On the Renewal of Concern for the Security of Oil Supply
by Chantale LaCasse and André Plourde (University of Ottawa)

Abstract

It seems curious that the security of oil supply would again emerge as a source of concern precisely when oil market conditions seem to be most favourable to oil-importing nations. We trace this development to the increased import volumes that have followed the 1986 collapse in the world oil price, and argue that concerns over the source of oil are of primary importance only in situations where physical availability is likely problematic. As the conception of security of supply is broadened, a distinction between random and strategic shocks is useful. Supply-side considerations, such as stockpiles, seem apt only to address the consequences of random shocks. As time horizons lengthen, supply-side measures lose their effectiveness, and demand-side considerations emerge as possible means of dampening the macroeconomic effects of future strategic shocks. Implementation remains an unresolved issue: the expected costs and benefits of specific interventions must still be compared.

On the Cost of Lost Production from Russian Oil Fields
by James L. Smith (University of Houston)

Abstract

Russia is now paying heavily for past mismanagement of its major oil fields. Unconventional attempts to maximize short-run extraction, neglect of routine maintenance, and shortages of critical equipment have combined to cause a steep decline in production. This study examines the scope and size of resulting economic losses using an extension of the traditional exponential decline model. Estimates derived from the model indicate that as much as 40% of the potential value of Russian oil reserves has been lost through poor management.
Effects of an Increasing Role for Independents on Petroleum Resource Development in the Gulf of Mexico OCS Region

by Omowumi O. Iledare, Allan G. Pulsipher and Robert H. Baumann (Louisiana State University)

Abstract

Major oil and gas companies are shifting their exploration and production (E&P) investment from the United States to foreign countries. As they do so, smaller companies, "independents," are expected to play a more prominent role in domestic E&P. Within both industry and government circles the apprehension is widespread that such a shift from the majors to the independents will cause domestic oil and gas resources to be developed less aggressively and less efficiently. This paper attempts to discern and quantify differences in firm behavior and success among firms of different sizes (majors, large and small independents) operating on the Gulf of Mexico OCS region. Contrary to conventional thinking, descriptive analysis of data on drilling effort and outcomes on the Gulf of Mexico indicates independents have been both more aggressive and successful than the majors in exploration while the majors have been only moderately more successful than independents in development drilling.

Effects of Global Warming on Energy Use for Space Heating and Cooling in the United States

by Donald H. Rosenthal, Howard Gruenspecht and Emily A. Moran (U.S. Department of Energy)

This study uses a three-step approach to estimate the impact of global warming on U.S. energy expenditures for space heating and cooling in residential and commercial buildings. First, average results from six different global circulation models are used to estimate the change in heating and cooling degree days in five U.S. climate zones associated with a 1°C centigrade (C) global warming. Second, the change in degree days is mapped into a corresponding change in U.S. energy use for space conditioning, taking account of differences in population and baseline space conditioning intensity levels across regions, under the assumption that desired indoor temperature is unaffected by climate change. Finally, we estimate the associated change in energy expenditures. We find that a global warming of 1°C would reduce projected U.S. energy expenditures in 2010 by $5.5 billion (1991 dollars). This contrasts with earlier studies which have suggested modest global warming would increase U.S. expenditures on space conditioning energy.
Market Structure and the Price of Electricity: An Ex Ante Analysis of Deregulated Swedish Markets

by Bo Andersson and Lars Bergman (Stockholm School of Economics)

Abstract

Following new legislation the Swedish electricity market is about to be deregulated. The new system is designed to ensure competition in production and supply. The main motive for deregulation is to increase competition and thus achieve lower market prices. A possible threat to this outcome is the high degree of concentration on the seller side that characterizes the Swedish electricity market. In this paper we show that given the current structure of firms on the supply side, deregulation is not a sufficient condition for lower equilibrium prices in the electricity market. We use a numerical model to explore the quantitative relation between the Cournot-equilibrium price, the number of firms, and the size distribution of firms in the Swedish electricity market. We compute equilibrium electricity prices and a welfare measure in order to quantify the effect of asymmetric market concentration on competition.

Marginal Capacity Costs of Electricity Distribution and Demand for Distributed Generation

by Chi-Keung Woo (Energy and Environmental Economics), Debra Lloyd-Zannetti, Ren Orans, Brian Horii and Grayson Heffner (EPRI)

Abstract

Marginal costs of electricity vary by time and location. Past researchers attributed these variations to factors related to electricity generation, transmission and distribution. Past authors, however, did not fully analyze the large variations in marginal distribution capacity costs (MDCC) by area and time. Thus, the objectives of this paper are as follows: (1) to show that large MDCC variations exist within a utility's service territory; (2) to demonstrate inter-utility variations in MDCC; and (3) to demonstrate the usefulness of these costs in determining demand for distributed generation (DG).
Book Reviews

Pages 131-132

Fueling One Billion: An Insider's Story of Chinese Energy Policy Development
by Yingzhong Lu (book review by Joy Dunkerley)

Pages 132-135

Managing the Global Commons: The Economics of Climate Change
by William D. Nordhaus (book review by Marian Radetzki)

Pages 135-136

Energy in Latin America: Production, Consumption and Future Growth
by Kang Wu (book review by David Edelman)

Pages 136-138

Regulating Regional Power Systems
by Clinton Andrews, ed. (book review by Richard Gordon)

Pages 138-139

Prisoners of Myth: Leadership of the Tennessee Valley Authority 1933-1990
by Erwin C. Hargrove (book review by Richard Gordon)