ABSTRACT

The paper analyses the unexplored contractual relationship among sellers and buyers in the natural gas business. In the majority of European natural gas contracts the seller commits to deliver the stated quantity of gas during the year and the buyer is obliged to offtake the main part of the agreed quantity. The difference between these two volumes represents the offtaking flexibility that the seller grants to the buyer, the embedded option. The paper focuses on the evaluation of this embedded option. Firstly the investigation is performed in the current market situation when the buyer doesn't have the access to the spot market with natural gas. Under this condition the buyer can't make a profit and he is using the option only to satisfy the changing demand of his consumers. Secondly, the option is evaluated in the future situation when the spot market with natural gas emerges. In this circumstance, the embedded option becomes a financial option with changing strike price and we can evaluate it using the spread option formulas.