



## Limitations of Renewables and Baseload Energy Sources

**Date:** Friday, June 19

**Time:** 10:30 am-1:30 pm Seminar

**Location:** Online, A link will be emailed to each attendee 2 days before seminar begins

**Cost:** Free members, \$40 Non-Members, Free for Students

Payment Online (Credit Card or PayPal) at the vTools registration website below.

**Registration and Payment (vTools):** <https://events.vtools.ieee.org/m/231223>

**Speakers:** Dr. Charles (Chuck) Hawkins

**Questions:** Steve Antman at 813 460-5434 or email at [steve.antman@gmail.com](mailto:steve.antman@gmail.com)

### ABSTRACT

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 of by the minute.

This talk is about energy options. Is it renewables or baseloads or both? We will evaluate twelve ways that we generate electricity and their suitability. What are the pluses and minuses? There is a logical path, and that is the focus of this talk and the book. We are hindered by a lack of national energy policy that China has. My fifth book "Limitations of Renewables and Baseload Energy Sources" is offered free to the public.

### BIOGRAPHY

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.