“Will the blurring of reality and fantasy continue?” This recent headline appearing in a major Chicago newspaper shouts a warning worth heading in the upcoming debate on energy legislation and Illinois’ energy future, and as President Joe Biden formulates a response to effectively deal with climate disruption. The reality is – nuclear power is not a viable response to the climate emergency.

Nuclear cheerleaders in the media and politics continue unchallenged to glowingly but falsely refer to nuclear as “clean” power.

Nuclear reactors produce 20+ tons of extremely hazardous high-level radioactive wastes (HLRW) annually, plus thousands of cubic feet of so-called low-level radwaste. Exelon’s Illinois reactors have produced over 11,000 tons of the nation’s 80,000+ tons of HLRW — with no place for disposal, thanks largely to federal government ineptitude and Congressional incompetence.

Government Nuclear Regulatory Commission (NRC) regulations also permit routine radionuclide discharges into the air and water – if below regulatory standards, some of questionable validity. But “accidental” releases like at the Braidwood and Dresden reactors also occur; sometimes, rather large ones – like Chernobyl and Fukushima.

Cradle-to-grave analyses of the entire nuclear fuel chain (beginning with uranium mining and ending with permanent HLRW disposal) demonstrate that nuclear has an abundant greenhouse gas footprint exceeding renewables when accounting for the necessities of uranium mining and processing, fuel production, reactor manufacture, plant construction and eventual tear-down, such as has occurred at Exelon’s Zion nuclear power plant, and the permanent disposal of dangerous HLRW.

This is not the profile of a “clean, green and emissions-free” energy resource, as nuclear advocates claim. At best, nuclear is LOW-carbon, and only at the reactor site. End of fantasy. To paraphrase the late S. David Freeman, former public utilities director of SMUD in California: exchanging carbon for plutonium is dumb energy policy.

But beyond environmental cleanliness, Governor Pritzker and the Legislature must also consider the “political cleanliness” of nuclear power. ComEd’s admitted unethical lobbying practices locking in rate increases and possibly the $2.3 billion bailout of Exelon’s unprofitable reactors on the backs of Illinois ratepayers should disqualify them as a desirable business partner supplying an essential public necessity. Corporations like Exelon/ComEd that actively thwart the ability to bring in renewable-generated power from out of state are certainly no friends of “clean” energy.

Beyond Illinois’ $2.3 billion bailout, nuclear scandals such as the FBI arrests and $61 million nuclear bribery and $1.3 billion bailout scheme in Ohio, the ratepayer subsidized $13 billion cost overruns at the Georgia Vogtle 3 & 4 reactor construction site, the 2016 $8.5 billion nuclear bailout in New York, and the $9 billion SCANA nuclear fraud scandal in South Carolina unequivocally demonstrate the ethical
“uncleanliness” of the nuclear industry. The fraud and bailouts of these scandals alone amount to **$34.1 billion** – nearly **65 times** the $528 million Solyndra bankruptcy often mentioned by renewables critics as an excuse to not invest in renewables – amply illustrating that nuclear power is certainly not a climate option least susceptible to corruption and mismanagement.

New nuclear plants – whether conventional or “advance” designs – remain untested, economically uncompetitive, and unavailable. To meaningfully address the climate crisis, an energy resource must: 1.) remove the most amount of carbon, 2.) in the quickest time, 3.) at the lowest cost possible, and 4.) without creating, substituting or worsening equally planetary-threatening, socially unjust or unacceptable alternatives ( nuclear proliferation, terrorism, war, waste, etc.). **Nuclear power fails all of these conditions.**

Yet some persist with the fantasy that we must pursue an “all of the above, everything is on the table” approach to meeting energy needs and fighting climate disruption. Sen. Joe Manchin (D.WV), incoming chair of the Senate Energy Committee recently expressed this absurd belief in an “all-in” energy approach as an indication of how he intends to operate and gate-keep energy legislation in the Committee (and bailout out his home state’s coal industry).

This is an irrational and completely uneconomic option, best laid low by former **NRC Commissioner Peter Bradford**, who was also the public utilities chair for the states of Maine and New York. Bradford points out:

> “Those who assert that the problem of climate change is so urgent that — we have to do everything (or, another popular substitute for serious thought, ‘seek silver birdshot, not silver bullets’), overlook the fact that we can never afford to do everything.

> “The urgency of world hunger doesn’t compel us to fight it with caviar, no matter how nourishing fish eggs might be. Spending large sums on elegant solutions (especially those with side effects) that provide little relief will diminish what we can spend on more promising approaches.”

A study coming from University of Sussex last October (2020) discovered that economies that attempted to grow both a nuclear and renewable energy sector simultaneously wound up reducing carbon emissions less than if they would have done renewables alone:

Andy Stirling, Professor of Science and Technology Policy at the University of Sussex Business School, said: **“This paper exposes the irrationality of arguing for nuclear investment based on a ‘do everything’ argument. Our findings show not only that nuclear investments around the world tend on balance to be less effective than renewable investments at carbon emissions mitigation, but that tensions between these two strategies can further erode the effectiveness of averting climate disruption.”**

The fact is – nuclear crowds out more effective renewable energy resources. **End of fantasy.**

With legislation, words mean something, and fantasy has no place in it. It’s long past time to end the fantasy that nuclear power is "clean" energy. If Illinois is serious about supporting clean energy, then aggressively support renewables, not nuclear. Unlike nuclear, they are both carbon and radiation free.

You can’t create an energy future by bailing out the past. ■

*Nuclear Energy Information Service (NEIS) is a 40-year old, safe-energy advocacy, nuclear power watchdog organization based in Logan Square, Chicago.*