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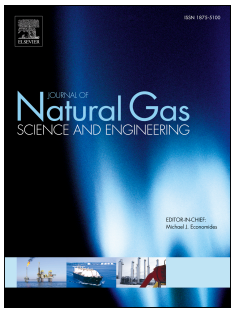

The role of LNG and unconventional gas in the future natural gas markets of Argentina and Chile

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THE ROLE OF LNG AND UNCONVENTIONAL GAS IN THE FUTURE NATURAL GAS MARKETS OF ARGENTINA AND CHILE

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Abstract

The natural gas exports from Argentina to Chile until the last decade represented a milestone for the energy integration aspirations in South America. Since the interruptions of Argentinian gas flows to Chile in 2004, this regional gas trade has been substituted by LNG imports. In 2016, Chile even started delivering gas to Argentina sourced by its LNG regasification terminals. However, tapping into unconventional gas resources in Argentina can reshape the supply-demand balance for these two countries. This study analysed the interplay between LNG and unconventional gas under two scenarios of investments in upstream supported by an integrated modelling tool for gas and power. In the Low-Investment Scenario in upstream, LNG imports increase significantly making it necessary to double the regasification capacity of Argentina by 2030. In the High-Investment scenario, where unconventional gas represents nearly half of natural gas domestic production in 2030, Argentina will rely on LNG only to meet winter demands. For Chile, in both scenarios tested, LNG remains relevant, requiring the construction of new regasification terminals. Still, developing unconventional resources as in the High-Investment scenario allows Argentina to re-take exports to Chile in the next decade, mainly in the summer season, providing another opportunity for discussions on energy integration in the region.

Keyword: Latin America, Shale gas, Gas trade, LNG, Water impacts

1. Introduction

Integration of energy markets in Latin America is a long-lasting goal, with some success but also some failures. Among the greatest successes stands the Brazilian – Paraguayan hydropower dam of Itaipu, with 14.000 MW of install capacity that begun operations with its first turbines in 1984, and the Argentina – Uruguay hydropower dam of Salto Grande with 1.890 MW of capacity, that started operations with its first turbines in 1979. On the failures, is the interrupted natural gas

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