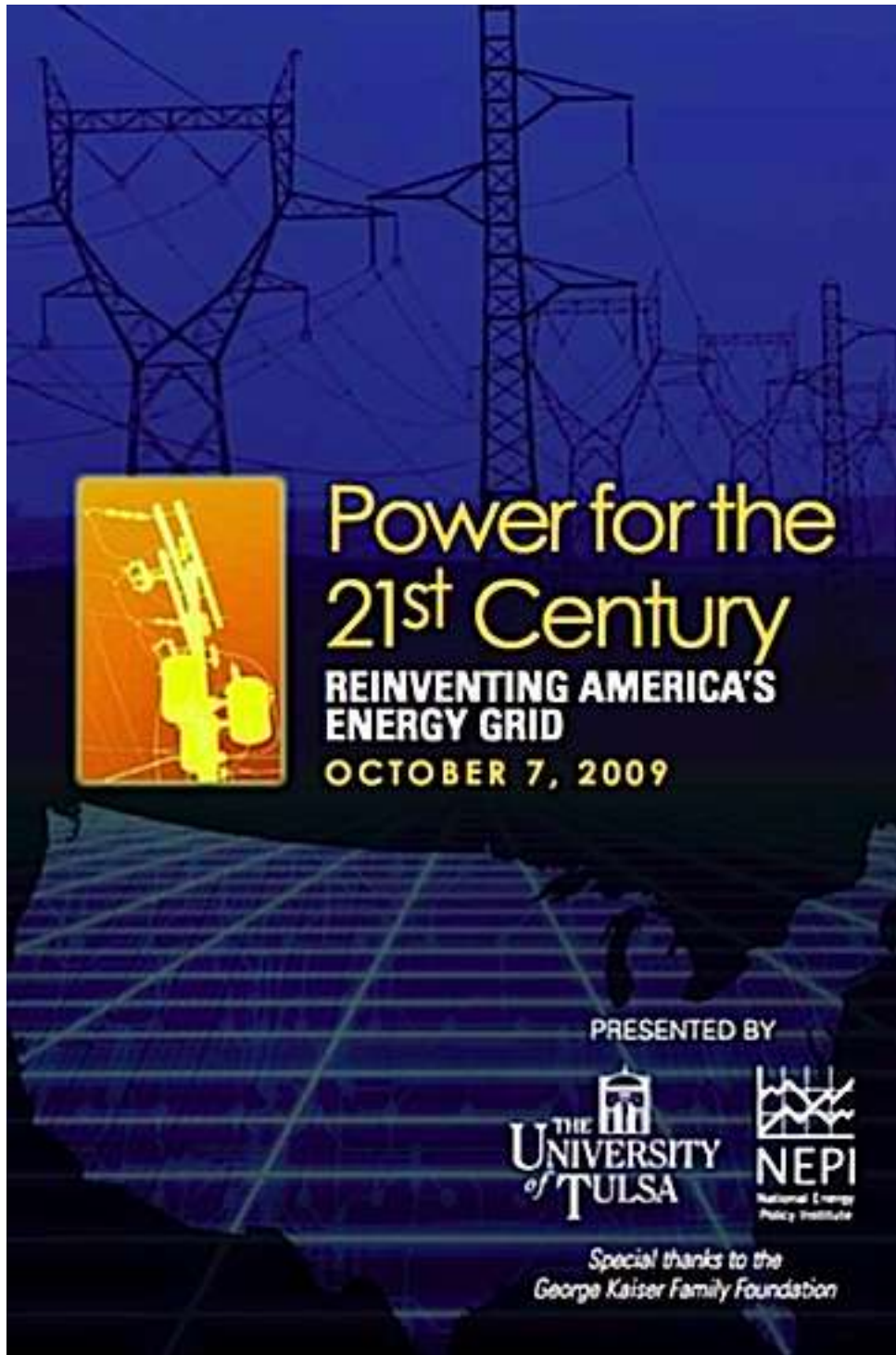


## STATE POLICIES



## STATE POLICIES - A Bridge or Barrier to Renewable Energy?



**Gary Allison, Vice Dean, TU College of Law**

Professor Allison earned his J.D. in 1972 from The University of Tulsa and his LL.M. in 1976 in the area of economic regulation from Columbia University. He teaches constitutional law, water law, and regulated industries. Professor Allison is a fellow of the Sustainable Energy & Resources Law Program of the College of Law. His scholarship includes a casebook on regulated industries and numerous articles on constitutional law and energy policy. As special counsel to the Oklahoma Corporation Commission, he helped organize and write a study of issues the OCC encountered in deciding whether to adopt various public utility standards proposed in the landmark Public Utilities Policies Act of 1978. Professor Allison has been lead counsel on five State Supreme Court challenges to initiative petitions concerning state government reorganization, abortion rights, education reform, and congressional term limits. He has been a Democratic nominee for Congress.

### ***Presentation Summary***

Allison discussed the potentials and constraints of renewables, and how our current market structures may affect key supply and demand choices. He pointed out that currently coal is by far the most utilized resource and combined with natural gas, nuclear power and hydroelectric it accounts for 95% of what is being used. All other renewables amount to only about 2.6%. That includes wind, solar, wood, geothermal, and other biomass. Wind is the leader of this group. Fuel cells could possibly be the game changer of the future.

#### The Constraints:

- **Cost:** With some renewables the cost is all upfront. Currently coal is the least costly and solar the most expensive. Geothermal, natural gas, nuclear, biopower and wind fall in between in that order.
- **Transmission:** It is a big issue for wind, solar and geothermal because you must build where the resources are and sometimes they are very remote.
- **Intermittency:** Some resources cannot produce at a steady level and can't be stored well.
- **Environmental:** Each renewable carries an environmental impact and many create the 'not in my back yard' response. For example, using water resources raises the issue of reducing the number of dams or not building more dams. Biopower materials are at odds with things like the use of corn for food or power generation. Thermo electric production is the highest consumer of water in the country.

Renewables depend upon subsidization if we are going to meet the timetables of 2010 or 2020. Some states are creating renewable energy credits as a way of subsidizing production. If we can get enough renewables in use, technology will advance with a critical mass at some point. Scientists, engineers, and economics take over and build a better mousetrap.

Net metering can spread the cost. It is a business arrangement between an individual power generator and a power distributor where you generate electricity for your own use and sell the excess back to the grid.

Voluntary purchase, a 'green' marketing plan, asks if you would be willing to contribute to a fund

to buy renewable energy.

Feed In Tariff is a form of Renewable Portfolio Standard whereby all users on the grid pay the same amount for energy from a specified renewable technology.

'Not in my back yard' plays a huge role in picking sites for transmission. Some states have gone to a one-stop shop for transmission siting, while some states have not, especially for renewables. Answers are not yet clear.

Climate change is going to dramatically impact the water supply. Demand will exceed supply and the solutions are not being fully addressed.

We need subsidies, feed in tariffs and dramatic carbon policy and radical R&D on the Manhattan Project scale. We must face the fact that you can force ratepayers to pay. It's hard for elected commissioners to abide by this and retain their jobs, but we need to make radical changes to what we're doing now. We need to research renewables. We need to explore things like fuel cells and batteries. Batteries could possible lead to the option that we won't need transmission grids. Battery technology is the new Saudi Arabia. China has 4 research projects on renewables, India has 3 and we have 2.

The very things needed to solve climate change, may be the things that will save the economy for our children.