

MINUTE ITEM

This Calendar Item No. 27  
was submitted for information  
only, no action thereon  
being necessary.

CALENDAR ITEM  
27.

2/80  
Thompson

INFORMATIVE

REVIEW OF PILOT SCALE DEMONSTRATION  
OF MICELLAR-POLYMER WATERFLOODING TECHNIQUES  
FOR ENHANCED OIL RECOVERY, WILMINGTON OIL FIELD

The Commission, at its July, 1976 meeting, approved a request by the City of Long Beach to enter into a cost-sharing contract with the federal Department of Energy to conduct a pilot scale demonstration of micellar-polymer waterflooding techniques in the Upper Terminal Zone of Fault Block VB, Wilmington Oil Field. The Long Beach Oil Development Company is the oil contractor for the City in this area.

Under the terms of this cost-sharing contract, the City and the federal government agreed to share in total project costs of \$7 million, on a 50/50 basis. The total federal obligation is limited to \$3.5 million. The total project expenditures through December 31, 1979 were \$7,645,000. Therefore, the period of federal government participation in costs has been completed.

The federal government does not share in any incremental oil revenue produced by the pilot demonstration. It is considered to be an enhanced recovery project by the Department of Energy, for which uncontrolled crude oil prices are allowable. Total quantities of oil produced since the project began have been 38,152 barrels, resulting in gross revenue of approximately \$430,000.

Injection of the micellar slug began on July 12, 1979 and was completed on October 11. A total of 90,605 barrels was injected. The polymer buffer injection was initiated immediately upon completion of the micellar slug injection. This phase of the project is expected to last a total of about eighteen months, which will complete the injection phase of the project.

During the past 6-month review period, 5,029 barrels of crude oil were produced. The current production rate is about 59 B/D. Oil producing rates from the project continued to decline while the gross rate of oil and water production remained approximately the same. Pump failures occurred and were remedied in two wells, and two wells were acid stimulated. All producers were on production at the end of the review period.

A 52, 57, 58  
S 27, 31

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|---------------|-----|
| CALENDAR PAGE | 161 |
| MINUTE PAGE   | 400 |

CALENDAR ITEM NO. 27 (CONTD)

The project injection wells performed satisfactorily and total polymer injection was maintained at 2,000 B/D.

Samples of the produced fluids from all wells continue to be monitored for tracer materials that would indicate response at the producing wells. A significant amount of thiocyanate tracer has been detected in one well thus far. The sulfonate tests show concentrations only similar to those of background levels.

The time of first response for the project has been estimated to occur in the first quarter of 1980.

The Commission's staff will continue to analyze the progress and effectiveness of this pilot demonstration for enhanced oil recovery and will present semi-annual summaries to the Commission for its information.

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|---------------|-----|
| CALENDAR PAGE | 162 |
| MINUTE PAGE   | 401 |