

Cost: \$35 Preregistered members; \$40 non-members/walk-ups

To guarantee a seat, pre-register on the HGS website & pre-pay by credit card.

Pre-registration without payment will not be accepted.

Walk-ups may pay at the door if extra seats are available.

W.C. Rusty Riese

If you are an Active or Associate Member who is unemployed and would like to attend this meeting, please call the HGS office for a discounted registration cost. We are also seeking members to volunteer at the registration desk for this and other events.

Geologists, the Public, and Public Policy: What Are Our Ethical Responsibilities?

In the polarizing and supercharged environment of today's public discourse, many views are hotly contested, but three stand out as worthy of attention from geological scientists: fracking, public primary and secondary education, and climate change. All three are interconnected.

Fracking is widely condemned in the public media as a new technology whose safety hasn't been demonstrated and which should therefore be banned, as it has been in New York, and all this in spite of the fact that fracking has been carried out in Kansas since the 1920's, and more widely since the end of WWII – all tight gas plays have benefited from its application. Public K-through-12 education in science has been weak for many years, as evidenced by ever-declining scores on achievement tests, but has been further compromised in a number of states through the application of the Common Core State Standard Initiative and the Next Generation Science Standards (NGSS) – standards which appear less devoted to raising scientific awareness and skills than to promoting a political agenda.

The chimeric fantasy of controlling climate change is thus the avenue through which an assortment of political agenda are being promoted. Common Core and NGSS both recommend that educators identify global warming as a core concept and stress the relationship between global warming and human activity. This is a link which no scientific study has been able to demonstrate; and neither set of standards address the physics of heat, or the relationship between radiant heat and energy. They offer no appreciation of the role of the sun in affecting climate, or the relative impact of human contributions.

Why would educators and the federal bureaucracy which drives these initiatives take positions which clearly short-change the application of true quality science and in so doing diminish the scientific capabilities of the next generation? John Holdren, president Obama's science advisor answered that best:

"A massive campaign must be launched to...de-develop the United States...bringing our economic system (especially patterns of consumption) into line with the realities of ecology and the global resource situation... We must design a stable, low consumption economy in which there is a more equitable distribution of wealth."

This "more equitable distribution of wealth" is envisioned to be global, as indicated by a UN IPCC spokesperson in the fall of 2015:

"One must free oneself from the illusion that international climate policy is environmental policy. This has nothing to

do with environmental policy anymore. ... We redistribute the world's wealth by climate policy."

This is where geoscientists, indeed all scientists, must become involved. Our science is the study of the planet Earth, including all its materials, processes, and products; and the history of the planet and its life forms. We then have an ethical responsibility to place the knowledge thus obtained into the service of man. In this we have failed. We must become involved in shoring up the scientific foundations of the next generation by seeing that their curricula are robust in content. We must speak out about how hydraulic fracturing really works. We must shine a light on the criminal alteration of historical climate data by individuals who are charged with maintaining the integrity of those data and help the public understand what is really happening. None of this will be easy and some may be distinctly unpleasant, but without a robust engagement along these lines the "war on coal" will continue to metamorphose into a "war on all carbon fuels"; our access to many of the things which the "Great Enrichment" of the past two hundred years depended on and developed will be lost; and our very culture and way of life will be threatened. ■

Biographical Sketch

DR. W.C. RUSTY RIESE is a geoscientist based in Houston, Texas. He is widely experienced having worked in both minerals and petroleum as a geologist, geochemist, and manager during more than 40 years in industry.

Rusty has written extensively and lectured on various topics in economic geology including biogeochemistry, isotope geochemistry, uranium ore deposits, sequence stratigraphy, and coalbed methane petroleum systems; and he holds numerous domestic and international patents. He also has more than forty years of teaching experience. He is a fellow in the Geological Society of America and the Society of Economic Geologists; and an Honorary Member of the American Association of Petroleum Geologists as well as several other professional organizations.

He earned his PhD from the University of New Mexico in 1980; his MS in geology from the same university in 1977; and his BS in geology from the New Mexico Institute of Mining and Technology in 1973. He is a Certified Petroleum Geologist.

