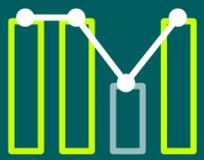


What is grid firming?

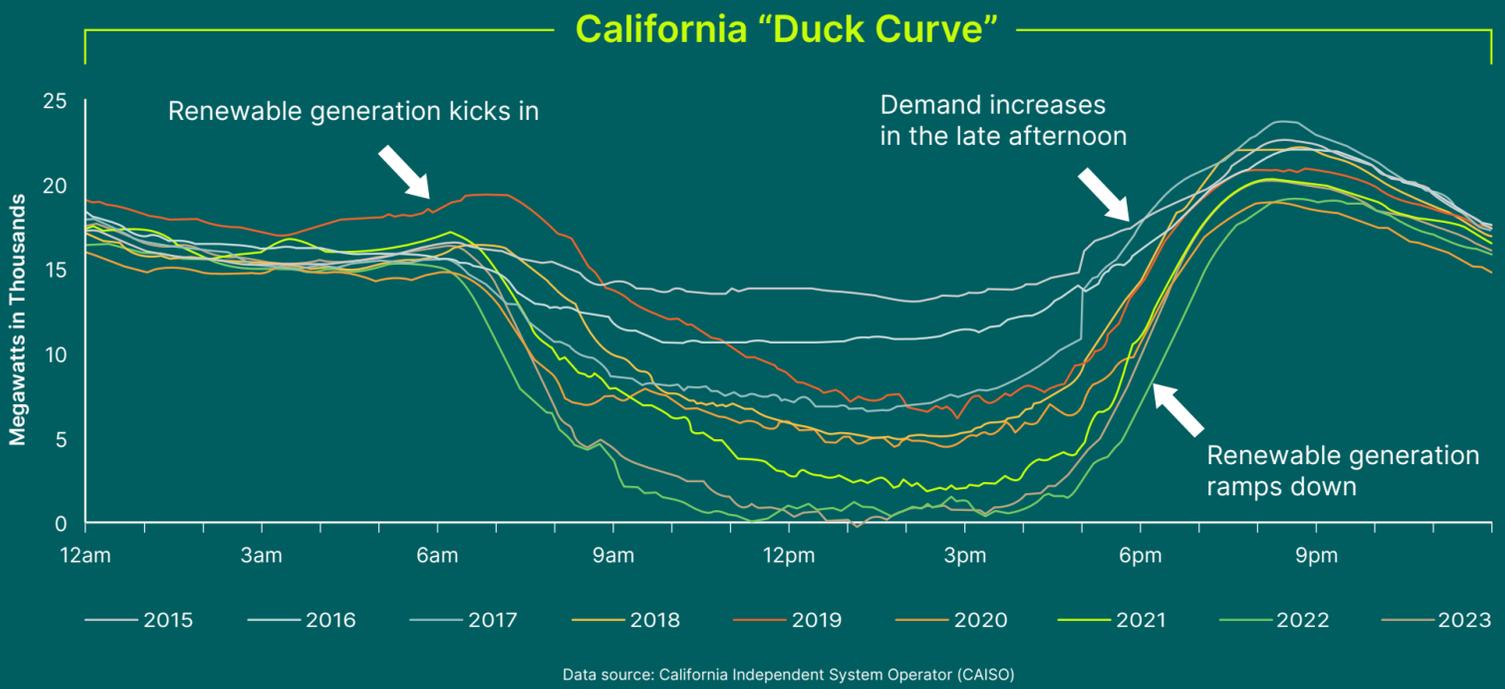
Grid firming (also known as capacity firming or renewable firming) is the addition of another energy resource to a renewable power plant to balance the intermittent variation of renewable resources.



Why do we need grid firming?



Renewables are here to stay, and while going green is important worldwide, it can introduce **intermittency issues**. Let's take a look at a typical net load curve that shows power demand in California, a place with many renewable energy generation sources.



As the day starts, energy needs begin to ramp up...



...peaking in the late afternoon.

But with renewable energy's **intermittent nature**, we see a challenge for grid operators.



The sun provides energy when it's directly overhead—but not if it's cloudy...and none after it sets.



Similarly, the wind isn't always blowing hard enough for turbines to produce their rated capacity.

This creates a gap between
energy supply | ... | **and demand.**

But there's a solution...
and GE Vernova can help.

