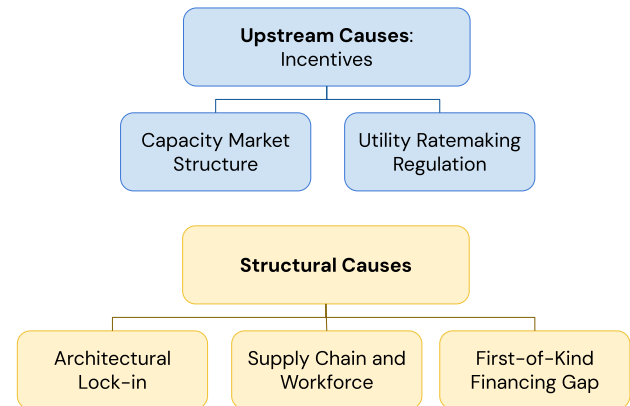


Executive Summary – The Grid Gap Report: 2026

The report identifies six root causes that together explain why grid modernization stalls even when the technologies to solve it exist, capital is available, and policy intent is present. They are not equally weighted – some sit upstream and drive multiple downstream problems, while others are downstream effects that fixing upstream causes would partially resolve on their own. Understanding that hierarchy is what makes the difference between isolated interventions that underperform and coordinated action that compounds.

Upstream Causes:

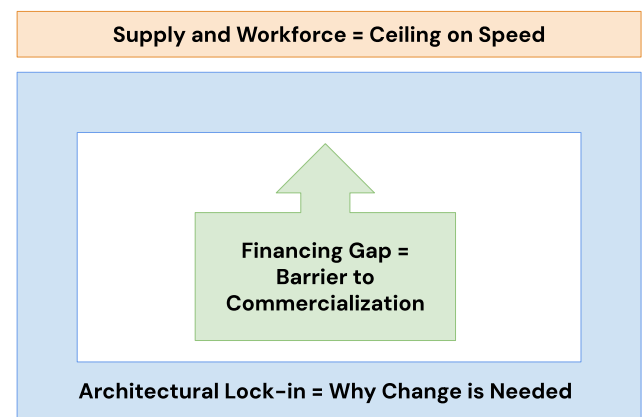
Market mechanisms and policy gaps are the upstream incentive layer. Energy markets currently undervalue the firm, dispatchable generation the grid needs most, and utility regulation rewards capital spending over efficient outcomes – together creating financial incentives that actively slow the adoption of cheaper, smarter grid solutions. These two causes sit at the top of the hierarchy because fixing them partially unblocks everything downstream.



Underlying Pressure: Electricity Demand Growth

Structural Causes:

The technologies that could modernize the grid already exist, are technically proven in many cases, and have capital available to fund them, yet they systematically fail to deploy at scale. The underlying reason is not a single obstacle but three compounding barriers: **a physical grid built for a system that no longer exists, supply chains and workforces that cannot keep pace with demand, and financing structures that were never designed for first-of-kind technologies.**



Solutions:

Technologies that address fundamental grid problems, are hardware-light and have proven track records will be the fastest to implement, but only under market and policy structures that align utility investment with cost-efficiency and performance goals. Conversely, hardware-forward and first-of-kind technologies will need to navigate resource constraints and find appropriately risk-tolerant funders to bridge their access to project debt. Overall, no single technology will sufficiently address the grid's reliability challenges whilst accommodating the energy transition. The range of technologies introduced must be considered alongside each other in the context of geophysical constraints, political structures, and market realities to understand when and what to implement for grid reliability