The Biden Energy Plan Is Like California’s—but Worse

By IER

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Former Vice President and Democratic Party presidential nominee Joe Biden is setting aside $2 trillion for his “clean energy” plan that would replace fossil fuels on the electrical grid by 2035—10 years earlier than California’s state goal. California currently requires 60 percent of its generation to come from renewable energy by 2030 and 100 percent to come from zero-carbon sources by 2045. These non-carbon sources will likely be wind, solar, geothermal, and hydropower because California is shuttering its last nuclear plant in the next few years and new nuclear power cannot compete economically with these other non-carbon sources. California’s reliance on renewable energy resulted in rolling blackouts last month when a heatwave hit and it could not import reliable energy from neighboring states, which the state normally does when its own energy cannot keep the lights on. California’s wildfires resulted in 30 percent less power from its solar units, which also lose power toward sunset—the same time homeowners turn on their appliances.

Mr. Biden, if elected, will force the rest of the country toward a similar plight with his “clean energy standard,” which requires 100 percent electricity to be generated from non-carbon sources by 2035—ten years earlier than California’s mandate. Whether it is even feasible to achieve on a national scale is doubtful, but it will undoubtedly be expensive to electricity consumers and to taxpayers.

Biden’s Plan Has Farther to Go than California’s Plan and Ten Fewer Years to Get There
California generates 42 percent of its power from hydrocarbon sources (natural gas) while the U.S. as a whole generates 63 percent of its electricity from hydrocarbons (coal, natural gas, oil, and other gases). While Biden’s plan does include existing nuclear power, which supplies 20 percent of U.S. generation today, these plants may not all survive premature retirement. Renewable energy is heavily subsidized through state mandates and federal subsidies that makes it hard for other forms of energy to compete with solar and wind units even when their capital costs are fully paid off.

The cost of transforming the U.S. electrical system by replacing perfectly good coal and natural gas plants with non-carbon dioxide emitting generating resources—most likely wind and solar power—and obtaining the necessary grid upgrades and the back-up battery power needed when the wind isn’t blowing and the sun isn’t shining will be an immense and expensive task in just 14 years, if it can be done at all.

California with 30 percent of its utility-scale electricity generated by non-hydroelectric renewable energy had the seventh-highest residential electricity price in the nation in 2019. California’s residential electricity price at 19.22 cents per kilowatt-hour was almost 50 percent higher than the average residential electricity price in the nation (13.04 cents per kilowatt-hour). The United States currently gets just 10.6 percent of its electricity from non-hydroelectric renewable energy despite 28 years of massive tax subsidies at the state and federal levels, coupled with state mandates that force utilities to use increasing amounts of wind and solar. And, many U.S. states do not have good resource potential for generating electricity from wind or solar. Minnesota, for example, received just 5.6 percent of the rated capacity of its solar panels in December 2018. If required to supply all of its electricity in a similar month, consumers would have to pay almost 18 times more to get 100-percent solar power.
Further, nobody is taking into account the massive costs associated with the disposal of retiring wind and solar units, which are expected to occur after 20 to 25 years of operation, because these units do not operate for the 50 to 60 years that coal, natural gas, and nuclear plants can generate power. Solar panels create **300 times more toxic waste** per unit of energy than do nuclear power plants. And, researchers estimate the United States will have over 720,000 tons of wind turbine blade material to dispose of over the next 20 years—a figure that doesn’t include newer, taller higher-capacity turbines.

While coal, nuclear, and petrochemical companies must come up with detailed, costly plans for dealing with disposal, mining restoration and other results of their operations, solar and wind companies have received massive subsidies and absolutely **no disposal standards or requirements**. Government grants do not require that solar companies set aside money to dispose of, store or recycle wastes generated during manufacturing or after solar farms have ceased operation. Solar and wind customers are currently not charged for waste cleanup, disposal, or reuse and recycling, which distort the costs of solar and wind power along with the state mandates and federal subsidies they receive. Disposal costs will have to be paid, and ultimately consumers will bear the cost, increasing the cost of electricity even more.

Research has found that **large-scale solar power plants raise local temperatures**, creating a solar heat island effect. Temperatures around one solar power plant were **5.4o-7.2 °F warmer** than nearby wildlands. One can just imagine such manmade warming effects across the millions of acres needed to meet Biden’s “clean energy standard,” which he promises to implement 10 years earlier than even California’s current plans.

Conclusion
California can serve as an example of what is to come from the Biden energy plan, which is even worse and more costly than California’s plan. Biden must remove more hydrocarbons from the U.S. generating sector in just 14 years than California needs to do in 24 years. California is facing black-outs and reduced generation from its solar plants as heat waves and wildfires hit the state. Californians pay more for electricity than most Americans and they will continue to pay more as the state continues to move toward more renewable energy.

This is the future Americans have to look forward to if Joe Biden’s vision becomes the law of the land. Californians’ energy price increases will seem small compared to what Americans can expect from Biden’s plans that must be implemented in 14 short years. Most Americans want affordable electricity when they need it, for their homes and businesses and for hospitals and schools and everything in modern life. California’s unreliable and costly electrical system is what Joe Biden is promising to implement nationwide, but on a larger and faster scale.