

ABSTRACT

A TECHNO-ECONOMIC EVALUATION OF TWO NATURAL GAS FIELDS FOR DEVELOPMENT LOCATED OFFSHORE ON THE EAST COAST, OF TRINIDAD.

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Current supplies of natural gas are derived from three main sources, AMOCO, NGC and TRINTOMAR. Up to 1989 virtually all of the NGC gas came from AMOCO's East Coast Fields comprising 340 mmcf/d of high pressure gas purchased from AMOCO and 110 mmcf/d of low pressure gas which it collects and compresses itself from the Teak and Poui Fields. These fields are however starting to decline.

Two options for new sources of gas were evaluated. They were the Kiskadee Field (Project A) which was intended to supplement the production of the existing Pelican Field and the North Seg Field (Project B) the nearest alternative. Based on the sequence of timing of both projects, for Case 1, years 2002 - 2003 , and for Case 2 , 2000 would be critical years of future shortages occurring and consideration should be given to developing another field.

The results have shown conclusively that based on the present reserves of the Kiskadee Field , a gasfield development project here would not be viable even if the reserves estimates used herein, were increased significantly.

It has been found that an increase in the reserves by approximately 202 % for this project would contribute to positive NPV's being produced.

For the North Seg Project the estimated selling price of gas excluding transmission costs, and based on anticipated demand would be in the order of \$ US 0.90 - 1.20 per mcf. This proposal is an excellent one and should be the next gasfield to be brought on stream.

The results clearly demonstrate that future priorities should be established at the earliest opportunity for the development of new gas supplies, in order to meet in a timely manner the demand of current and new users. Evaluation of alternatives should note the critical role that the benefits from condensate production play in gasfield development. Government direction or incentives may be necessary in the development of small fields.

To Trinidad & Tobago Oil Company, through its Exploration and Production Manager, Mr Wayne Bertrand for allowing me the opportunity to complete this project.

and finally,

To my family who rallied around me when the going was rough.