
OpenMinds
Grid Vision Plan

Our Grid Vision

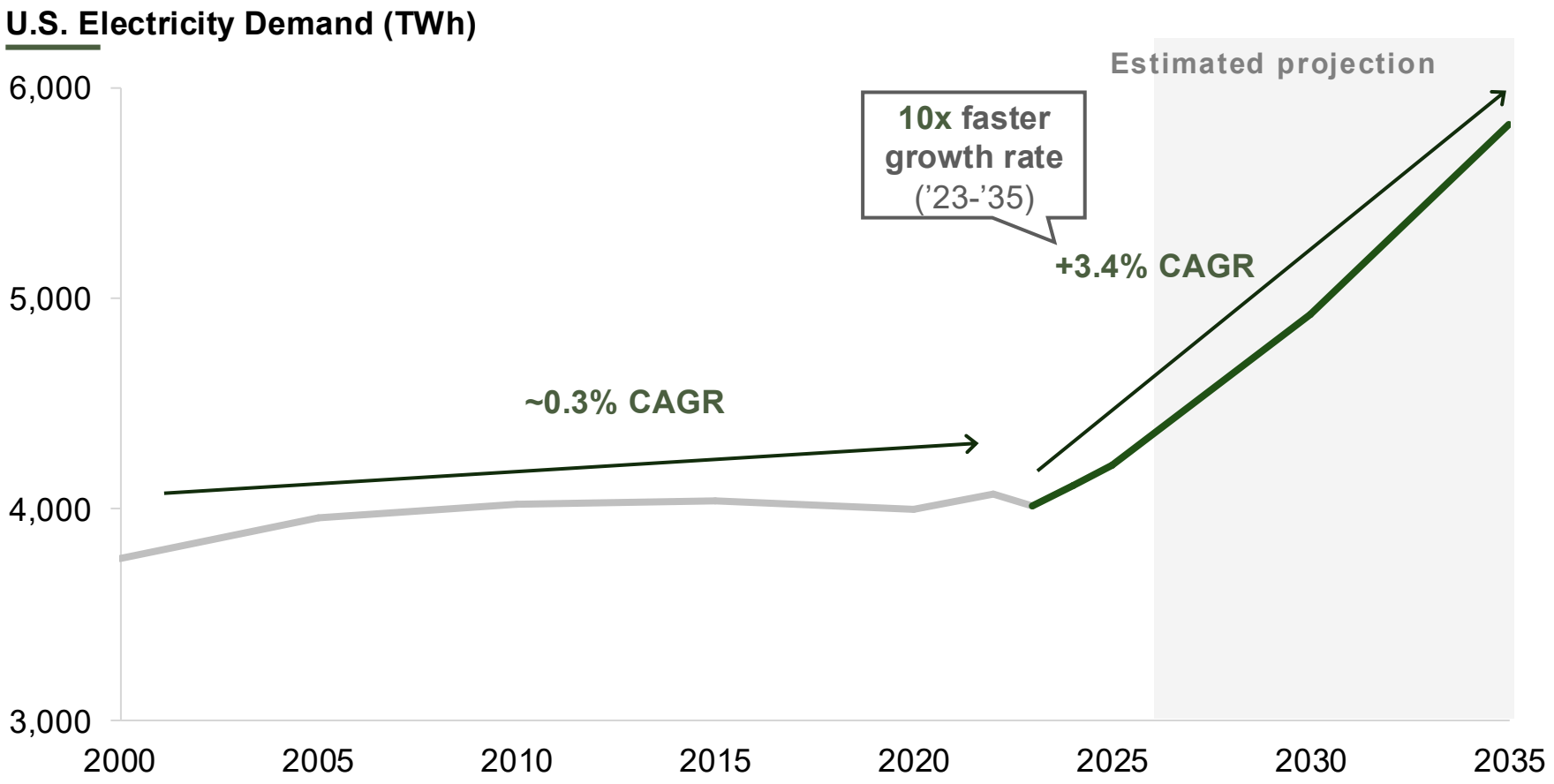
Optimizing the grid we have **today,** while…

Building the grid we need for **tomorrow**

Delivering affordable, abundant, and reliable power

Driving American prosperity and AI leadership

Electricity Demand Growth Rate Is Up 10X!

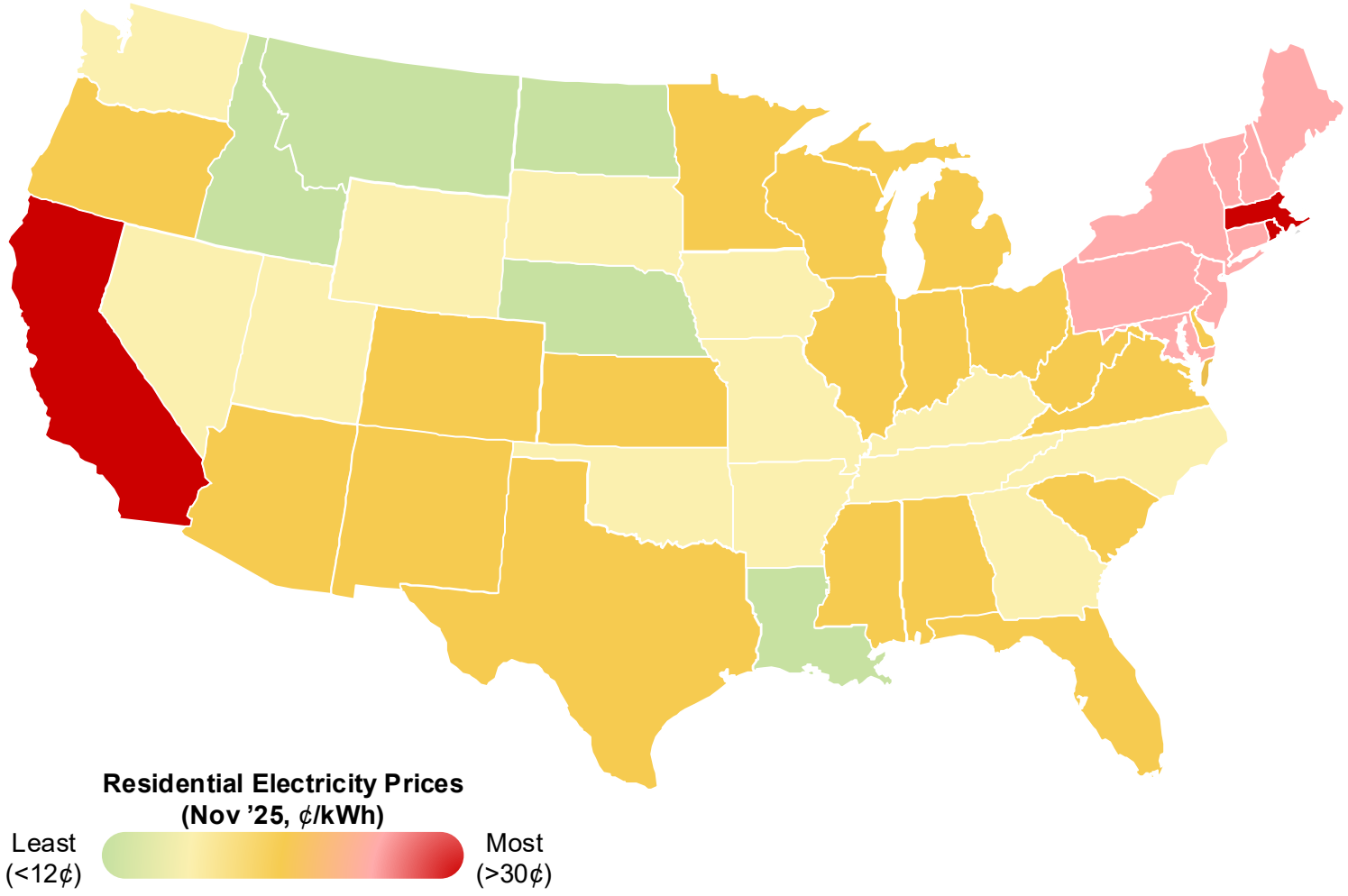


Increase in demand driven by:

- Data centers
- Electrification
- Manufacturing reshoring

Our Outdated, Fractured Grid Is Straining Ratepayers

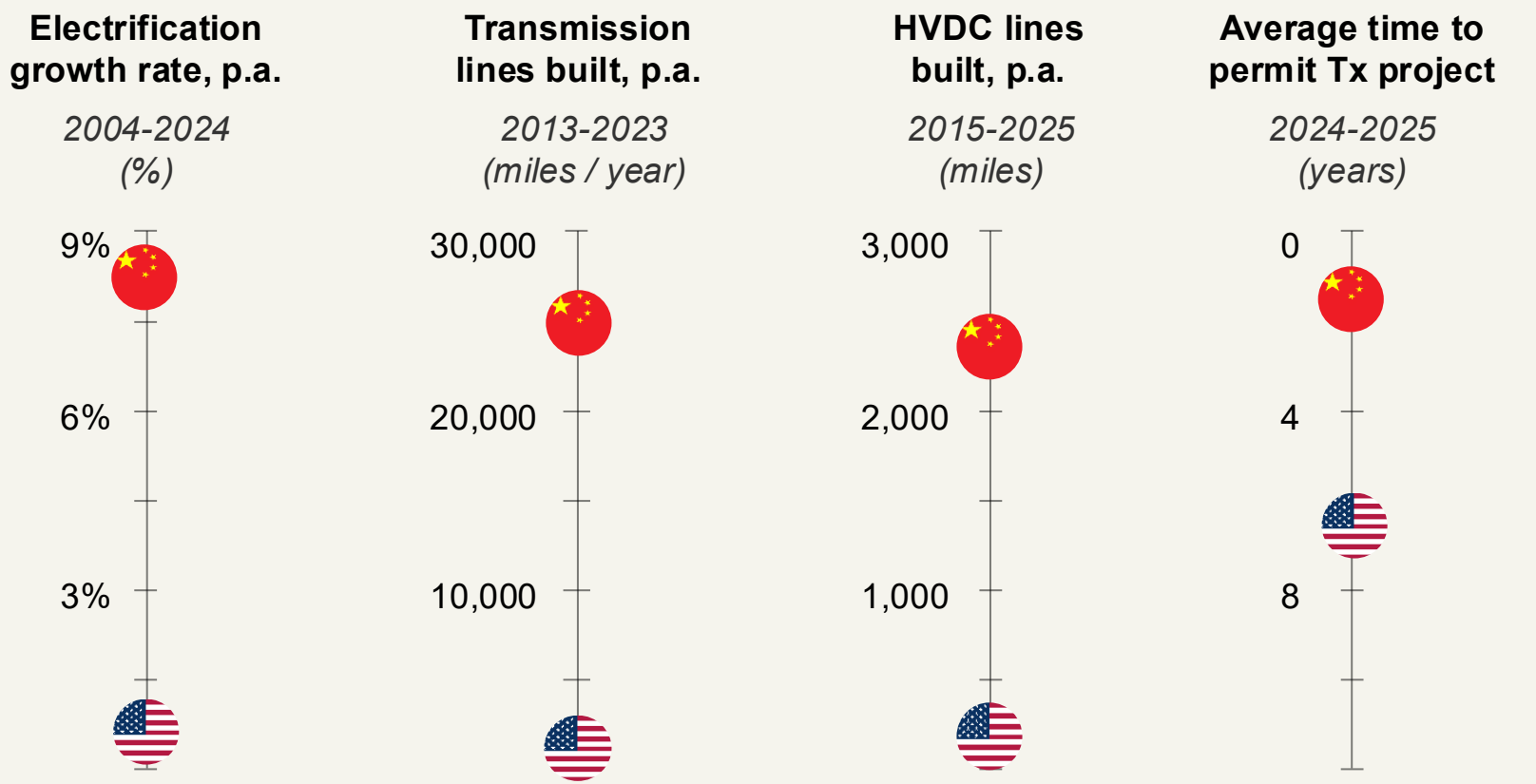
Residential electricity prices (¢/kWh)



Drivers of higher electricity prices

- Surging demand
- Fuel cost volatility
- Extreme weather
- Supply chain constraints
- Tariffs on raw materials

China Leads, but the U.S. Must Narrow the Gap



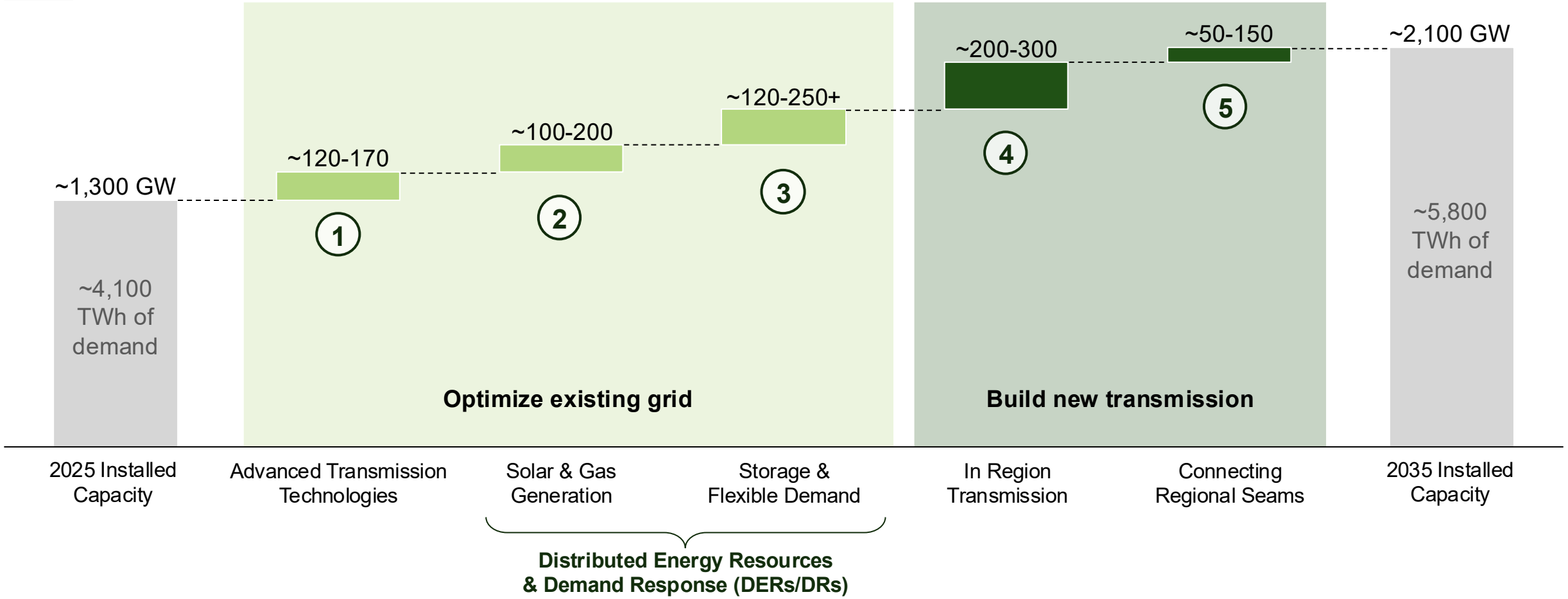
China shows what can be done, but **U.S. is well positioned to narrow the gap through:**

- **Energy abundance**
- **World- leading innovation**
- **Strong capital markets**

The Right Types of Investment Can Unlock 800+ GW by 2035

DIRECTIONAL

Required Additional Installed Capacity, 2025-2035 (GW)



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The Grid Must Fundamentally Change over the Next 10 Years

The U.S. grid must meet future load growth while delivering affordable energy

The 2035 grid must be…

- Connected
- Flexible
- Reliable
- Scalable

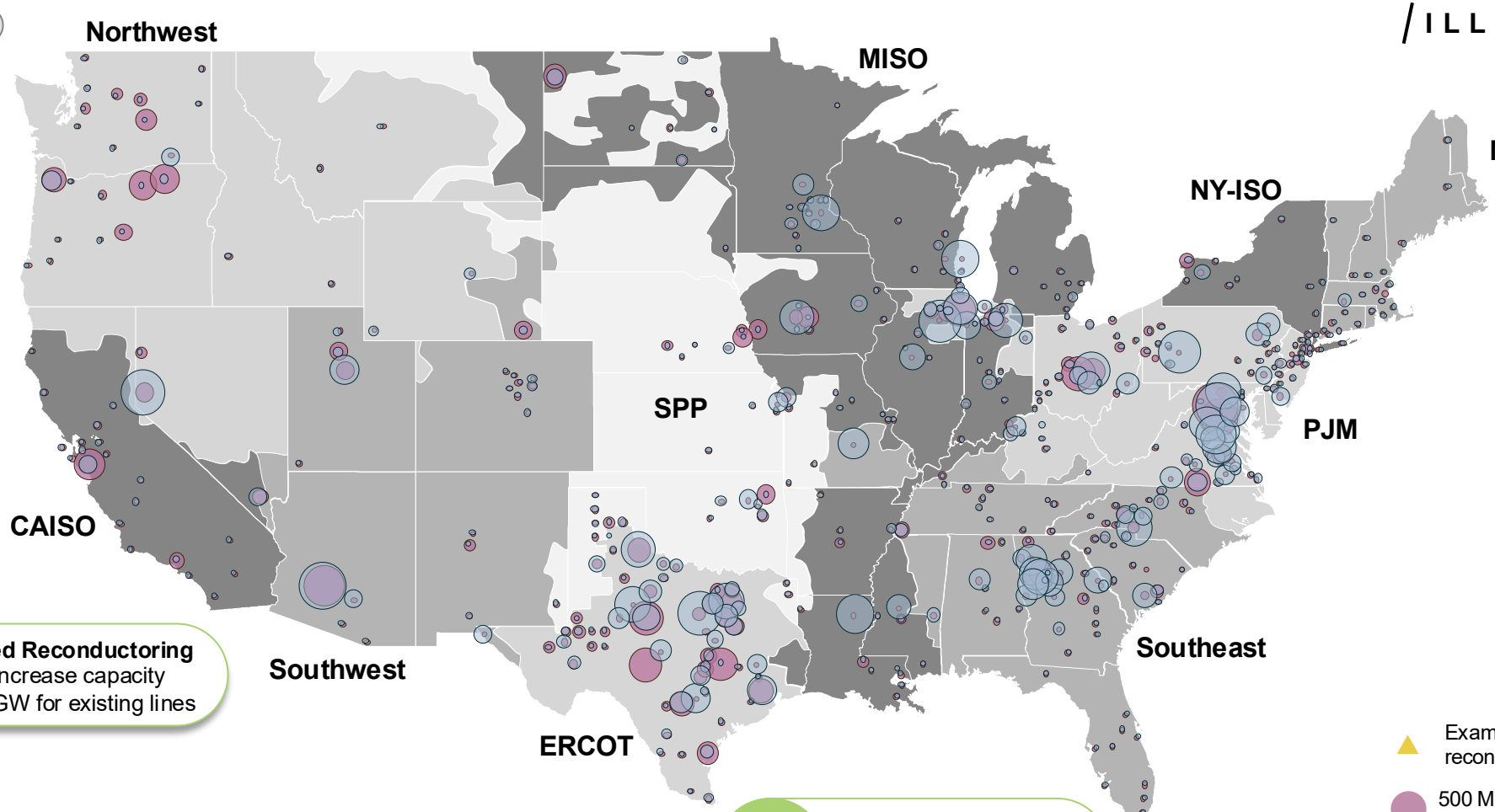
Change will be driven by…

- Policy
- Technology
- Markets

GV Plan – Solution 1: Deploy ATTs at Scale

1 2 3 4 5

/ILLUSTRATIVE



Advanced Reconductoring projects increase capacity ~50-100GW for existing lines

AI-enabled GETs increase capacity ~70 GW by optimizing power flow

Example near-term advanced reconductor projects

500 MW Data center (2026 operating/in-construction)

500 MW Data center (2035 planned)

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GV Plan – Solutions 2&3: Scale Distributed Energy Resources

1 2 3 4 5

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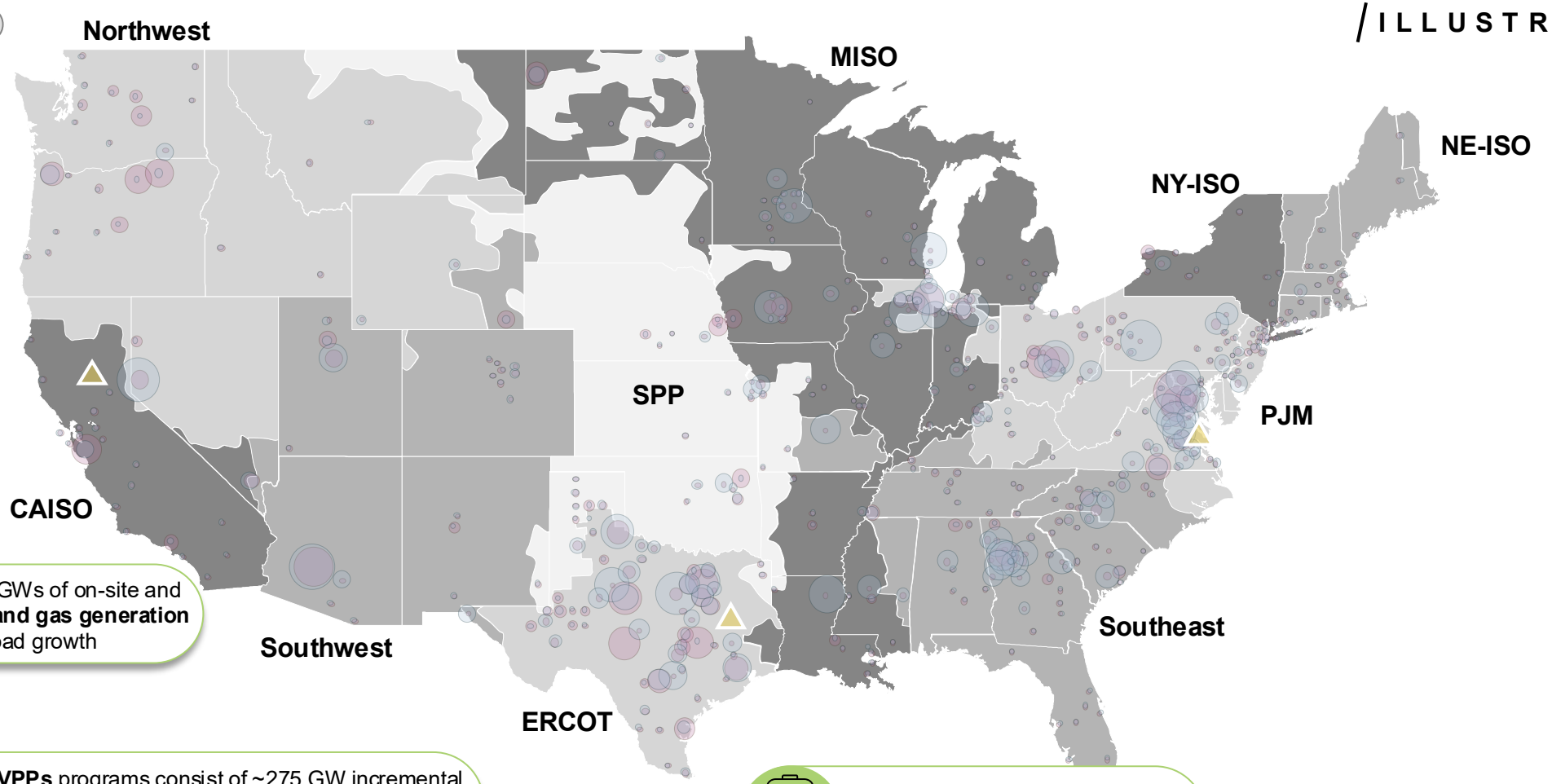

Up to ~200 GWs of on-site and local **solar and gas generation** to support load growth

VPPs programs consist of ~275 GW incremental DER capacity (subset of 2035 total), dispatching distributed resources to reduce congestion

Up to ~250+ GWs of **storage and flexible demand** shaving peak load and supporting reliability

Example new VPP hub

Example new storage hub

GV Plan – Solution 4: Expand In-Region Transmission Rapidly

1 2 3 **4** 5

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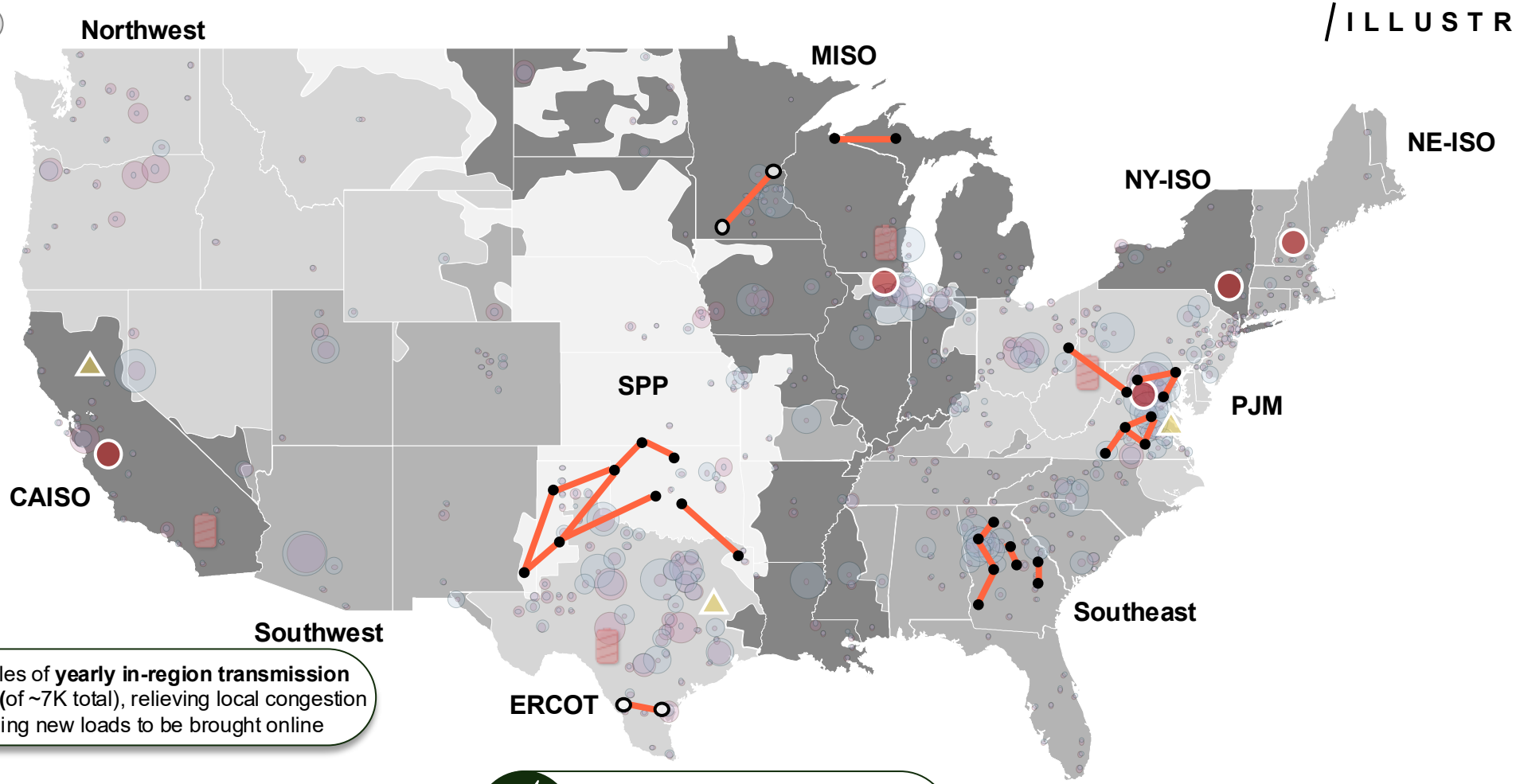

~ 6.5K miles of **yearly in-region transmission buildout** (of ~7K total), relieving local congestion and enabling new loads to be brought online

Expanded capacity through buildout of ~100 additional HVDC lines (both within and across regions)

Example new HVDC line

Example new in-region line

GV Plan – Solution 5: Connect Regional Seams

1 2 3 4 **5**

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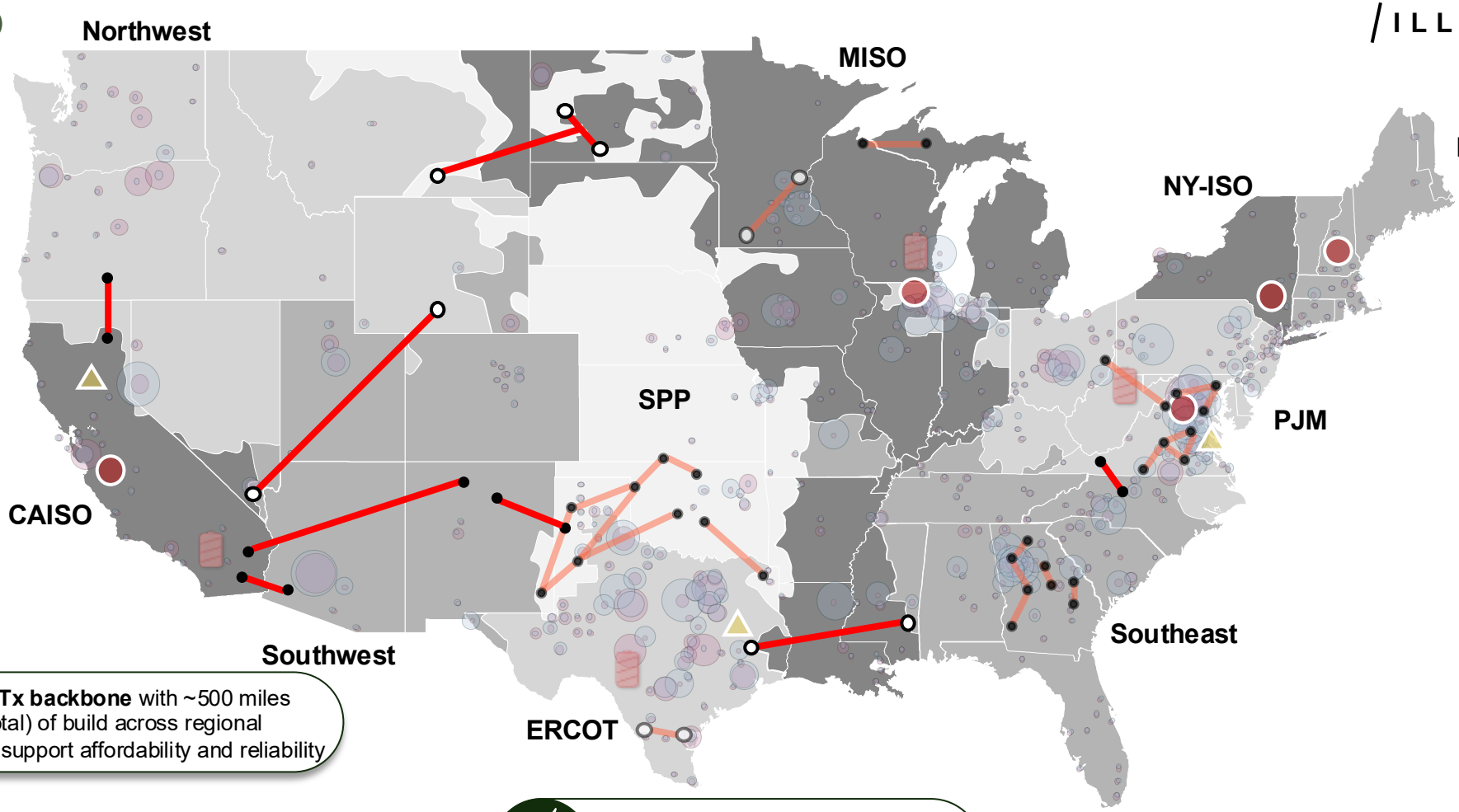

National Tx backbone with ~500 miles (of ~7K total) of build across regional seams to support affordability and reliability

Expanded capacity through buildout of ~100 additional HVDC lines (both within and across regions)

- Example new HVDC line
- Example new cross-regional seam

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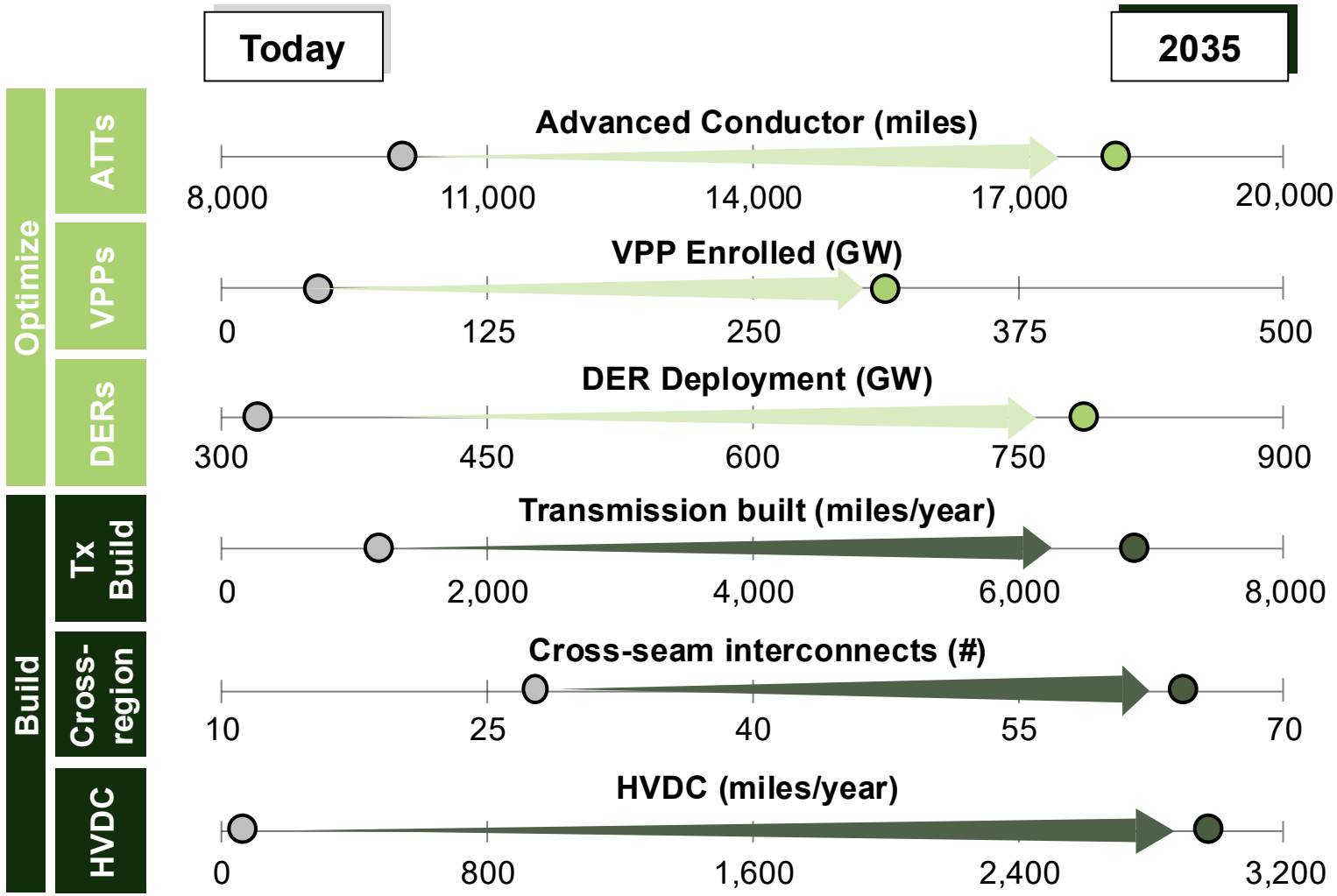
Grid Imperatives by 2035



Key outcomes

~8k mi of state-of-the-art reconductoring

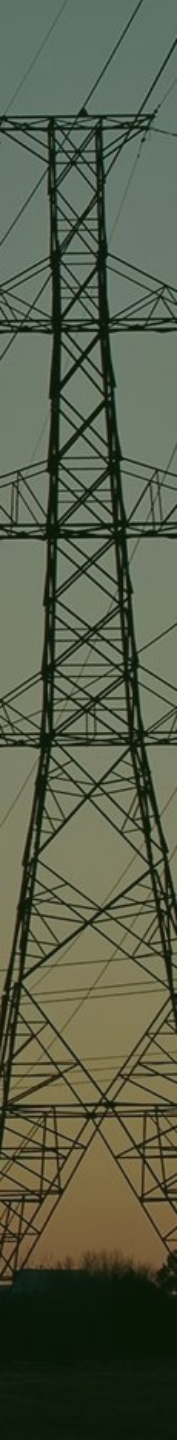
~7x VPP capacity

~2.5x DER capacity

~7x more transmission build

Double cross-seam interconnections

~3,000 more HVDC miles per year



Stakeholder Actions in the Next 12 Months to Catalyze Progress

Stakeholder	Action
Utilities	• **Commit to a dual-track optimize and build strategy:** deploy ATTs and AI-enabled planning at scale *now* while advancing at least one transmission project with accelerated timelines
Tech vendors	• **Innovate, prove and scale**: Innovate technologies (AI, ATTs) to mitigate today's barriers, deliver bankable, utility-grade deployments with quantified capacity unlock and cost savings so that system-wide adoption becomes low risk and routine
Equipment OEMs	• **Remove the future bottleneck**: Lock-in transformer, conductor, and critical component capacity now through standardized designs, dual sourcing, and forward production commitments so part shortages don't become a bottleneck to build
Developers	• **Prioritize and accelerate:** Lead the drive to advance high-impact, in-region and cross-region projects that relieve major congestion, embrace new tech to accelerate
Data center operators	• **Put capital and demand signals on the table**: Work with utilities / owner operators on innovative models / partnerships to co-invest in transmission and distributed energy solutions and provide long-term, load commitments to de-risk builds and minimize affordability impacts
Investors	• **Invest in the transmission backbone**: Actively fund first-of-their-kind interregional transmission, storage, and ATT-enabled projects.
RTOs	• **Rewire planning to optimize outcomes**: Mandate ATT and non-wires alternative evaluation as the first step in every regional transmission plan
Federal	• **Induce speed and certainty into the system**: Pass permitting reform with shot clocks, ensure federal backstop authority, mandate standardized interregional cost allocation and set clear direction for supply chain expectations
State	• **Reward outcomes, standardize inputs**: Set permitting targets, align on standardized cost allocation frameworks and approve reforms that favor congestion relief, resilience, and speed, including ATTs, storage —not just traditional steel-in-the-ground investment
Nonprofits	• **Lean in to solve the dual challenge of energy and emissions:** Mobilize public, policy, and business coalitions to drive action that helps meet energy demand and reduces emissions
Thought leaders	• **Change the Narrative:** Publish independent affordability and reliability evidence, identify real success stories, and make grid modernization a mainstream competitiveness and national security agenda

OpenMinds and Partners Are Focusing on Six Catalyzing Projects

1 The U.S. Grid Vision Plan

Communicate compelling, impactful grid vision plan

BAIN & COMPANY

2 Federal and State Policy

Inform policy to expedite transmission optimization and build

3 AI Planning

Encourage AI planning adoption

Microsoft ThinkLabs EPRI

4 ATTs

Deploy ATTs at a higher frequency

EPRI QUANTA RMI

5 Shovel Ready Interconnects

Accelerate specific and high value high-value transmission projects

GridStrategies

6 Speed to Power Loop

Initiate the development of multi-region transmission project

Utilities IPPs

Project Selection: Existing 6 projects selected for highest near-term OM impact
Projects for future consideration include nuclear, geothermal, storage, etc.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