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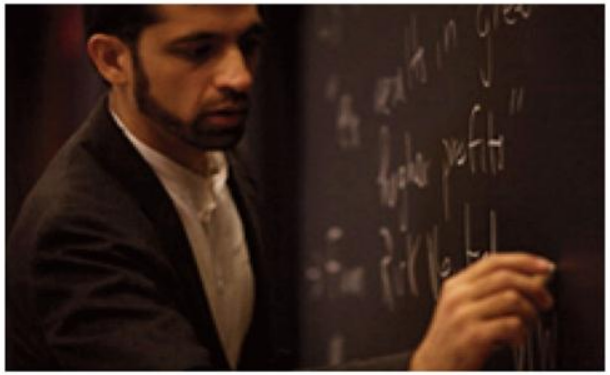

Contractual and Commercial Elements of Hydrocarbon Exports-What Can Be Taken Over to a Renewable Energy Export Scheme?

Renewable Energy Workshop, Casablanca, Morocco and Tunis, Tunisia Nov. 23, 2010

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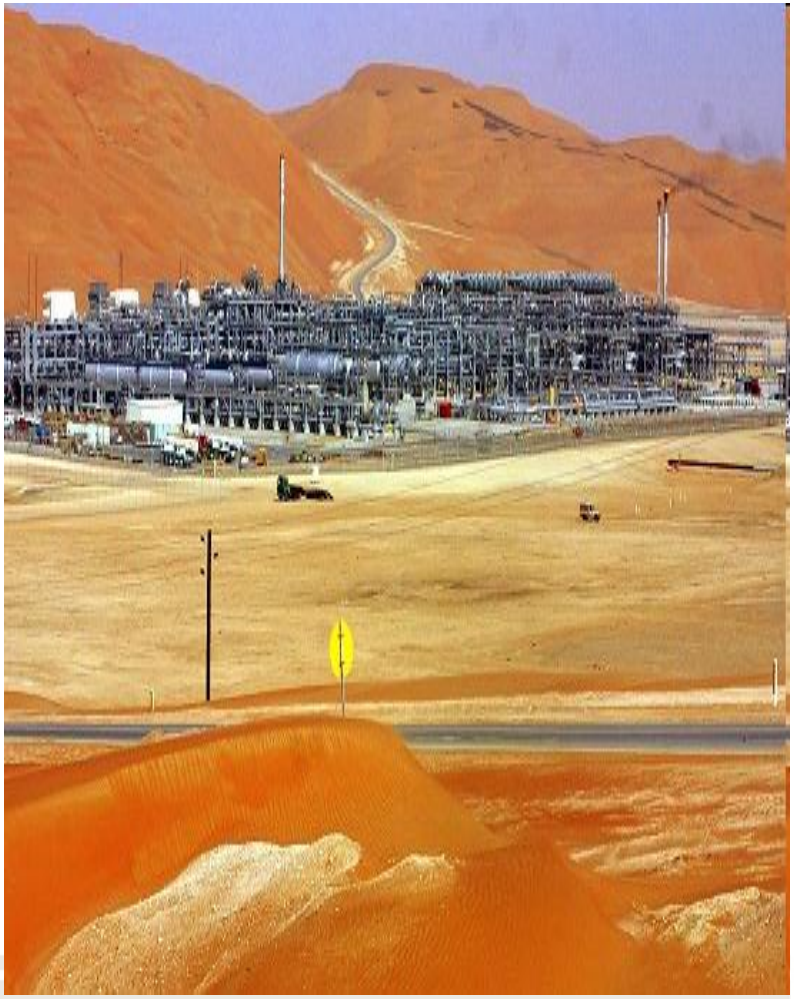
Main Discussion Points

- The use of take or pay contracts in the natural gas sector and the impact of regulations on the contracts as well as optimal contract duration.

- The applicability of these contracts to power export to the EU as well as the renewable energy sector.



Main Points: Contractual forms

The transaction cost theory: because of the specific upfront capital investment required on both the sellers and the buyer (pipeline connections, etc.) the irreversibility of such infrastructures creates the potential risk of "hold up" and illustrates that pricing in the gas market is the outcome of long-term bilateral agreements. In long term "take of pay " contracts which link the sellers and buyers for a long period of time, generally 20-25 years, both parties have strictly defined obligations where the take or pay clause requires that has to be paid whether taken or not, and specifies an obligation for the seller to make available defined volumes of gas.

Hold Up Problem: In terms of the natural gas sector, when there is one party that commits capital that has little value for alternative uses, the other stakeholder has a strong incentive to appropriate the rents which arise from the relationship through opportunistic behavior.

Issues with Duration

Main Problem with long term contracting:
Inflexibility in the face of supply and demand fluctuations.

- **Attempted solution:** Parties will stipulate certain clauses. Such as:

  Price floor, prices are rigid downward but can raise following price escalators, as predefined increases per year or petroleum price index.

  Redetermination clauses provide renegotiation of the terms of the contract at predetermined intervals.

Take or Pay

Take or Pay: The Take or Pay clause requires that gas has to be paid for whether it is taken or not, and the clause specifies an obligation for the seller to make available defined volumes of gas.

- The take amount can be specified in two ways:

  Allows the buyer to take a quantity which is a specified percentage of the production within a given lifetime.

  The take amount can be based on a percentage of production capacity of the well. With both the reserves and the capacity are tested periodically, these indicate from changes, the buyer can be asked to modify the take quantity, though the percentage itself is fixed. In order to absorb seasonal demand fluctuations, annual take requirements may be modified and complemented by monthly or daily withdrawals.

Suggestions for Power Export and Renewable Energy Contracts

- Long-term take or pay contracts are able to minimize regulatory uncertainty, they create appropriate incentives for location placement and operation, allow for efficient system operation and are generally compatible with the tradition of state directed development in the region.

- Take or pay contracts can include differentiated payments according to the technology utilized or locally available resource base. Because these payments are built in with the long term contracts, the differentiation does not create regulatory risk.

- It is desirable to create a renewable energy support scheme that protects investors from the regulatory uncertainty that arises from the evolution of grid access, congestion management and balancing. Take or pay contracts can encourage this certainty/stability as they ensure that revenue streams remain stable in the event of any market design changes.

Thank you for your Attention

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