IMPACT OF DEVELOPING TECHNOLOGY ON INDIRECT LIQUEFACTION

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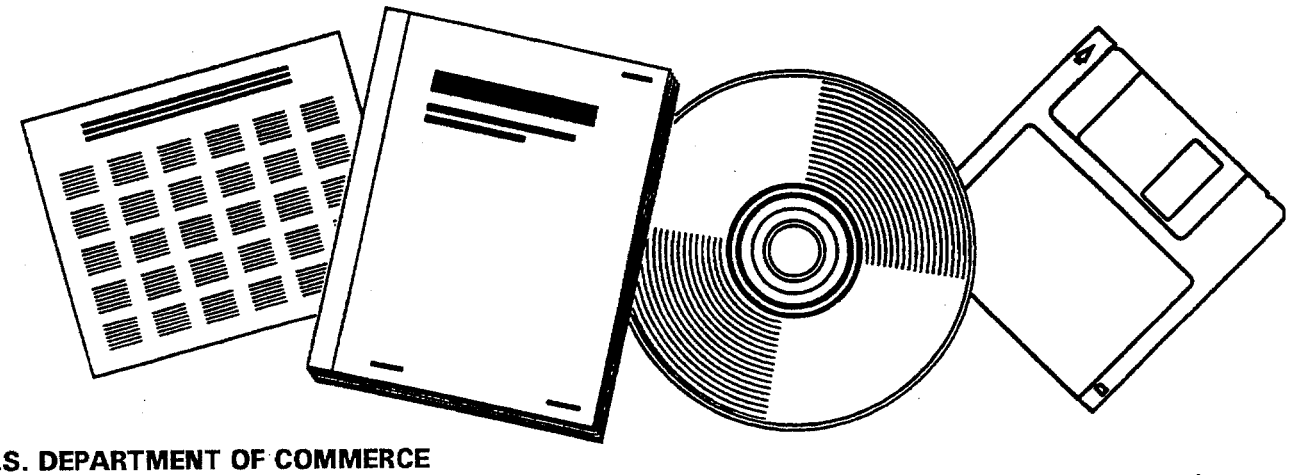

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The Impact of Developing Technology on Indirect Liquefaction

David Gray
Milton Lytton
Martin Neuworth
Glen Tomlinson

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The MITRE Corporation
Metrek Division
1820 Dolley Madison Boulevard
McLean, Virginia 22102

Cover photograph of SASOL II by courtesy of FLUOR

ABSTRACT

The status of commercial technology for indirect liquefaction, as exemplified by SASOL facilities in South Africa, is reviewed. The impact of substituting more advanced gasifiers and synthesis systems is then investigated.

Slagging BGC/Lurgi, Texaco and Shell-Koppers gasifiers were substituted for the Dry Ash Lurgi units used at SASOL. SASOL SYNTHOL synthesis units were replaced by slurry phase Fischer-Tropsch units employing technology pioneered by Kolbel.

The advanced systems were found to have a highly favorable impact on plant efficiency, product distribution and gasoline cost. If all the projected technical improvements can be realized for indirect liquefaction, the yields of refined transportation fuels per ton of coal will approach those anticipated for direct liquefaction processes.

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