

MAKING A STATE 111(d) PLAN TRADING READY



Franz Litz, Litz Energy Strategies LLC
Stacey Davis, Senior Program Manager

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AGENDA FOR APRIL 29TH

- Welcome & Introductions
- Update on Activities
 - Midcontinent States Environmental & Energy Regulators
 - Regional Stakeholder Workshop June 5th in Detroit
 - Other updates?
- Recap of Steps in the Stakeholder Process
- Summary of Results from Informal Poll
- Making a State Plan Trading Ready
- Next Steps

RECAP & UPDATE ON ACTIVITIES

- Stakeholder “Kickoff” on February 20th
 - *What should the state’s objectives be in developing a 111(d) plan?*
- Webinar March 12th Webinar
 - *Key threshold consideration: take a rate- or mass-based approach? Rate to mass conversion.*
- Meeting March 18th
 - Survey of Policy Pathways
- Webinar April 15th with MISO

OBJECTIVES AND THRESHOLD CONSIDERATIONS

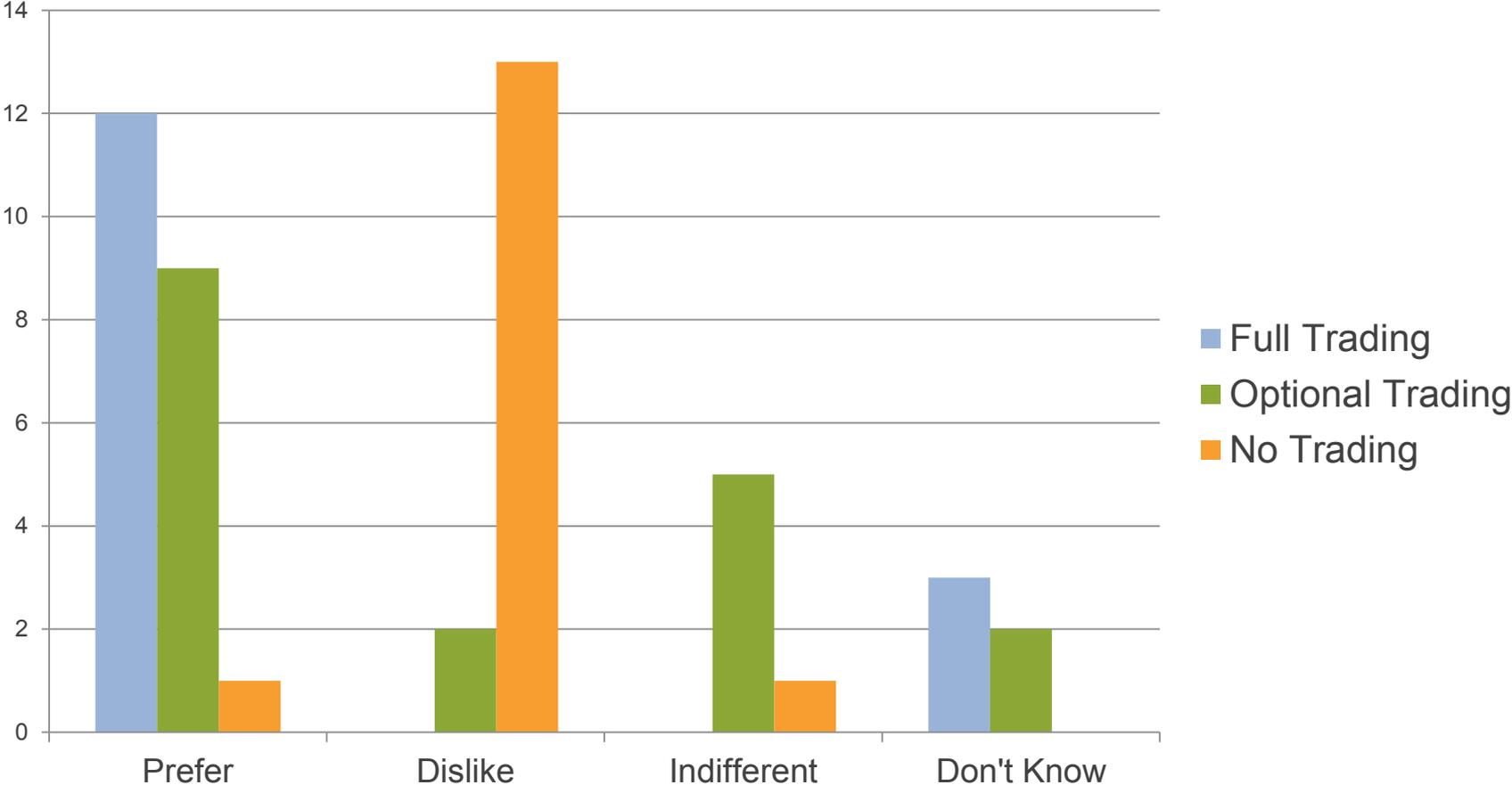
- What should be the state's objectives for its 111(d) plan?
- Should the state take a rate-based or mass-based approach?
- What is the point of regulation? Who should be regulated?
- How much compliance flexibility? Trading? Optional trading?

INFORMAL POLL RESULTS

INFORMAL POLL RESULTS - CAVEATS

- 20 responses in total (13 from industry, 4 from environmental groups, 3 other)
- Should be seen as preliminary reflections; all participants have the option to change their minds.

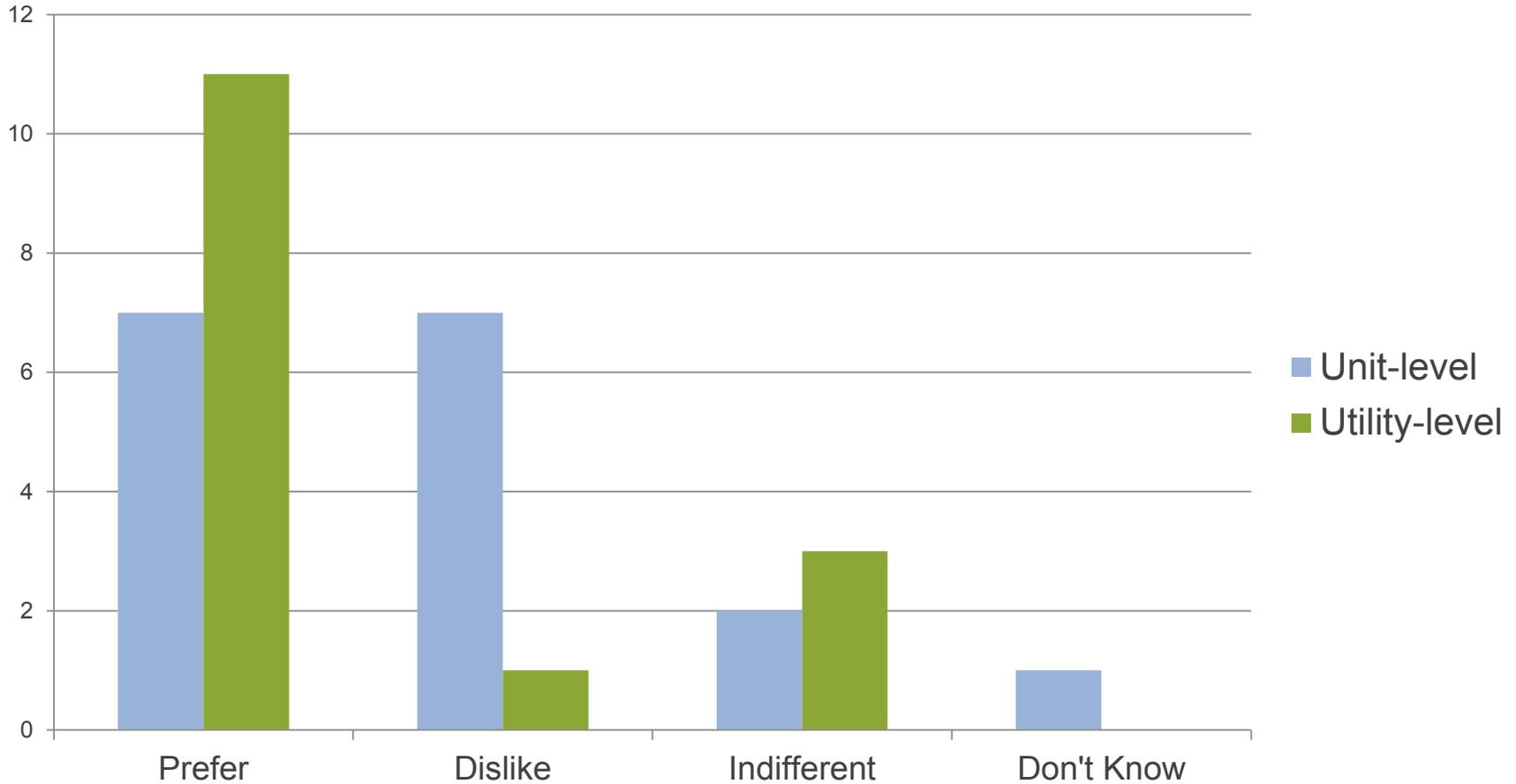
TRADING RESULTS: CLEAR SUPPORT FOR TRADING



TRADING RESULTS: CLEAR SUPPORT FOR TRADING (2)

- Trading, especially interstate trading, will give utilities the greatest flexibility to manage compliance while still achieving GHG reductions.
 - Why would anyone choose to opt out of trading?
 - It is possible to design a cost-effective compliance pathway without trading, but trading could result in lower costs, even on an intrastate level. Respect states' decision on whether or not to allow trading.
- Two respondents views optional trading as essentially the same as full trading. (Both offer the option to trade.)
- One environmental group supports REC, EE trading; support for CO₂ trading depends on environmental justice considerations.
- Trading options will be very difficult if MN has a “go it alone” plan.
- One industry representative comments that uncertainty over cross border claiming rights and obligations creates uncertainty in how owned renewable credits will count towards compliance.
- Need more information on optional trading.

POINT OF REGULATION RESULTS: MORE SUPPORT, LESS DISLIKE FOR UTILITY-LEVEL TRADING



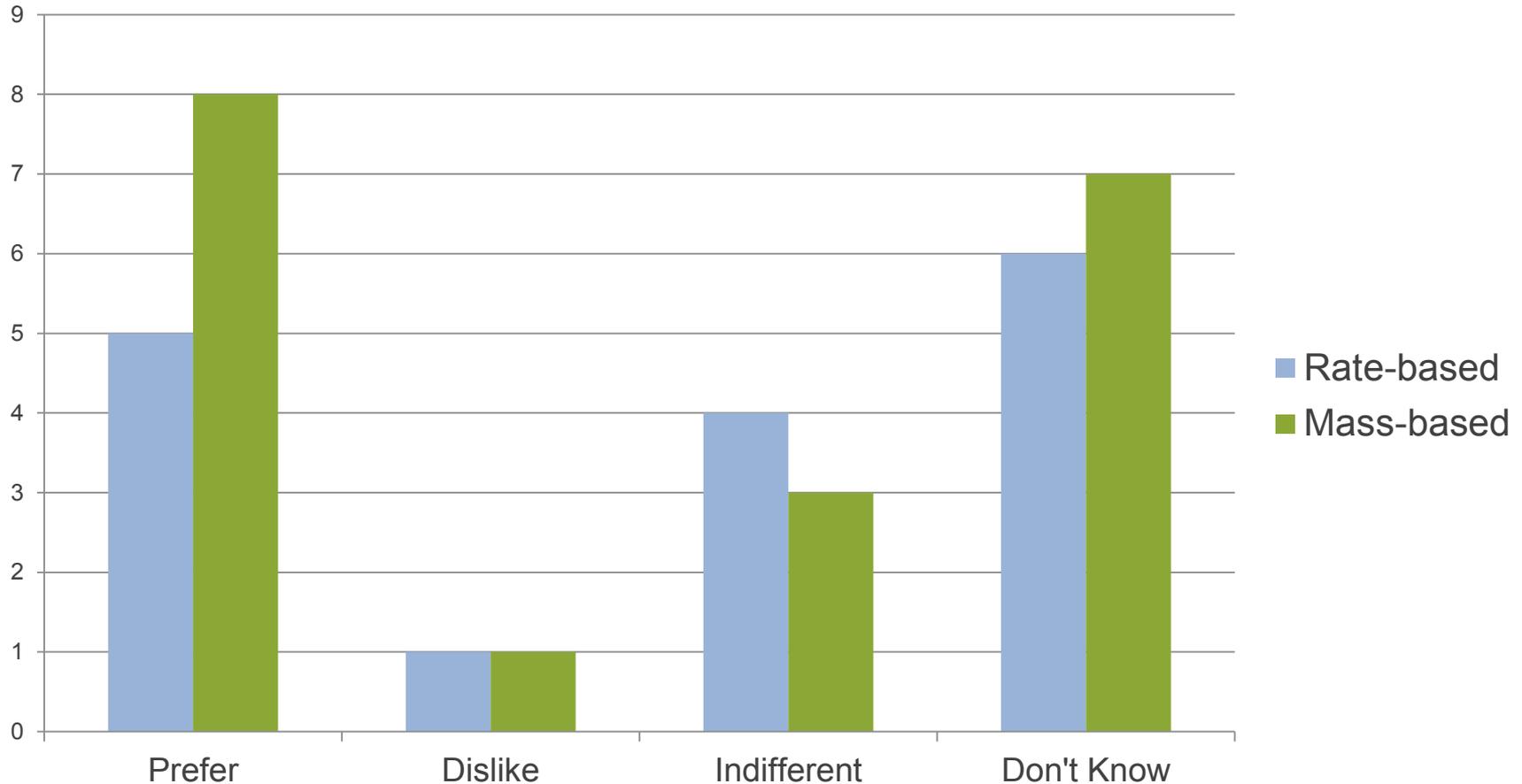
POINT OF REGULATION RESULTS: MORE SUPPORT, LESS DISLIKE FOR UTILITY-LEVEL REGULATION (2)

- More entities prefer utility-level compliance and dislike unit-level compliance.
 - “Feels” most similar to the well-established IRP process. Allows for management across our portfolio to meet the target. If compliance is multi-state, could use RE and DSM in any of our states to support compliance in MN.
 - Unit-level compliance seems to provide fewer options and violates “shared responsibility” principle. That said, unit-level compliance could be workable, and could be preferable depending on state plan decisions.
 - In a unit-level compliance scenario, utilities must be allowed the flexibility to move mass-based allowances or rate-based credits into or out of the unit.
 - Only utilities that emit in the state/have affected EGUs should have compliance obligations.
 - We assume that utility-level compliance is not just 111(d) affected units and includes beyond-the-fence-line as part of the covered sources portfolio (e.g., renewable resources).

POINT OF REGULATION RESULTS: MORE SUPPORT, LESS DISLIKE FOR UTILITY-LEVEL REGULATION (3)

- Other comments:
 - 111(d) clarifies that stationary sources are the affected entities (supporting unit-level compliance).
 - The appropriate point of regulation might depend on EPA's final decisions on which building block(s) are part of the Best System of Emission Reduction, the stringency of the target, and the applicability of New Source Review requirements.
 - The choice of the point of regulation depends on other design elements.
 - More discussion is needed in this area.

FORM OF THE STANDARD RESULTS: FAIRLY EVEN AT THE MOMENT; MUCH DEPENDS ON SPECIFICS



FORM OF THE STANDARD RESULTS: FAIRLY EVEN AT THE MOMENT; MUCH DEPENDS ON SPECIFICS (2)

Some comments supporting a mass-based approach:

- The mass-based goal may be favored if it more readily enables interstate trading without having to combine state goals and enables states to “work together without talking”. Having flexibility for interstate trading is very important since most utilities operate portfolios across state lines.
- Preferred so long as: 1) not more stringent than the rate standard; 2) allows for reasonable projection of demand growth, with an opportunity to correct the projection; 3) the mass budget is allocated equitably among EGU owners, recognizes early action, and doesn’t significantly divert allowance value to other purposes.
- Rate can work but isn’t preferred. Rate has many challenges, but they may have solutions.

FORM OF THE STANDARD RESULTS: FAIRLY EVEN AT THE MOMENT; MUCH DEPENDS ON SPECIFICS (3)

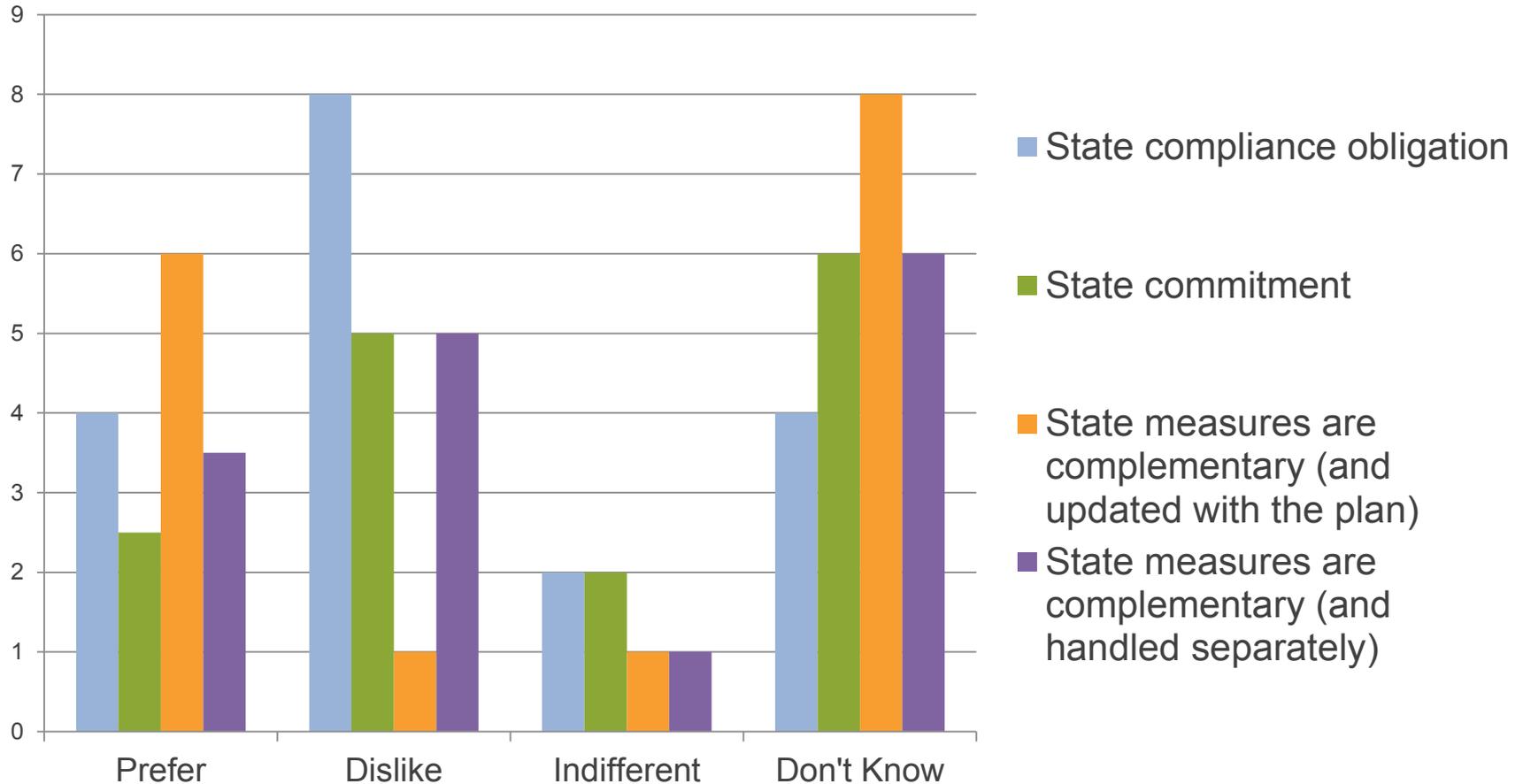
Areas of uncertainty:

- Until both plans have been reviewed side-by-side, it is too early to decide. The mass calculation is also a major uncertainty. Need to understand organizational impacts.
- Without knowing what the mass-based target would be and the allowance allocation methodology, it is difficult to support one approach over the other at this time.
- Need to understand how rate- and mass-based approaches differ in regulated electricity markets (as compared to competitive markets), including different types of resource ownership.
- Need to understand whether EPA will allow use of “safety values” or other flexibility mechanisms under a mass-based standard.

It shouldn't matter:

- Rate and mass are equivalent if: 1) $\text{mass} = \text{rate} * \text{generation}$; 2) $\text{generation} = \text{regulated sources (affected units)}$ as defined in the proposed rule (including renewables and efficiency); and 3) there is an annual true-up of a mass-based approach to correct for under/over estimates.

ROLE OF STATE POLICIES RESULTS: MIXED; A LOT OF UNCERTAINTY AND DISLIKE



ROLE OF STATE POLICIES RESULTS: MIXED; A LOT OF UNCERTAINTY AND DISLIKE (2)

- **Some support for treating state actions as complementary, with updates to those programs**
 - Sources are responsible for compliance, not the state. That said, state measures are likely needed because affected sources will need to buy RECs or EE credits in addition to on-site improvements.
 - Federal enforceability should be restricted to high level compliance obligations and should not reach down to specific state plan mechanisms and their implementation.
 - Updating complementary measures could make more sense under a rate-based system.
 - State policies should allow for interoperability of obligations and trading mechanisms across state borders without the need for formal multi-state plans.
 - Concerned that present state policies may not fit into a federal plan, including out-of-state efforts.

ROLE OF STATE POLICIES RESULTS: MIXED; A LOT OF UNCERTAINTY AND DISLIKE (3)

- Several respondents prefer **state compliance obligations**, but many dislike this option. One industry respondent expressed opposition to federal enforceability of state measures by EPA or citizen suits.
- A **state commitment approach** could offer Minnesota the best opportunity to define/design what is in their interest. State commitment approach merits more evaluation since it could provide additional compliance flexibilities and reduce consumer costs.
- More generally, one industry representative commented it is simpler to let affected 111(d) sources manage compliance directly. Having states assume some responsibility creates challenges in enforcement and administration, and could limit potential compliance opportunities for utilities.
- **Existing RES programs (handled separately)** could complement a mass-based system.
- One industry participant commented that Minnesota's existing policies should be deemed sufficient to satisfy Clean Power Plan compliance.
- More information is needed on the different options, including to better understand the differences among them.

MAKING A STATE PLAN TRADING- READY

INTRA- AND INTERSTATE TRADING ARE FORMS OF FLEXIBILITY

- **Intra-state trading:** Flexibility that includes the option to use allowed tons/allowances or credits generated from other entities within the state as determined by the state's policy choice.
- **Interstate trading:** Flexibility that includes the option to use allowed tons/allowances or credits from another state.

REVIEWING THE TYPES OF TRADING

Mass-Based Trading	Rate-Based Trading
State starts with an EPA-approved emissions budget, meaning total emissions from “affected units” cannot exceed the budget in each year.	State starts with an EPA-prescribed emissions rate, meaning emissions per megawatt hour must average out to be a certain rate or better.
The tradable instrument is allowed tons or allowances.	The tradable instrument is a credit, measured in MWhrs or tons.
Every affected unit must surrender an allowance for each ton emitted in the compliance period.	Every unit must <u>actually</u> meet the emissions rate, <u>or</u> use credits to adjust the unit’s emissions rate to be at or under the prescribed rate.
Allowances are issued by state at the start, with each ton in the emissions budget = one allowance.	Credits are issued by the state after the credits are earned, by units operating at better than the state rate, and/or by renewables and/or energy efficiency and/or other creditable activities.
State determines who gets allowances.	Credits go to the producer of the credits.

RECALL EPA'S PROPOSAL

- Trading within the state is allowed
- Multistate groups can file a joint plan that allows trading.
 - Must have a regional or multistate goal, which means different things in mass-based versus rate-based context.
 - Rates have to be a weighted average, meaning some states get an “easier” target while others take a “harder” target.
 - In mass context, regional target is the sum of all participating states’ budgets, so states keep their individual state budgets.
- States and stakeholders have asked for changes to the proposal to allow multistate trading without joint plans and without regional or multistate goals.

CONSIDER THE LIKELIEST MULTISTATE SCENARIO

- Each state is a sovereign entity, most comfortable when maintaining that control.
- Each state has its own governor; its own legislative and regulatory process; and will arrive at decisions at different times.
- The most likely multistate scenario is one that respects individual state prerogatives and provides “on-ramps” and “off-ramps” that are not disruptive.

LESS FORMAL TRADING ARRANGEMENTS (1)

- Each state keeps its own state goal;
- Each state follows its own process for developing a state plan;
- Each state decides whether and when to allow owners of affected units to use allowances or credits from other states; and
- Each state can change its mind later and decide to stop allowing the use of allowances or credits from another state.

LESS FORMAL TRADING ARRANGEMENTS (2)

- Key element: the state allows the use of the allowed ton/allowance from the other state, or the emissions credit from the other state.
 - Reciprocal? Presumably, but no formal agreement between the two states.
 - Mechanics of using allowances or credits from other state? Tracking system is designed to allow this to happen with integrity.
- Decision whether to opt into trading can also be left up to the utility or other owning entity.

COMPATIBILITY

- Two key questions:
 - What will EPA accept as compatible for interstate trading?
 - What will states accept as compatible?

MINIMUM COMPATIBILITY BETWEEN STATES (1)

- Midwestern Power Sector Collaborative developed criteria for this and made recommendations to EPA.
- For Mass-based Approaches:
 - EPA-approved emissions budget has integrity;
 - Each and every ton of emissions must be covered by allowance;
 - Program features like cost-containment measures, banking, borrowing, etc. do not change the budget or relax allowance surrender requirements; and
 - Tracking system is robust.

Meet these criteria and state can accept allowances from another state that meets the criteria.

MINIMUM COMPATIBILITY BETWEEN STATES (2)

- For Rate-based Approaches, a little trickier:
 - Rates interact differently than emissions budgets.
 - Because each state has a different rate, the rate at which credits are earned and surrendered will vary state to state. The credit price will vary too based on stringency.
 - The electricity market is already multistate, however, so the differences in rates will affect dispatch (and in the long run siting) outcomes even if states do not allow interstate trading between them.
 - The question is whether allowing trading between two states with different rates improves or worsens competitiveness or emissions leakage impacts. Probably takes sophisticated modeling to project the answer, and it may vary depending on the states analyzed.

MINIMUM COMPATIBILITY BETWEEN STATES (3)

- For Rate-based Approaches, EPA is likely to insist that trading cannot result in a diminished environmental outcome.
 - Require modeling before allowing credits from another state to be used?
 - Other ways to make sure trading with a state with a different rate results in an acceptable outcome?

MINIMUM COMPATIBILITY IN RATE-BASED CONTEXT

- Assuming environmental outcome is no less stringent, then other minimum compatibility kick in:
 - Plan will achieve state goal with certainty.
 - Same unit of trade.
 - Credit mechanism has integrity.
 - Tracking system has integrity.
- Beyond what must be in place for trading to occur, compatibility depends on an individual state's view of what is compatible.
 - Is a credit from state A the same as a credit from state B?

OTHER REGIONS CONTEMPLATING SIMILAR IDEAS

- Southeastern states, convened by Nicholas Institute, have a related idea—the “common elements” approach.
- Western states have been considering a “modular” approach to trading between states.
- EPA is considering what to propose for its federal plan/federal backstop approach.

**SHOULD MINNESOTA
DEVELOP A “TRADING
READY” PLAN?**

**HOW SHOULD THE STATE
DECIDE WHETHER
ANOTHER STATE’S PLAN IS
“COMPATIBLE” WITH
MINNESOTA’S PLAN?**

THANK YOU

For more information, contact:

Stacey Davis
sdavis@ccap.org

Franz Litz
franz@litzstrategies.com

Please visit us at
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