

Renewable Portfolio Standard

Renewable portfolio standards (RPS) set by state law require electric utility companies to produce or purchase a minimum share of electricity from renewable energy facilities. Nevada mandates that renewable energy must account for a rising share of electricity sold within the state, regardless of the additional cost imposed. Under current law, renewable energy must account for:

- 29% of production by 2022.
- 34% of production by 2024.
- 42% of production by 2027.
- 0% of production by 2030.¹

Legislation passed in 2013 disqualified less costly energy-efficiency measures from satisfying any portion of the RPS.² The current requirements result from 2019 legislation that doubled the previous targets.³

Key Points

Renewable energy is less reliable than traditional sources. Electricity generated from wind turbines and solar cells, in particular, are subject to high variability throughout the day and year and may not be available to grid operators during periods of peak demand. Traditional power sources, however, can be reliably scheduled to be available during times of high demand.

A 2021 study in leading scientific journal *Nature* reviewed the performance of solar and wind power sites over the past 38 years and determined that these systems can satisfy consumer demand in 72 to 91% of available hours, depending on location. That means electric grids heavily reliant on these sources could experience hundreds of hours annually of power shortages.⁴

High costs are passed on to ratepayers. When state law requires a utility provider to produce electricity through more expensive means like renewable sources, the utility recoups those costs by increasing the rates charged to customers. By 2025, it is expected that Nevada's electric rates will rise by 6% due to the RPS alone, costing ratepayers an additional \$174 million annually. This amounts to \$70 per year for the average household and \$400 for the average business.⁵

The RPS is a regressive tax. Essentially a tax on energy, the state-imposed renewable energy mandate hits low-income Nevada families hardest, as they must expend a greater proportion of their earnings to meet their energy needs.

High energy costs and grid unreliability damage state competitiveness. Energy is an input into every production process. When entrepreneurs decide whether to open a new manufacturing plant, restaurant, department store, or casino in Nevada, they must factor energy costs into their calculations.

Nevada's RPS has made and will continue to make electricity in Nevada more costly and less reliable. This damages

¹Nevada Revised Statutes, 704.7801-704.7821, inclusive.

²Nevada Legislature, 77th Session, Senate Bill 252.

³Nevada Legislature, 80th Session, Senate Bill 358.

⁴Dan Tong et al., "Geophysical Constraints on the Reliability of Solar and Wind Power Worldwide," *Nature* (2021).

⁵David Tuerck et al., "RPS: A Recipe for Economic Decline," Beacon Hill Institute at Suffolk University, Prepared for NPRI, April 2013.

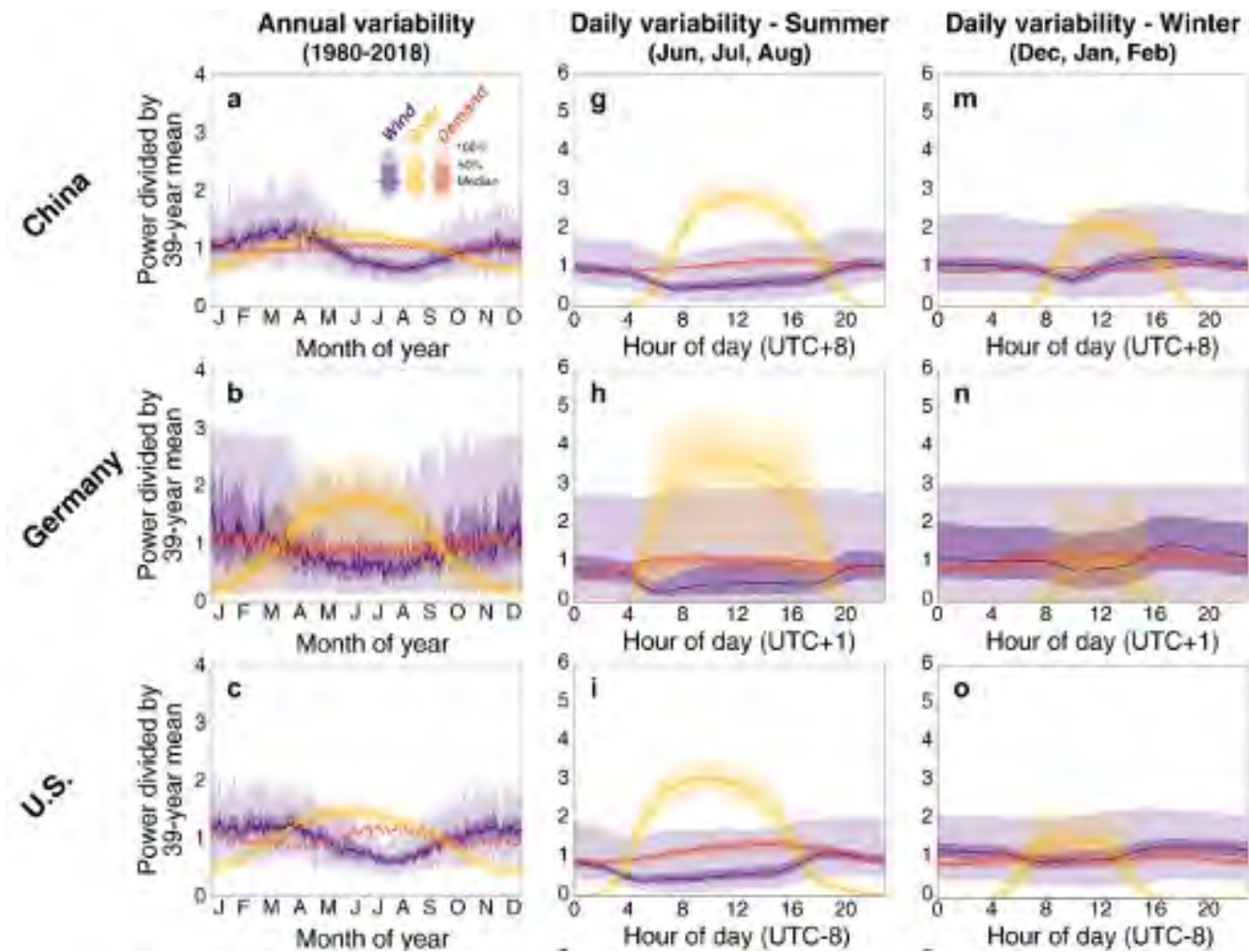
state competitiveness and is a stumbling block to corporate investment and job growth.

California has provided a cautionary tale in recent years as state RPS mandates have encouraged regulated utilities to defer maintenance of the existing grid in favor of constructing renewable generation facilities. As a result, increasing failures within the transmission system have led to routine rolling blackouts across the state.

Recommendations

Repeal the Nevada RPS in its entirety. Because of the renewable mandates, Nevadans are required to expend greater resources to deploy the same amount of energy and that energy is not always available when it is needed. This is the very definition of economic inefficiency.

Repeal of the RPS will lead to higher living standards and faster job growth.



Source: Dan Tong et al., "Geophysical Constraints on the Reliability of Solar and Wind Power Worldwide," Nature (2021).