Shift toward renewables a conundrum for Calif.

By Kim Smuga-Ottoksmugaotto, San Jose Mercury News

FOLSOM — California's electrical grid has a problem — a nice problem, but a problem nonetheless: The state often has too much power.

Nearly 23 percent of California's energy now comes from renewable sources such as wind and solar, and the state is on track to reach its goal of generating one-third of its energy from renewables by 2020. But feeding all that green energy into the Golden State's grid — without overloading it — has become a major challenge.

That's because the state's aging natural gas plants aren't nimble enough to turn off when the sun starts shining and then quickly switch back on when it gets dark. And while the technology to generate clean energy is growing by leaps and bounds, efforts to store the power haven't kept up.

Power grid operators work in the grid operation center at the California Independent System Operator in Folsom, Calif., on Monday, March 9, 2015.

The dilemma has forced the energy industry to rethink the way we make and use electricity. And utilities are having to recalculate how much they should charge for electricity at certain times of the day.

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