MINUTE ITEM

20. DEVELOPMENT PLAN, LONG BEACH HARBOR DEPARTMENT, PARCEL "L", WILMINGTON OIL FIELD - L.B.W.O. 10,197.

The Executive Officer stated that this item was being reported to the Commission because it was the first of such advance planning for operational developments under the collateral agreement, and because of the significant amount of additional revenue involved, amounting to $41 million.

The Chairman pointed out that this entire amount would accrue to the State because of the ceiling imposed under the schedule in S.B. 60, then being considered by the Legislature. He asked that the Executive Officer make certain that this new estimate was used in discussions before legislative committees and the Commission.

Attachment
Calendar Item 15 (2 pages)

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CALENDAR ITEM

INFORMATIVE

15.

DEVELOPMENT PLAN, LONG BEACH HARBOR DEPARTMENT, PARCEL "L", WILMINGTON OIL FIELD - L.B.W.O. 10,197.

The Harbor Department of the City of Long Beach has submitted a "Development Plan, Parcel 'L'" for study and review pursuant to the terms of the "Collateral Agreement between State Lands Commission and Long Beach Board of Harbor Commissioners, Long Beach Harbor Tidelands Parcel". This collateral agreement was entered into concurrently with the "Drilling and Operating Contract, Long Beach Harbor Tidelands Parcel", which was approved by the Commission at its meetings of October 10, 1963 (Minute Item 2, Pages 9309-9316) and December 20, 1963 (Minute Item 30, Pages 9555-9558).

This proposed plan provides for the immediate development of Parcel "L" to allow exploitation of the recoverable petroleum reserves in a 25-to-30-year period by drilling 59 production and 16 injection wells. These wells will be directionally drilled in to the Tar, Ranger, and Upper Terminal Zones from two existing piers, "A" and "G", and from Pier "J", now under construction. As proposed, Pier "A" will provide drillsites for 20 producing and 3 injection wells; Pier "G", 21 producing and 5 injection wells; and Pier "J", 18 producing and 8 injection wells. Drillsites for the 26 wells to be drilled from Pier "J" will not become available until 1965.

In order to reduce personnel, minimize the space needed for facilities, and provide a more sightly landscape, it is proposed to conduct production and injection operations through automated systems, with oil-pumping equipment located below ground level. Prime movers for production and injection facilities will be electrically powered because of an anticipated shortage of natural gas.

Total drilling costs are estimated at $7,030,000, and total production facility costs at $1,371,000. Capital costs for water-injection facilities are not specifically set forth in the plan; however, a lifetime amortization charge of 2.75 mills per barrel of water injected was used in the economic study. The plan estimates that 451 million barrels of water will be injected during the economic life of the parcel; thus, the estimated amortized capital costs for water-injection facilities will be $1,240,000.

The plan proposes peripheral water injection with a line-drive to maintain full reservoir pressure. Under these conditions, it is estimated that over 42 million barrels of oil and 6 million Mcf of gas can be recovered economically from the three productive oil zones. A peak oil production rate of 11,000 barrels per day is anticipated during 1966. The rate of water injection should reach a maximum of 58,000 barrels per day during 1976.

The gross value of the 42 million barrels of recoverable oil is estimated to be nearly $88 million. Total costs, including drilling production, injection, and facility costs are estimated to be nearly $47 million during the 25-year

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economic life of the parcel. Thus, future net income from Parcel "L" will probably be in excess of $41 million. From this net income the Long Beach Oil Development Company, as contractor, will receive approximately $3-3/4 million. The balance, an estimated $37-1/2 million, will be shared by the City of Long Beach and the State of California in accordance with applicable statutes. (See Exhibit "B").

The proposed plan of development for Parcel "L" has been reviewed, and in the opinion of the staff, is in accordance with good petroleum engineering practice and should result in maximum recovery of hydrocarbons.