



Nuclear Energy: A Baseload Option

Description:

Abundant energy is the base for advanced societies. America succeeded only because of a coal base that drove our manufacturing machines, and now we add the increased national power needed to drive our computers. We are being squeezed by two forces. The first is that our coal and oil burning does inflict lethal (yes, lethal) damage. The second is that coal and oil have finite resource lifetimes. They are a fixed resource that we burn huge amounts by the minute.

What are the energy options? That is what this talk is about. Let's look at the pluses and minuses of each energy path. We wake up each morning and mainly burn coal and oil as we have for over 100 years. We are hindered by lack of a national policy on energy such as China has. There is a logical path, and that is the main thrust of this talk and there is an accompanying no-cost E-book. This is Professor Hawkins' fifth book, and it is offered free to the public.

This seminar is an outgrowth of lectures and book writing over a 5-year period given at the University of Florida and with the IEEE P&E Society. We often read that we must eliminate all fossil fuels and nuclear reactors and replace them with 100% renewable energy sources. This seminar presents data that clearly show that is not possible. While elimination of fossil fuels is an urgent goal, what do we replace them with? These data indicate that nuclear power is the only resource that can provide dependable, safe, pollution-free emission, and when delivered in small reactor designs it can be mass produced in a near plug and play configuration at a competitive cost. We will close with a summary of future direction, and a digital version of the Book will be distributed free to attendees.

Speaker: Chuck Hawkins

When:(Part 1) Tuesday, March 22nd, 2022 From 6:00 PM to 7:00 PM (PST/PDT)

Where: Online via the zoom platform

Register:

<https://events.vtools.ieee.org/m/304909> or

<https://us02web.zoom.us/meeting/register/tZMlduiqrz4tE9ybdxzJmny3PdTS4ENDihe1>

Speaker Bio:

Dr. Charles Hawkins is a Professor Emeritus in the Department of Electrical and Computer Engineering at the University of New Mexico and an Affiliate Professor at ECE Florida. His research and graduate teaching was in IC test engineering, reliability, and failure analysis. He has also worked with the CMOS IC Development Group at Sandia National Lab in New Mexico for 20 years and did on-site research at Intel, AMD, Philips Research Labs, Signetics, and Qualcomm.

