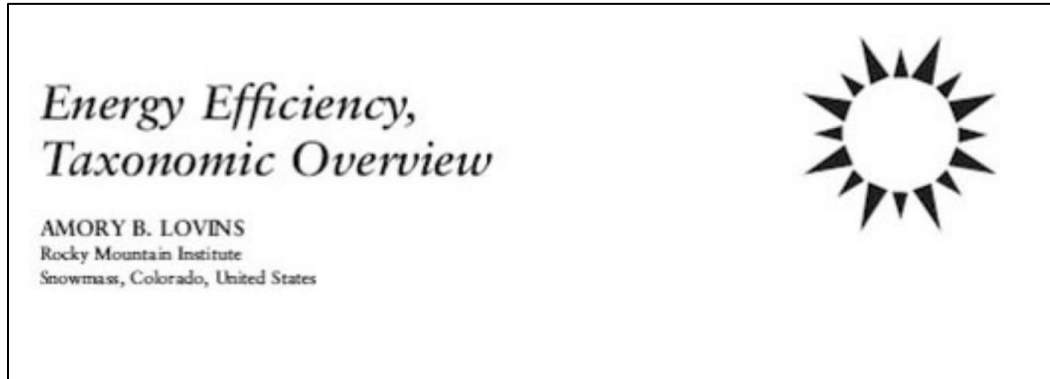




# **GETting the Most Out of the Grid We Have**

VSPC QUARTERLY MEETING  
APRIL 2024

# A brief history of RMI and our long-running interest in efficiency



**Assessing the Electric Productivity Gap  
and the U.S. Efficiency Opportunity**



# RMI's approach to realizing a climate-aligned energy transition: Think. Do. Scale.



## Scale:

Catalyze Global Markets at Speed



## Do: Implement



## Think: Identify Solutions

Solutions adoption

Tipping Point



# RMI released a new study evaluating GETs' ability to accelerate generator interconnection



Project lead



Analysts

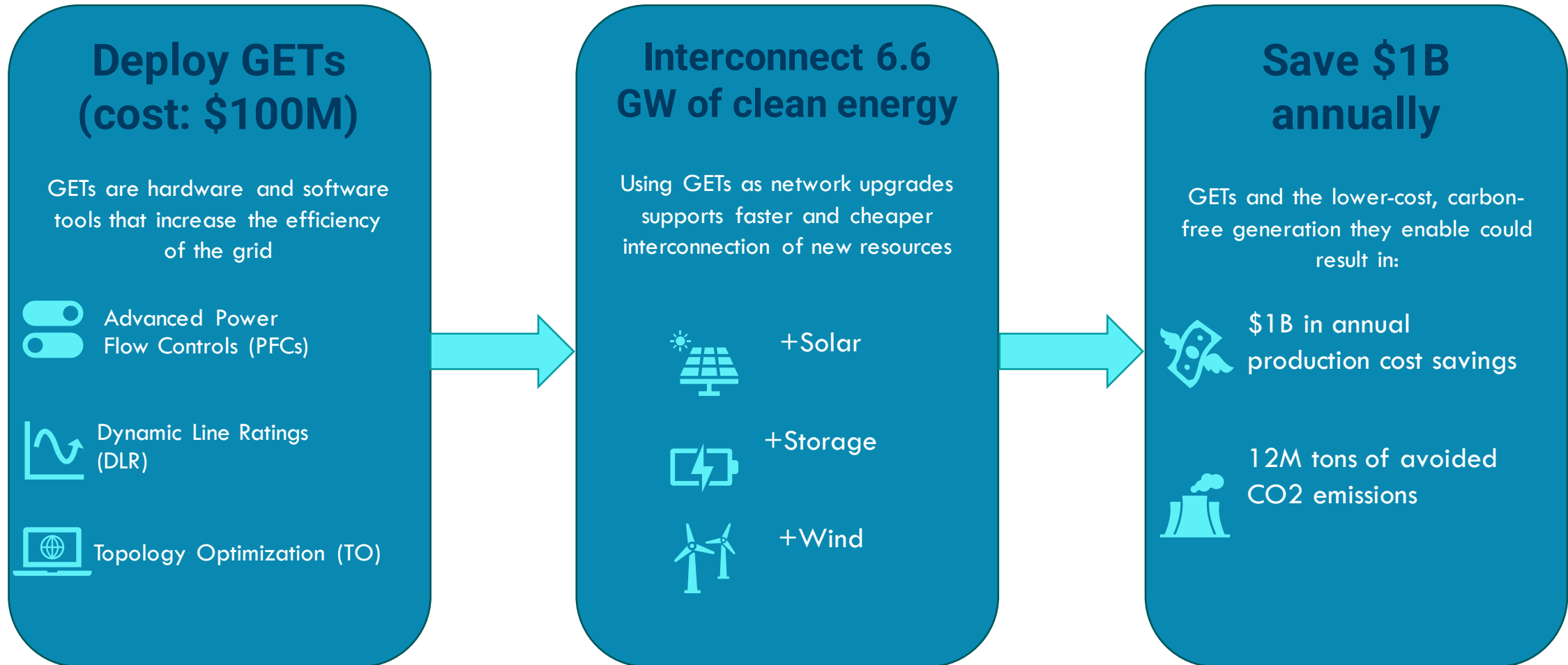


Funder



*Consulted vendors*

# Study summary: A \$100M deployment of GETs in PJM could lead to \$1B in annual savings that flows to ratepayers



# Lessons Learned: GETs can be applied in an interconnection study context and deliver substantial value

## GETs are applicable in a planning paradigm

- Some GETs are viewed today as only operational tools; this fails to recognize their full potential

## GETs can be modeled and deployed reliably

- Quanta and GETs vendors pressure-tested GETs application to ensure no adverse impacts elsewhere in the system while respecting all reliability criteria

## GETs are complementary transmission solutions

- GETs can work well in combination (particularly DLR, which can be effectively paired with PFCs or TO) and serve as bridge solutions to longer-term transmission upgrades or as part of a broader transmission project

*We hope to work with transmission owners and utilities to leverage this analysis as a capacity-building tool, as well as support new regulations or policies that promote uptake of GETs*

# ...But barriers to GETs adoption remain

GETs evaluation is not yet standardized and a lack of incentives impede their scaled deployment



Many utilities still lack **experience and familiarity** with these technologies and the range of use cases they may be suited for



GETs must be **incorporated into transmission models** and studies in order to support their routine evaluation in transmission planning processes



Cost-of-service regulation can deter utilities from deploying low-Cap Ex, efficiency-enhancing tools like GETs, creating a need for **better aligned incentives**

# States have a variety of regulatory and policy options to support GETs deployments



## Facilitate learning

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State leaders can advance understanding of GETs among key energy industry players by convening a panel or discussion, establishing a working group, conducting a cost-benefit analysis, etc.



## Establish a requirement

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State policymakers can require GETs consideration or deployment via the jurisdictional means at their disposal (e.g., as a part of utility IRPs, or as a statewide standard)



## Incentivize GETs

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State regulators can correct the misaligned utility incentive structure by developing a GETs incentive program, such as a shared savings incentive or other performance incentive mechanism (PIM)



## RTO/federal advocacy

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State leaders can engage in RTO and FERC proceedings to push for regional and federal regulatory reforms that would support GETs uptake, including development and standardization of GETs modeling approaches

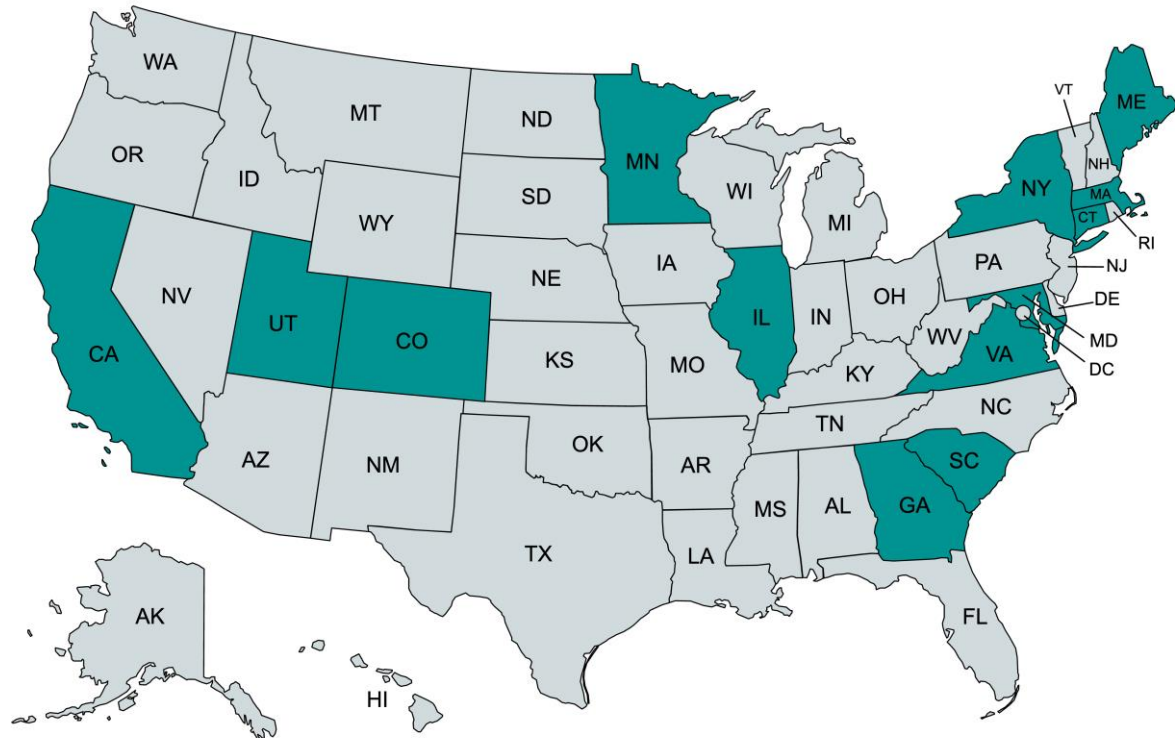


# And states are taking action

10+ states have proposed policies or initiated regulatory reforms to spur GETs uptake

In the past year, GETs have risen in prominence as cost-effective transmission tools that can help interconnect new generation and load in the near term, sparking interest from over a dozen states:

- **12+ states** have proposed policies or considered regulation to encourage GETs deployment
- **Diverse policies have been advanced** including study requirements, incentives, and implementation plans
- **Important considerations include** state jurisdictional authority over transmission, state regulatory capacity, and existing programs that could be leveraged



Created with mapchart.net

# Regional and federal regulatory efforts on GETs are also underway

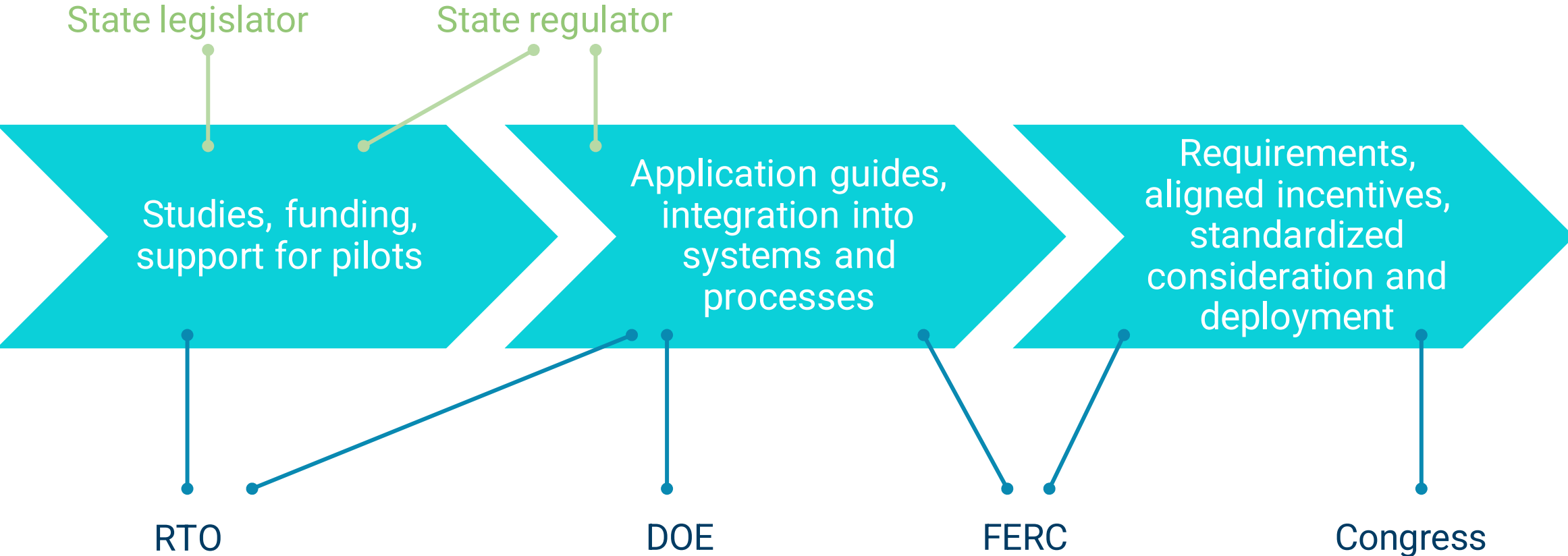
RTOs and FERC are advancing efforts to streamline the study and deployment of GETs

- **PJM** and regional utility PPL recently submitted comments to **FERC's NOI on DLR** affirming the technology's operational and reliability value
- **PJM's Applied Innovation team** is in the process of developing an application guide for GETs
- **MISO** now allows market participants to request grid reconfigurations to reduce congestion
- **FERC Order 2023** requires consideration of alternative transmission technologies (including some GETs) in interconnection studies
  - RTO compliance filings are underway and expected to be submitted this spring/summer
- **Federal funding** is available to support GETs projects testing novel applications of the technologies (states are eligible applicants)



# Policy pathway to scaled GETs deployments

The right policies and policy actors depend on the state of play in a particular jurisdiction



# Thank you

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# Appendix / Extra slides