APR09-2009-001198

Abstract for an Invited Paper
for the APR09 Meeting of
the American Physical Society

Skating on Thin Ice: Evolution of Conservation in Energy Policy

JACK GIBBONS

Why are we physicists so often drawn into the nexus of energy policy and governance? There are several explanations. First, we are quite accustomed to this phenomenon of "cause and effect," so we instinctively examine those two ends as well as the connections between them (i.e., what happens between a lump of coal and a light bulb). That way of thinking makes energy production and consumption intiminately connected and "conservation" naturally becomes a technological strategy rather than an appendage. Strangely, however, "conservation" in our society (called "The Cowboy Economy" by economist Kenneth Boulding) has been widely interpreted as competitive with supply and ridiculed as only a minor option, entailing denial of an amenity. After nearly a half-century of dialogue, innovation, and frustration, the rationality of what I call the "physics" perspective seems to have come of age. The evolution of relevant science and technology and public policy has advanced markedly, reflected and sustained at the national level by a succession of organizations. The Congressional Office of Technology Assessment, the Federal Office of Energy Conservation, the Federal Energy Administration, the U.S. Department of Energy, and the Office of Science and Technology Policy. Not surprisingly, physicists continue to play key roles in the inculcation of science and analysis into the policy and governance. This requires, as implied by C.P. Snow, a bridging and strengthening of the thin ice between science and society. We still have a long road to travel.