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## Local column: No energy source 100% renewable

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**By Steve Piet**

PC businesses hoping to curry favor with customers are starting to drive selection of future electricity options toward expensive and intermittent wind and solar, writes Steve Piet.

Kudos to those who prepare, whether is it forest fires, hurricanes, riots, or needed energy sources. This column focuses on future energy sources.

Last month, I attended the Intermountain Energy Summit hosted in Idaho Falls. Many good people are preparing our energy options, mostly wisely.

Consider “re-newable energy” often used but not defined at the Summit. This term is meant to imply goodness, sustainability, and the Light Side of the Force. It always includes solar and wind – unless a particular installation is opposed by the forces of Goodness. For example, some oppose solar mirror installations in southern California’s desert impacting threatened animals or wind turbines offshore the rich homes in Massachusetts. “Re-newables” sometimes includes hydro, sometimes not, depending on the politics of the hydro in question. For example, the Hetch-Hetchy dam providing water and electricity to San Francisco is ok despite being in Yosemite National Park, but Snake River dams feeding eastern Washington state are not ok. And, of course, all right-minded, ... correct-minded, ... left-minded folks don’t include nuclear energy in “re-newables.”

A scientific definition of “re-newable” would consider all the required fuel and construction materials, e.g., uranium for nuclear, cobalt and rare-earth metals for wind turbine motors, toxic materials like cadmium and arsenic for some solar cells, and lithium for batteries required for intermittent wind and solar. I challenge any energy source to be more renewable than nuclear, especially when used nuclear fuel is recycled.

Our politicians and energy preparers must make that case because there is pressure to limit electricity energy sources to only those labelled renewables.

More businesses are renewable energy; more businesses are labelling themselves 100 percent renewable. They are misleading you.

What powers the vehicles going in and out? Are they all 100% electric vehicles? With all electricity charging those vehicles coming 100 percent renewable sources?

What about the buildings housing the business and its employees? The number 1, 3, and 4 largest global energy uses are making steel, plastic, and cement. Steel refining uses coal. Plastic uses

petrochemicals. Cement uses whatever heat sources can be found locally and cheaply. These aren't renewable. (The number 2 global energy use is making nitrate fertilizer, typically using natural gas, which isn't renewable either.)

Thus, at least two thirds of the energy of "100 percent renewable businesses" aren't renewable by the politically-correct definition of renewable. Patronize "100 percent renewable businesses" if you want, but it's just a marketing ploy.

This exposé isn't just for fun. It's deadly serious as politicians and bureaucrats are weaving renewables into laws and regulations. Politically-correct businesses hoping to curry favor with customers are starting to drive selection of future intermountain state electricity options toward expensive and intermittent wind and solar. Let's at least get nuclear in the mix.

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**Piet holds the Doctor of Science degree in nuclear engineering; he retired after 31 years at INL.**