

The side effects of wind energy

In the drive to produce 100 percent of our electricity from renewable sources, we should remember new technologies are not without their own challenges and costs. Solar panels cannot generate electricity at night and wind turbines are useless without wind. Of course, we still want to turn on the lights on those calm, windless nights, so a fully redundant system is essential.

This redundancy and steady supply of energy could involve gigantic battery systems, stored hydro, compressed air, hydrogen fuel cells, or any number of technologies. In the meantime, oil-fired generators provide the backup and base load, continuously cycling from neutral to on, as needed, to balance the load. The cost of burning oil that does not generate electricity, but is needed to support intermittent alternative energy, is called spinning reserve.

Wind turbines are often touted as a critical component for a modern, clean, green energy system of the future. Yet, wind energy generates only about a third of its stated energy capacity, it has a major visual impact on the landscape, it requires spinning reserve, and it has not reduced our electricity bill, even while providing millions of dollars of tax credit to the developers.

Wind turbines have also proven lethal to numerous species around the world, including the bald eagle, migratory birds and bats on the mainland, and to Hawaii's only land mammal, the endangered 'ōpe'ape'a (Hawaiian hoary bat).

When Kawaihoa Wind Power opened in 2012, its consultants projected no more than 60 'ōpe'ape'a would be killed or harmed over the life of the project. Just six years later, the estimated take is 84 and the wind developer is seeking an amended permit to take 265 bats. In four years of operation, Auwahi Wind Farm on Maui has blown past its projected limit of 21 'ōpe'ape'a with an estimated take of 46. They now want permission to take 140 over the next 19 years. Other wind farms are having similar impact.

The exceptional take of endangered 'ōpe'ape'a is particularly alarming because there is no reliable estimate of how many bats remain in the wild and there is no proven method to replace the lost bats. If they cannot replace the affected species, they must reduce the take, not increase it!

Hawaii law requires mitigation and minimization protocols, implemented to the maximum extent practicable, that will result in a net benefit to an affected species. This is not happening. Shockingly, Kawaihoa Wind is already at 75% of a proposed new limit, and yet they resist making operational changes to reduce the level of take.

Keep the North Shore Country, of which I am a Director, is asking the court to send Na Pua Makani back to the Endangered Species Recovery Committee for a thorough review of its Habitat Conservation Plan, based on the latest and best available science, before it constructs a new wind project in Kahuku. NPM has not demonstrated that it will provide a net benefit to the affected 'ōpe'ape'a, nor has it demonstrated that it will protect the species to the maximum extent practicable. A hearing has been scheduled on December 5th.

My phone number is 586-7330. My email address is SenRiviere@capitol.hawaii.gov. Follow us on FaceBook or online at SenatorRiviere.com. Please visit us in Room 217 at the Capitol; or let's talk closer to home, maybe the next time we pass in the street. Mahalo.