MINUTE ITEM

14. APPROVAL OF HUNTINGTON BEACH "LINE FLOOD AGREEMENT" E 392.1, SIGNAL OIL AND GAS COMPANY AND STANDARD OIL COMPANY OF CALIFORNIA, AND AN AMEND-MEN! AND MODIFICATION OF STATE OIL AND GAS LEASE PRC 1343.1, STANDARD OIL COMPANY OF CALIFORNIA, HUNTINGTON BEACH COMPANY, AND SOUTHERN PACIFIC TRANSPORTATION COMPANY; ORANGE COUNTY - W 9121, E 392.1.

After consideration of Calendar Item 18 attached, and upon motion duly made and carried, the following resolution was adopted:

THE COMMISSION:

1. RESCINDS ITS ACTION OF MARCH 26, 1970 (MINUTE ITEM 20, PAGE 211), AP-PROVING A MODIFICATION AGREEMENT TO AMEND AND MODIFY THE JONES ZONE LINE FLOOD AGREEMENT.

2. FINDS THAT:

- A. AMENDMENT AND MODIFICATION OF STATE OIL AND GAS LEASE EXTENSION AND RENEWAL PRC 1343.1 IS NECESSARY AND ADVISABLE IN THE PUBLIC INTEREST;
- B. A COOPERATIVE PLAN OF OPERATION OF THE MAIN ZONE AS TO BOTH PRC 1343.1 AND E 392.1 IS NECESSARY AND ADVISABLE IN THE PUBLIC INTEREST;
- C. THE CONSERVATION OF NATURAL PRODUCTS REQUIRES A LINE FLOOD AGREEMENT.

3. APPROVES:

- A. THE AMENDMENT AND MODIFICATION OF STATE OIL AND GAS LEASE PRC 1343.1, A COPY OF WHICH IS MADE A PART HEREOF BY REFERENCE TO THE OFFICIAL FILES OF THE COMMISSION;
- B. THE LINE FLOOD AGREEMENT (AGREED COMMON LINE HUNTINGTON BEACH),
 ENTERED INTO ON JANUARY 27, 1971, BETWEEN STANDARD OIL COMPANY OF
 CALIFORNIA AND SIGNAL OIL AND GAS COMPANY, A COPY OF WHICH IS MADE
 A PART HEREOF BY REFERENCE TO THE OFFICIAL FILES OF THE COMMISSION.
 THE APPROVAL SHALL BE SUBJECT TO THE CONDITIONS THAT NO WELLS, EITHER
 SURFACED OR BOTTOMED WITHIN LANDS INCLUDED IN LEASE E 392.1, PURSUANT
 TO THE AGREEMENT, BE OPERATED BY ANY PARTY OTHER THAN SIGNAL OIL AND
 GAS COMPANY WITHOUT WRITTEN APPROVAL OF THE STATE, AND THAT COPIES OF
 ALL LOGS, PRODUCTION, INJECTION, AND OTHER ENGINEERING AND GEOLOGICAL
 DATA (EXCLUDING INTERPRETATIVE DATA) PERTAINING BOTH TO INJECTION
 WELLS AND PRODUCING WELLS OPERATED UNDER THE AGREEMENT BE FILED WITH
 THE STATE.

Attachment:

Calendar Item 18 (2 pages)

18.

REQUEST FOR APPROVAL OF HUNTINGTON BEACH "LINE FLOOD AGREEMENT" E. 392.1, SIGNAL OIL AND GAS COMPANY AND STANDARD OIL COMPANY OF CALIFORNIA AND AN AMENDMENT AND MODIFICATION OF STATE OIL AND GAS LEASE PRC 1343.1, STANDARD OIL COMPANY OF CALIFORNIA, HUNTINGTON BEACH COMPANY AND SOUTHERN PACIFIC TRANSPORTATION COMPANY; ORANGE COUNTY - W 9121.

On November 6, 1963 (Minute Item 21, page 9362), the Commission authorized the Executive Officer to execute and issue an "Amendment and Modification of Exchange Oil and Gas Lease 392.1 PRC (Secondary Recovery)" to provide for full-scale secondary recovery operations on the subject lease.

On October 26, 1967 (Minute Item 36, page 1165), the Commission approved a line flood agreement for water-injection operations in the Jones Zone along the common boundary between E. 392.1 and Standard's P.E. Lease (upland area). Subsequently, Signal submitted a modification agreement to amend and modify the line flood agreement to include the Lower Main Zone. The modification was approved by the Commission on March 26, 1970 (Minute Item 20, page 211); however, the agreement was never executed, nor were the proposed operations commenced.

Signal has now submitted a fully executed line flood agreement (Agreement Common Line - Huntington Beach), dated January 27, 1971, between Standard Oil Company of California and Signal Oil and Gas Company for waterflood operations in the Main Zone. The agreement will permit Signal and Standard to proceed with water-injection operations along the common boundary between E. 392.1 and Standard's P.E. Lease, in order to balance reservoir pressures to prevent the migration of oil, gas, water, or other fluids in the Main Zone.

The initial injection program requires that Signal, as operator, will convert wells "State 392" S-1, S-11 and 7-A into Main Zone water-injection wells and Standard, as operator, will convert wells P.E. 36, 22, and 1 into Main Zone injection wells.

Standard's well P.E. No. 1 is operated under State Oil and Gas Lease Extension and Renewal PRC 1343.1. The conversion of the well will require an amendment to the lease to provide for continuation of the lease and for indemnification of the State. Standard has requested such an amendment and modification as required, and has submitted a proposed form of "Amendment and Modification of State Oil and Gas Lease PRC 1343.1."

Based upon an engineering and economic evaluation, the conversion of the well into an injection well will be in the best interests of the State. The estimated primary oil that could be recovered from this well, absent any secondary recovery operations, will be recovered as secondary response oil from wells on E. 392.1. In addition to the estimated remaining primary oil, considerable secondary oil will be recovered, resulting in economic advantage to the lessees and to the State. Deferment of approval of the agreement will result in a loss of natural resources and of income to the State.

Sections 6832 and 6833 of the Public Resources Code provide for such waterflood agreements upon approval by the Commission.

CALENDAR ITEM 18. (CONTD.)

The Office of the Attorney General has reviewed the proposed forms of "Amendment and Modification", and "Agreement", and has advised that the forms are legally sufficient providing the Commission finds, in accordance with Sections 6832 and 6833, that they are in the public interest, are necessary for conserving the natural resources, and are in the best interests of the State.

The State Oil and Gas Supervisor has approved a waterflood project for 5. 392.1 for the Main Zone.

IT IS RECOMMENDED THAT THE COMMISSION:

1. RESCIND ITS ACTION OF MARCH 26, 1970 (MINUTE ITEM 20, PAGE 211), APPROVING A MODIFICATION AGREEMENT TO AMEND AND MODIFY THE JONES ZONE LINE FLOOD AGREEMENT.

2. FIND THAT:

- A. AMENDMENT AND MODIFICATION OF STATE OIL AND GAS LEASE EXTENSION AND RENEWAL PRC 1343.1 IS NECESSARY AND ADVISABLE IN THE PUBLIC INTEREST;
- II. A COOPERATIVE PLAN OF OPERATION OF THE MAIN ZONE AS TO BOTH PRC 1343.1 AND E. 392.1 IS NECESSARY AND ADVISABLE IN THE PUBLIC INTEREST;
- C. THE CONSERVATION OF NATURAL PRODUCTS REQUIRES A LINE FLOOD AGREEMENT.

3. APPROVE:

- A. THE AMENDMENT AND MODIFICATION OF STATE OIL AND GAS LEASE FRC 1343.1, A COPY OF WHICH IS MADE A PART HEREOF BY REFERENCE TO THE OFFICIAL FILES OF THE COMMISSION;
- 5. THE LINE FLOOD ACREEMENT (AGREED COMMON LINE HUNTINGTON BEACH), ENTERED INTO ON JANUARY 27, 1971, BETWEEN STANDARD OIL COMPANY OF CALIFORNIA AND SIGNAL OIL AND GAS COMPANY, A COPY OF WHICH IS MADE A PART HEREOF BY REFERENCE TO THE OFFICIAL FILES OF THE COMMISSION. THE APPROVAL CHALL BE SUBJECT TO THE CONDITIONS THAT NO WELLS, EITHER SURFACED OR BOTTOMED WITHIN LANDS INCLUDED IN LEASE E. 392.1, PURSUANT TO THE AGREEMENT, BE OPERATED BY ANY PARTY OTHER THAN SIGNAL OIL AND GAS COMPANY WITHOUT WRITTEN APPROVAL OF THE STATE, AND THAT COPIES OF ALL LOGS, PRODUCTION, INJECTION, AND OTHER ENGINEERING AND GEOLOGICAL DATA (EXCLUDING INTERPRETATIVE DATA) PERTAINING BOTH TO INJECTION WELLS AND PRODUCING WELLS OPERATED UNDER THE AGREEMENT BE FILED WITH THE STATE.