs-- Fuel Cost recovery

Lack of a disincentive to penalize overuse of carbon emitting fuels... allows the utilities to continue to choose higher cost carbon emitting generation [which] generate a higher ROE... rather than pursuing energy efficiency or demand response

fuel cost recovery approach does not have a direct impact on this outcome



# ENERGY EFFICIENCY

## Overall

Current regulatory framework does not promote maximization of energy efficiency.

Overwhelmingly favors capital projects

Dominion Energy Virginia did not meet its 2022 EERS target.

Utility performance is undercut by the

- throughput incentive
- low threshold for approving new RACs
- Their negative impact on cost savings for customers

## RACs--Fuel Cost Recovery

Lack of disincentive to penalize the overuse of carbon-emitting fuels for utilities.

Higher ROE utilities incentivizes carbon-emitting generation

## Performance adjustments--EE target

Increased energy saving at IOUs compared to before the targets began in 2022.

Neither the positive performance incentive (ROE adder) or the disincentive for underperformance that bars capital investments in new power plants are sufficient to meet the EERS targets

The 20 basis point adder for Phase 1 and Phase 2 utilities per 0.1% exceeding their EERS targets is an example of a positive PIM.

## RACs--General

Can weaken overall rate containment

Nothing inherently +/- about RACs.

The RACs for capital projects and fuel cost recovery dwarf the impact of the other RACs.

## RACs--Capital Projects

Capital projects incents create a very strong disincentive to maximize energy efficiency and demand response. This is especially strong for large, expensive new generation.

No positive incentives or negative disincentives for utilities to make more cost-effective fuel investments for power generation facilities or utilize energy efficiency investments to help meet energy demand with more financial prudence.

## IRPs

Neither incentivizes nor disincentivizes

more of a reporting exercise than a true plan.

Retirement of carbon emitting facilities by 2045/2050 and meeting annual EERS targets should be a minimum requirement.

The most recent IRP in its projections did take EERS into account but with no further investment in energy conservation or demand response.

EERS can be back-seated as a priority resource alongside other resources that generate more revenue and profit for electric utilities and do not undercut electric sales.



# AFFORDABILITY

## Overall

Riders and adjustment clauses, together with increases in the fuel factor, have made up the vast majority of rate increases to residential customers

The ability of a utility to spend and recover costs must be tied to the explicit approval of a specific resource by public stakeholders and the Commission through a cost/benefit and prudence review

Offers weak financial incentives

Extensive use of RACs and frequent biennial reviews may appear to increase accountability, but shields utilities from market-like incentives to keep prices low and disproportionately shift business risk from utility shareholders to customers.

## Rate Reviews

Frequent rate cases erode cost-containment incentives for the utility and increase regulatory burden

## Performance adjustments--EE target

Substantial evidence and applications show that energy efficiency gains can prevent the need for costly infrastructure projects. To the extent that energy efficiency programs are cost-effective, incentivizing the expansion of this resource would benefit affordability

## RACs

A majority of the rate hikes in Virginia are being processed through a style of ratemaking that does not subject these rising costs to the basic incentives of traditional utility regulation.

## RACs--General

Cost trackers erode a utility's incentive to control costs because the utility is allowed to reconcile revenues to actual costs each year.

## RACs-- Fuel Cost recovery

The current recovery of fuel costs allows for recovery on a dollar-for-dollar basis with no return available to the utility.

These do not provide any cost containment incentives since costs are automatically trued-up and passed on to customers.

## RACs-- Capital Projects

Using riders for a multitude of capital projects is not as common in other jurisdictions as in Virginia.



# REGULATORY ASSESSMENT RESPONSES

## Discussion

- Understand the perspectives on the mechanisms
- Identify alignment or divergence in stakeholder perspectives
- Begin to consider the appropriate PBR solutions



# RATE ADJUSTMENT CLAUSES (I.E., TRACKERS)

## RACs Assessment Areas

RACs overall (general assessment of the use of RACs)

Fuel Cost Recovery

Purchased power

Demand response program costs

RPS compliance costs

Broadband capacity extension

Low-income programs (lost revenue recovery)

Capital projects (e.g., combined cycle gas projects, offshore wind, solar, distribution system undergrounding, distribution grid transformation, nuclear life extension, etc.)

Other trackers (user choice to select additional trackers used in Virginia rate making for attention)



# RACS [OVERALL]

## Overall

RACs disincentivize cost containment, equity-focused efforts and decarbonization and undermine affordability because:

- they allow the utility to recover costs outside of what's permitted in base rates.
- rider structure and utilization in Virginia provides rider recovery for specific projects, a cost which would in other jurisdictions often fall into base rates
- generally keeps costs higher than necessary for all households

The RAC structure disincentivizes minimizing unnecessary investments that could have been avoided through more cost-conscious planning that prioritizes peak demand reduction, clean energy, load flexibility, non-wire alternatives and grid-enhancing technologies.

Overall, the impacts of RACs for capital projects and fuel cost recovery dwarf the impact of the other RACs.

Disincentivize equity-focused efforts like decreasing energy burden costs for overburdened households

RACs can thwart utility innovation. They tend to multiply, once a utility begins to use RACs.

## Issue for Attention

Need to evaluate whether utilizing the RACS available would collectively tend toward achieving VCEA goals and mandates

Bringing operating and capital expenditures into a single ratemaking mechanism creates an incentive for efficient business decisions

Tracking mechanisms should only be used for a very limited set of costs that are outside of a utility's control and strategic investments.

To ensure that customers can maximize the energy efficiency measures to reduce their energy costs and support decarbonization, it is critical for the SCC to

- reduce # of RACs that electric utilities have accumulated and roll those RACs into base rates
- consider a strong threshold with very specific criteria for the approval of any proposed RACs going forward to abate energy savings provided by energy efficiency or other alternative and performance regulations being undercut or completely diminished.
- limitations on the rate impact of RACs
- filling and legislative requirements,
- expectations to conduct consumer impact analyses per RAC
- on-bill rider comparisons
- retiring approved RACs into base rates
- special evaluation procedures for RACs, as well as rate analyst publications from the utility regulator.



# ENERGY EFFICIENCY SAVINGS TARGETS

## Overall

The current construct does not appear to incentivize achievement or overachievement for all utilities in Virginia.

Demand response could have benefits on energy efficiency

The 20-basis point adder for Phase 1 and Phase 2 utilities per 0.1% exceeding their EERS targets is an example of a positive PIM.

The EE target results in greater energy savings by the utility company, lowering its carbon emissions.

Dominion Energy has underperformed under the EERS and failed to meet the required EERS targets. Neither the positive performance incentive (ROE adder) or the disincentive for underperformance that bars capital investments in new power plants are sufficient for making the electric utilities simply meet the EERS targets let alone supersede them.

APCo could be doing more direct outreach to assist the LMI households most in need.

In theory optimizing and maximizing EE should lead to better EJ and equity outcomes.

The ability to earn a return on energy efficiency costs helps to offset the utility's throughput incentive and capital bias, creating an incentive for DSM programs that is not based on the amount of money spent may help to avoid the creation of an incentive for the utilities to inflate their DSM budgets, which will unnecessarily increase costs to customers

## Issue for Attention

Dominion has not met its EE targets and APCo may not meet its 2025 target, so the current EERS PIM may be insufficient

The ability to earn a return on energy efficiency costs helps to offset the utility's throughput incentive (aka lost revenues) and capital bias.

Since the financial reward is calculated based on the utility's energy efficiency program costs (operating expenses), this framework might reward greater program spending, rather than rewarding the utility for implementing the most cost-effective energy efficiency measures.

Understanding the materiality of incentive, what's "enough" to encourage utility action seems important here.

Though the ROE for op-ex and cap-ex have been equalized for energy efficiency programs, it does not appear to be enough to overcome the strong preference for building out new generation over maximizing energy efficiency.

How well meaningful energy efficiency improvements are reaching EJ communities and LMI households should be measured and assessed.

Other tools could include: 1) penalties for under-achievement and 2) requesting a report of performance metrics and improvement targets for customer awareness of and enrollment in energy efficiency programs.



# PERFORMANCE MECHANISMS

## Overall

Metrics and scorecard would be informative.

Too early to determine if the PIMs associated with PUR-2023-00210 will provide any benefits associated with decarbonization

The existing ROE adder applied to DSM operating expenses is not sufficient to incentivize the outcome of maximizing energy efficiency savings

Construing the four performance areas narrowly will likely limit real movement toward environmental justice outcomes, as the construct traditionally utilized to evaluate generating plant performance, reliability, customer service, and operating efficiency does not reflect contemplation of impacts and, in particular, harms to certain communities.

Metrics and scorecard utilization may present an opportunity for the design, review, and implementation of initiatives such as grid modernization to be informed by and consider environmental justice and equity-based metrics and impacts.

## Issue for Attention

Setting benchmarks and goals for achievement could be meaningful to understand the potential impacts of peak demand reduction.

PIMs should be implemented in Virginia alongside incentives to control the costs associated with meeting the PIM targets.

The total value of potential PIM rewards plus the utility's base ROE should not be excessive, or the utility will have a stronger incentive to expand its rate base

PIMs need to be implemented in combination with metrics and scorecards that are available for the public to view.

Metrics and PIMs with positive and negative basis point adjustments associated with total GHG reduction as well as total lead and mercury reductions should be explored.

Beneficial electrification of HVAC equipment, EVs, agriculture and other sources as measured in a reduction of sector based GHGs could also be explored as a metric with associated adjustments as is in place in Hawaii, New York and Colorado.

Another SCC Docket contains several metrics (including operating efficiency and generating plant performance) that could lower carbon dioxide emissions if finalized and used to determine basis points.

Additional negative penalties for not meeting EERS targets as established by the SCC should be considered.



# BACKWARDS-LOOKING RATE REVIEWS

## Overall

No demand response mechanisms in base rates

There are currently earnings adjustments opportunities related to: reliability, generating plant performance, customer service, and operating efficiency. This backward-looking earnings adjustment does not seem to impact the achievement of modest outcomes currently associated with each category and of peak demand reduction

The utilities did not all meet the initial benchmarks established, even with the incentive in place

The earning test measures earnings of utility over a 13-month historic period.

No incentives in base rates

If tied with appropriate metrics, this could potentially be an effective mechanism to incent decarbonization.

Disincentivizes achieving environmental justice and equity to the extent basis point adder consideration does not establish a baseline of meeting existing policy goals first

Backward-looking cost of service regulation and the need for prudent spending leads utilities to stick to what it knows is acceptable to the regulator.

## Issue for Attention

This is an example of an incentive meant to increase decreased usage that has not yielded the desired results across the board.

Need to consider whether utilities should be incentivized to achieve what is already required by the law or whether incentives should only be attached to exceeding legal requirements. Compliance with the law should not need to be incentivized, but failure to, should be penalized.

It will be important to revisit incentives for peak demand reduction and energy efficiency in the earnings test if an MRP framework is developed.

If there were some incentive associated with earnings adjustment that related to the procurement of as much low-cost clean energy as possible, backward-looking earnings adjustments might incentivize decarbonization.

Rate incentives (or penalties) could be used at the rate review to address the level of fullness in compliance with the VCEA that the utility achieved in the last period.

Current two-year rate period dampens any cost control signal from the earnings sharing mechanism for both APCo and Dominion because the utility would only get extra earnings delivered from possible cost efficiencies for one year until rates are reset in the next biennial rate review.



# PBR ASSESSMENT EXERCISE



# NEXT STEPS



# NEXT STEPS

## Timeline :

- Ongoing open public comment period until 11<sup>th</sup> April.
- PBR Assessment Exercise due on 11<sup>th</sup> April.
- Department of Energy Report to SCC due on 9<sup>th</sup> May.



# NEXT STEPS

## Future Meetings :

- Stakeholder Group Meeting #7 is scheduled for 10th April from 1 pm – 4 pm
  - RMI overview of current performance mechanisms
  - Discussion on carbon leakage
  - Discussion on regulation of competitive service providers
- Stakeholder Group Meeting #8 is scheduled for 22nd April from 1 pm – 4 pm
  - Review the draft report

