

**A Comparison of Natural Gas Spot Price Linear
Regression Forecasting Models**

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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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