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Clean power, clean fuels, clean transportation

by Robert Farmer, ©1999

Clean power, clean fuels, clean transportation. These concepts are very much a part of our lives these days, and they've appeared prominently in state and national energy legislative efforts while the chapter has been enjoying, if not sweltering, its annual summer vacation.

On the national front, U.S. Senators Jim Jeffords (R-Vt) and Joe Lieberman (D-Conn) introduced *The Clean Energy Act of 1999* with the support of a group of Northeast Senators. This far-reaching legislation builds on other comprehensive electric restructuring proposals by placing new emissions caps on power plants, and especially on old, dirty, coal-fired power plants which, under current law, are exempt from the requirements of *The Clean Air Act*. The Senators also note that because Northeast power plants do have to meet Clean Air requirements, their plants are placed at a competitive disadvantage with higher prices for their electricity. The legislation places special emphasis on a future for clean renewable energy sources by including a Systems Benefit Fund (see *Energy News*, January 1997) to develop renewable energy sources and promote energy efficiency and universal access. It also calls for a Renewable Portfolio Standard, net metering, and full-disclosure provisions on fuel sources for all utilities. Clearly the Northeast is reaching

the end-of-the-line in its continuing upwind pollution battle with old and dirty Midwest power plants. As Senator Jeffords said when introducing the Act, "Why should we live with smog, acid rain and code red summer afternoons when the technology is here to capture the sun and wind in our backyard? It is time for our Nation to transition from smokestacks, coal power and smog to a future with windmills, solar power and blue skies."

For the record, Florida has at least a dozen of these dirty, grandfathered power plants that the Act seeks to clean up. And, alarmingly, their annual emissions are increasing because they are working longer and harder. Senator Jeffords noted, "as the U.S. Public Interest Research Group report indicates, air pollution produced from dirty power plants has skyrocketed. With recent wholesale deregulation, coal-fired power plants increased their output almost 16%. This has got to end".

While emissions from these older plants have increased there are ominous signs that, in Florida, this is an indication the entire electric system is under stress. Requests for voluntary power curtailments are one sign but we've also been told that the state's electricity system has been working closer to maximum capacity, and much too frequently for comfort. There are concerns that reserve capacity margins are inadequate, that

power plant construction has not kept pace with demand. But the irony is, how could the utilities and the PSC have projected demand for the kind of summer temperatures we have been experiencing without having reliable climate prediction models to count on? I don't want to continue harping on the global warming issue, but isn't it time we factored increased heat load into utility 10-year Site Plans filed with the PSC? Before it really is too late and the whole system crashes?

It's not just wholesale deregulation that has driven up the output of these dirty power plants across the nation. They are the last line of defense against the combination of deadly summer heat and the shortfall of investment in needed infrastructure. In these wait-and-see times of restructuring who must shoulder the responsibility? Investor-owned utilities know they will not be allowed to own generating facilities in a restructured industry. And that is why, as Washington would have it, each state must commit to restructuring before its electricity reliability becomes a danger to its public.

Unfortunately the news for Floridians does not get better. Florida is ranked 50th on a list of restructuring efforts compiled by DOE's Energy Information Administration.

Perhaps as a result of Florida's inactivity, in August the House Committee on

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Resources, Subcommittee on Energy and Mineral Resources, requested testimony from Jay Hakes, the EIA Administrator, on "The Electric Power and Other Energy Needs for the State of Florida". Mr. Hakes reported "Florida's SO₂, Nox and CO₂ emissions were all among the top 7 nationally in 1996," the most recent year of reporting. On electricity restructuring he said the "PSC stated that the plant [Duke/New Smyrna Beach merchant plant], and other merchant plants proposed to be built could help solve the State's reserve margin problem, lack of photovoltaics, and market share concerns". On Florida legislation, he told the committee "the legislature adjourned April 30 with no major electric industry restructuring effort or even a study considered."

Concerning clean fuels and clean transportation, Governor Bush approved S 1270, the *Motor Vehicles & Highway Safety Act*, which, under Section 72, creates the *Florida Clean Fuel Act* and establishes a Clean Fuel Florida Advisory Board under the Department of Community Affairs.

The current EPA Fact Sheet, OMS-6 (1994), defines clean fuels as those vehicular fuels that "create less pollution than today's gasolines". Florida's *Act* provides seats on the advisory board for all of these fuels. But the EPA Fact Sheet and the *Florida Clean Fuel Act* are woefully out-of-date with today's technological advances. Since 1994 hydrogen fuel cells have made tremendous inroads into the transportation consciousness as one of the most viable solutions to our energy security and atmospheric pollution woes. The automobile and oil industries have seen fit to invest billions in their development, eagerly supported by their national governments. But Florida's board does not currently provide a seat representing hydrogen.

I have a recommendation. David Bruderly PE, of Gainesville, is one of Florida's top hydrogen experts and he will ensure that

Floridians' interests are taken care of first on the road to a sustainable future. Please DCA, do Florida's future a favor and put Mr. Bruderly on the board. •



Robert Farmer is an energy planning engineer and energy policy specialist. A comprehensive resource on technologies, issues, and policies, he offers clients strategies, briefings, and presentations on planning a sustainable energy future.

His technical expertise includes large scale to small scale power generation, combined heat and power (CHP), marine and surface transportation, and alternative fuel applications.

A Florida resident since 1984, Robert was a member of the Energy Advisory Committee of Governor Chiles' Commission for a Sustainable South Florida.

He is a Regional member and Market Development Chair of the Gold Coast Clean Cities Coalition (a U.S. Department of Energy program), and a member of the Southeast Air Coalition for Outreach (SEACO, an initiative of the Florida Department of Environmental Protection).

He is a member of the international Association of Energy Engineers (AEE) and since 1992 has served on the Board of the Southeast Florida Society of Energy Professionals, the local AEE chapter. He is a member of the Sound Science Initiative of the Union of Concerned Scientists, and a member of the United States Association for Energy Economics (USAEE).

He is also a member of the Board of Directors of the Tallahassee-based law firm, Legal Environmental Assistance Foundation, Inc. (LEAF), and of Third Planet, a Fort Lauderdale-based public charity.

He graduated as a Planning Engineer with Bristol-Siddeley Engines/Rolls Royce Gas Turbines Ltd. in the United Kingdom and has over 30 years engineering, sales and service management experience in the engine power industry in North America.

robertfarmer@conceptcommuniques.com
CONCEPT COMMUNIQUE'S INC.
5200 N Federal Hwy Ste 2
Fort Lauderdale FL 33308
(954) 493-8127

www.conceptcommuniques.com