

University of North Texas

Center for Economic Development and Research Institute of Applied Economics

October 26, 2000

California Energy Commission Energy Facilities Siting and Environmental Protection 1516 Ninth Street, MS-15 Sacramento, CA 95814

Re: Docket #98-AFC-3 (Metcalf Energy Center)

Dear Sir or Madam:

I am writing in response to a request by Californians for Renewable Energy, Inc. (CARE) on the reliability of California's natural gas supply for power generation. It is my considered opinion that high and rising natural gas prices are likely to be with us for at least the next two to three years. Higher gas prices, in turn, will result in higher delivered electricity prices because of the growing reliance of public utilities and non-utility generators on natural gas as a boiler fuel.

I am a professional economist who has followed the energy markets for the past 25 years, and I've also served as a consultant to a number of energy companies. My belief that natural gas prices will remain high, and supplies tight, for several years to come is based on the following facts.

Strong U.S. economic growth by itself is bolstering demand and affecting gas prices. For example, industrial consumption of natural gas—about 40 percent of total demand—has grown 4.5 percent over the past year. Because it is environmentally benign, natural gas has become the preferred fuel for industrial processing, home heating, and electric power generation. With the nation's electric utilities turning their backs on nuclear and coal-fired generators, natural gas is providing most of the new capacity. According to the Energy Information Agency, almost 50,000 megawatts of new natural gas fired generating capacity is expected to come on line by 2007. Total U.S. demand for gas is expected to approach 30 trillion cubic feet (TCF) by the year 2010—up from about 21 TCF today—with almost a third allocated to electric power generation.

Constraints on the production of gas will also keep prices high for the foreseeable future. Drilling for gas plummeted in 1998 and early 1999 in the face of low prices, and the number of rotary rigs drilling for gas declined almost 50 percent. Though the count has rebounded in recent months, extraction is up only six percent from a year ago. Natural gas exploration is being hampered by a severe shortage of drilling rigs as well as a dearth of trained personnel. These shortages are compounded by the reality that discoveries of

large gas field in the continental U.S. are increasingly rare. Thus more rigs and workers are needed to explore the smaller fields that remain.

One can only conclude that, in view of escalating demand on the one hand and supply constraints on the other, natural gas prices are likely to remain at historic highs for a number of years.

For a more detailed assessment of the natural gas situation and outlook, I refer you to a recent study prepared by our Center for Economic Development and Research here at the University of North Texas. You can access this study on our website at www.unt.edu/cedr/naturalgas.pdf

I've enclosed a short biographical sketch that summarizes my background and expertise. If you have any questions, please feel free to phone me at 940-565-4049.

Sincerely yours,

Bernard L. Weinstein Director and Professor of

Applied Economics

/ss encl.

BERNARD L. WEINSTEIN

Bernard L. Weinstein is director of the Center for Economic Development and Research and a professor of applied economics at the University of North Texas in Denton. The Center was established in 1989 to provide economic analysis and consulting services to university constituents in the private, non-profit and public sectors. He also serves as director of the Institute of Applied Economics, which offers masters degree programs in economic development.

Dr. Weinstein studied public administration at Dartmouth College and received his A.B. in 1963. After a year of study at the London School of Economics and Political Science, he began graduate work in economics at Columbia University, receiving an M.A. in 1966 and a Ph.D. in 1973.

He has taught at Rensselaer Polytechnic Institute, the State University of New York, the University of Texas at Dallas, and Southern Methodist University. He has been a research associate with the Tax Foundation in Washington, D.C. and the Gray Institute in Beaumont, Texas. He has worked for several U.S. government agencies including the President's Commission on School Finance, the Internal Revenue Service and the Federal Trade Commission.

Dr. Weinstein has authored or co-authored numerous books, monographs and articles on the subjects of economic development, public policy and taxation, and his work has appeared in professional journals such as LAND ECONOMICS, CHALLENGE, SOCIETY, POLICY REVIEW, ECONOMIC DEVELOPMENT QUARTERLY, POLICY STUDIES JOURNAL and ANNALS OF REGIONAL SCIENCE. His work has also appeared in THE NEW YORK TIMES, THE WALL ST. JOURNAL, THE LOS ANGELES TIMES and a number of regional newspapers and magazines. He is a former member of the editorial board of SOCIETY magazine and currently serves on the DALLAS MORNING NEWS Board of Economists.

Dr. Weinstein has been a consultant to many companies, non-profit organizations and government agencies, and he testifies frequently before legislative, regulatory and judicial bodies. His clients have included AT&T, Southwestern Bell, Texas Instruments, Conoco, Entergy, Central Power and Light, the Nuclear Energy Institute, the U.S. Conference of Mayors, the Western Governors Association, the City of San Antonio, and the Joint Economic Committee of the U.S. Congress.

Dr. Weinstein was director of federal affairs for the Southern Growth Policies Board from 1978 to 1980 and served as director of the Task Force on the Southern Economy of the 1980 Commission on the Future of the South. From 1984 to 1987 he was chairman of the Texas Economic Policy Advisory Council and from 1987 to 1988 served as visiting scholar with the Sunbelt Institute in Washington, D.C. In 1992 he was appointed by Lieutenant Governor Bob Bullock to the Texas Partnership for Economic Development. He is currently a senior fellow with the Southern Growth Policies Board and the Texas Public Policy Foundation, and he serves on the boards of the Dallas Business Finance Corporation and Metroplex Citizens Against Lawsuit Abuse. He is also a director of Beal Bank and AccuBanc Mortgage Corporation in Dallas, Texas.

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