MINUTE ITEM

14. SECOND SUPPLEMENTAL LETTER AGREEMENT OF MODIFICATION TO "COOPERATIVE AGREEMENT FOR WATER INJECTION OPERATIONS (FAULT BLOCK V RANGER ZONE)", WILMINGTON OIL FIELD, LOS ANGELES COUNTY.

After consideration of Calendar Item 15 attached, and upon motion duly made and carried, the following resolution was adopted:

THE COMMISSION, PURSUANT TO APPLICABLE STATUTES, APPROVES THE SECOND SUPPLEMENTAL LETTER AGREEMENT OF MODIFICATION TO THE "COOPERATIVE AGREEMENT FOR WATER INJECTION OPERATIONS (FAULT BLOCK V RANGER ZONE)", AS SUBMITTED BY THE CITY OF LONG BEACH.

Attachment: Calendar Item 15 (2 pages) 15.

SECOND SUPPLEMENTAL LETTER AGREEMENT OF MODIFICATION TO "COOPERATIVE AGREEMENT FOR WATER INJECTION OPERATIONS (FAULT BLOCK V RANGER ZONE)", WILMINGTON OIL FIELD, LOS ANGELES COUNTY

The Commission, at its meeting of March 26, 1964, approved the "Cooperative Agreement for Water Injection Operations (Fault Block V Ranger Zone)" between the City of Long Beach, Richfield Oil Corp. (later merged into Atlantic Richfield Co.), and the City of Long Beach and Mobil Oil Corporation (jointly referred to as Unit Operators).

This Cooperative Agreement provides for the injection of water into the Ranger Zone along the common boundary between the Fault Block V Unit and Parcel "A" in order to increase reservoir pressures, prevent the migration of fluids across the common boundary, and increase the ultimate amount of economically recoverable oil. The Cooperative Agreement established a Restricted Section along the common boundary, the location of injection intervals, and injection rates for all wells operating within the Restricted Section.

On October 28, 1971, the Commission approved a Letter Agreement supplementing the subject Cooperative Agreement to provide for the conversion of Restricted Section well A-184 to water injection as a replacement for injection well FRA-209, which had sustained severe casing damage requiring abandonment.

Since approval of the first Letter Agreement, Powerine Oil Company, Rothschild Oil Company, and Edgington Oil Company have become the successors in interest to the Atlantic Richfield Company.

Recently, Fault Block V Ranger Zone Unit injection well FJ-76, in the Restricted Section, failed mechanically and requires abandonment. This Second Supplemental Letter Agreement will permit the Fault Block V Ranger Zone Unit to purchase City-owned Terminal Zone well J-45, which is idle and uneconomic, as a replacement for the damaged well FJ-76. The Unit will plug back and recomplete well J-45 and convert it to injection service as well FJ-45. The City will inject water into the replacement well at the rate of approximately 1,500 to 2,500 barrels per day, subject to the terms of the Cooperative Agreement. This proposed conversion of well J-45 will be less expensive than redrilling or repairing well FJ-76.

All parties to the Cooperative Agreement and the Working Interest Owners of the Fault Block V Ranger Zone Unit have approved the Second Supplemental Letter Agreement. The City Council of the City of Long Beach, on January 8, 1974, approved the Second Supplemental Letter Agreement and authorized its execution by the City Manager.

CALENDAR ITEM NO. 15. (CONTD)

The Division has reviewed the Second Supplemental Letter Agreement and finds that implementation of the provisions of the Letter Agreement are desirable.

IT IS RECOMMENDED THAT THE COMMISSION, PURSUANT TO APPLICABLE STATUTES, APPROVE THE SECOND SUPPLEMENTAL LETTER AGREEMENT OF MODIFICATION TO THE "COOPERATIVE AGREEMENT FOR WATER INJECTION OPERATIONS (FAULT BLOCK V RANGER ZONE)", AS SUBMITTED BY THE CITY OF LONG BEACH.