

Decarbonizing the Peak

The role of Grid Enhancing Technologies

Hudson Gilmer - Co-founder and Chairman

What are Grid Enhancing Technologies?

Grid Enhancing Technologies unlock the grid's untapped potential to deliver reliable, affordable, and clean power—faster, smarter, and at lower costs than with traditional infrastructure alone.

Dynamic Line Ratings

Adjusting the carrying capacity of transmission lines based on real-time measurement of ambient conditions

Transit analogy: real-time adjusted speed limits



Advanced Power Flow Controls

Hardware solutions that push power away from lines with capacity constraints and pull power to lines with spare capacity

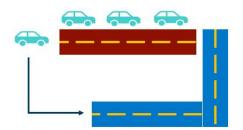
Transit analogy: railroad switching stations that direct trains to free tracks



Topology Optimization

Software solutions that automatically route power flows around congested areas

Transit analogy: re-routing drivers around traffic



RMI - Energy. Transformed.

Benefits of Grid Enhancing Technologies

Cost Savings - Grid constraints cost the U.S. billions of dollars every year and delay low-cost generation — GETs cost 5-10% of traditional grid infrastructure and pay for themselves in less than a year.

Speed - Traditional transmission upgrades take years to build – GETs can be deployed in months.

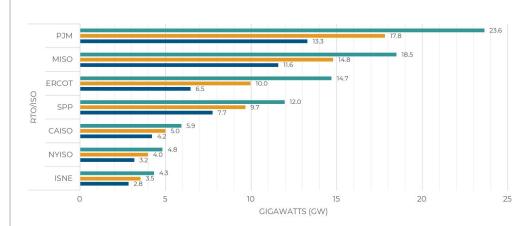
Reliability - GETs give operators new tools to monitor asset health and alert on conditions which may pose risks to public safety or grid reliability

Flexibility - These technologies can be deployed to reconfigure grid topology during outages and increase transmission capacity during times of peak demand

Flexibility - The key to meeting load growth

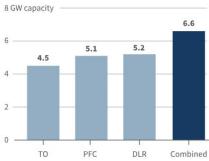
Load Flexibility: 17.8GW of headroom in PJM

Grid Flexibility: 6.6GW headroom in PJM



Source - Rethinking Large Loads, Duke University 2025

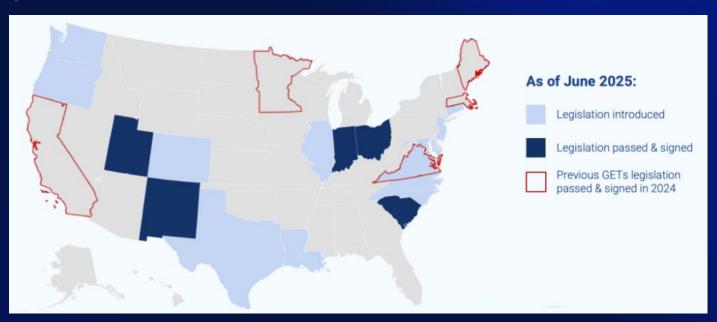
Capacity of queued generation (in GW) enabled to interconnect by each GET, as well as GETs in combination



Source - GETting Interconnected in PJM, RMI & Quanta 2024

Legislative Momentum for GETs is Building

Legislation for GETs has been introduced in at least 17 states, with new laws signed in five states as of June 2025.



Resources



GETting interconnected in PJM

- GETs can unlock 6.6 GW of grid capacity
- An investment of \$100M unlocks over \$1B/yr in production cost savings



Smarter Use of the Dynamic Grid

 Case study on project to deploy DLR on 5 transmission lines across Indiana and Ohio



Liftoff Report - Innovative Grid Deployment

"Deploying these solutions today could support 20-100 gigawatts (GW) of incremental peak demand"



Playbook on Grid Enhancing Technologies