MY VIEW DEBRA ANDERSON

'Clean' energy sources can cause their own harm

New Mexico is mobilizing to address a needed energy transition, but many clean technologies can cause their own significant harm.

In 2019 in Surprise, Ariz., a lithium-ion battery energy storage system owned by AES Corp. caught fire and exploded. This was one of three similar incidents in Arizona since 2012. Firefighters were hospitalized with head injuries and chemical burns to body and lungs. Battery energy storage system fires are chemical fires that cause evacuation of communities and can burn for weeks.

A chemical injury can be life-destroying. Arizona Corporation Commissioner Sandra Kennedy conducted an inquiry: "What has become apparent is that utility-scale lithium ion batteries ... create unacceptable risks, particularly those ... that can release hydrogen fluoride in the event of a fire and/or explosion. ..."

Many such incidents have occurred around the world. Potentially, such a catastrophe could be coming to Santa Fe County.

AES, a Fortune 500 energy company, has applied to build a 1,000-plus-acre 96 megawatt solar and 48 MW battery energy storage system facility on open private land between Eldorado, Rancho San Marcos and Rancho Viejo. More applications are in the offing, including on state-owned land. In considering a variance, the county will decide the future character of southeast Santa Fe.

Reforestation, land restoration, high-efficiency building and reducing food waste (8%-10% of global greenhouse emissions) are only a few of the climate change solutions that cause less harm. Why don't we hear about these but often hear about solar farms? One reason is political. Solar PV can be scaled up to industrial size, so monopoly utilities and energy companies will cooperate and can profit.

Many regenerative climate solutions involve restoration or protection of forests and grasslands to store carbon. Meanwhile, communities are revolting as the Mojave Desert is opened to solar and forests have been clear-cut in Massachusetts and Minnesota. What part of our natural landscape, one of our greatest assets, will we bulldoze in New Mexico?

Downsides to industrial solar and storage include a massive land footprint, inefficiency of centralized generation, and mining of hazardous and rare materials like arsenic, cadmium, cobalt and lithium. We are choosing to blanket thousands of acres with electronics that will become toxic e-waste in 20-plus years. According to the National Renewable Energy Laboratory, decommissioned PV modules could total 1 million tons of waste in the U.S. by 2030.

Industry choices are often based on greater profit rather than the greater good, and political influence is huge. How much support would there be for a program, for example, that would require "passive house" building standards (buildings that use 80% less energy) for all new construction? Instead, we invest elsewhere and keep creating new high-use energy customers.

As industrial solar deployment accelerates, we must at least try to prioritize health, safety and the environment, and should join a global effort to locate solar farms on retired coal plants and land that is already destroyed. Facilities should be located far from populated areas.

Email public comment to Jose Larrañaga at <u>joselarra@santafecountynm.gov</u> to oppose industrial power generation in close proximity to thousands of homes and many schools on land that is not zoned for industrial use and shouldn't be.

Debra Anderson is a documentary filmmaker and environmentalist living in Santa Fe. She has covered the energy industry extensively and was awarded the 2010 News & Documentary Emmy for Research for her directorial debut Split Estate about fracking and health. She is currently working on a film about clean energy.