A Comparison of Natural Gas Spot Price Linear Regression Forecasting Models

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Thesis submitted to the Faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Master of Arts

in

Economics

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May 7, 2001
Falls Church, Virginia

Keywords: Natural Gas, Price Forecasting, Spot Price

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(ABSTRACT)

The market for natural gas in the United States follows a yearly price pattern of high prices during the winter heating season and lows during the summer months. During the winter heating season the daily and weekly price fluctuations for natural gas are normally related to ambient air temperature and other weather related phenomenon. This paper examines a natural gas price forecasting model developed by the U.S. Department of Energy, Energy Information Agency (EIA). This paper proposes that a more accurate forecasting model can be created from the EIA model by focusing on forecasting price during only the winter heating season and by adding other variables to the EIA model. The forecasting results of the core EIA model are compared to the results of other linear regression models.
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