

MINUTE ITEM

29. ENGINEERING DATA CONTROL AND ANALYSES, LONG BEACH TIDELANDS MANAGEMENT -
W.O. 2323.7.5.

Following presentation of Calendar Item 18 attached, Commissioner Carr again emphasized that it is very important to both the State and the City of Long Beach that all possible information be accumulated for the purpose of learning about subsidence control and for purposes of future oil development, and invited the attention of Mr. S. M. Roberts, Administrator of the Subsidence Control Division of the Long Beach Harbor Department, to the importance of this project.

The Executive Officer commented on the use of an analog computer, and outlined very briefly, for the benefit of the Commissioners and Mr. Roberts, the basis of the two recommendations being made to the Commission, with the request that Mr. Roberts' report be based thereon.

Mr. Roberts informed the Commission that he had no objection whatsoever to the recommendations of the Executive Officer, and stated that his department had made considerable use of digital-computer and punch-card equipment, and that they were concentrating their data in Long Beach and could foresee further expansion of data processing to the pioneering and experimental phases of engineering problems.

UPON MOTION MADE BY COMMISSIONERS CRANSTON AND CARR, DULY SECONDED, AND UNANIMOUSLY CARRIED, THE FOLLOWING RESOLUTION WAS ADOPTED:

THE EXECUTIVE OFFICER IS DIRECTED TO INFORM THE CITY OF LONG BEACH THAT THE COMMISSION URGES THE CITY:

1. TO UNDERTAKE A STUDY OF THE APPLICATION OF RESEARCH EQUIPMENT DIRECTED TOWARD THE OBJECTIVE OF SECURING OPTIMUM FUTURE OPERATING CONDITIONS IN THE WILMINGTON FIELD;
2. TO PUT INTO IMMEDIATE OPERATION ALL PROGRAMS FOR INTEGRATION OF ENGINEERING DATA FILES AND ENGINEERING DATA PROCESSING AS RECOMMENDED BY THE CITY'S MANAGEMENT CONSULTANTS.

Attachment
Calendar Item 18 (2 pages)

CALENDAR ITEM

18.

ENGINEERING DATA CONTROL AND ANALYSES, LONG BEACH TIDELANDS MANAGEMENT -
W.O. 2323.7.5.

On October 5, 1959 (Minute page 5243), the Commission considered the need for engineering data control and analyses in connection with the administration of oil and gas resources by the City of Long Beach. At that time the Commission urged the City of Long Beach to obtain an analog-computer analysis on the future optimum operating conditions incident to waterflooding and subsidence alleviation in the Long Beach area. DeGolyer and MacNaughton (petroleum consultants to the City of Long Beach) investigated the feasibility of application of an electrical analog computer, at the request of the city, and on January 19, 1960, reported in part as follows (report received by State Lands Division on February 1, 1960):

"It is believed that there is no need for this latter type (analog) analyzer since the calculation which it would carry out can be made sufficiently well and in a reasonable length of time by a qualified petroleum engineer."

With reference to the possible application of other electronic computation equipment (digital computer), it was reported:

"At the present state of the art, programs are not yet in existence which would permit mathematical solution of the complex conditions involved in water flooding the Wilmington Field."

There is no current, continuing, coordinated engineering staff making the calculations for the field as a whole as suggested in the first report statement, or considering the research and development to make feasible the application of either or both analog and digital computers to the solution of Long Beach operating problems.

The City has under consideration recommendations from management consultants for the integration of engineering data files and engineering data processing related to reservoir engineering and the waterflooding operation. A schedule requiring approximately twelve months for implementation of the recommended procedures is suggested. It is stated:

"However, if circumstances require, it is believed that the schedule could be reduced by three to six months without harmful effects if adequate direction and supervision can be given to the transaction by a properly qualified administrative employee in the Harbor Department."

The first pilot waterflood program on tidelands was initiated by the Long Beach Oil Development Co., under contract with the City, on July 9, 1953, and the first full-scale operation was approved by the State Lands Commission on June 13, 1957.

CALENDAR ITEM 18. (CONTD.)

Chapter 29/1956 First E.S. (Section 8(b)) provides:

"In addition to the other powers and duties specifically delegated to it by this act, the State Lands Commission shall have general responsibility in connection with the interests of the State under this act and the acts in cited subdivision (a) of Section 2 hereof, including authority to examine financial and operating records relating to the production and sale of hydrocarbon products from the Long Beach tidelands and to conduct such other investigations and studies as it may deem necessary in connection therewith."

In consideration of the foregoing,

IT IS RECOMMENDED THAT THE COMMISSION DIRECT THE EXECUTIVE OFFICER TO INFORM THE CITY OF LONG BEACH THAT THE COMMISSION URGES THE CITY:

1. TO UNDERTAKE A STUDY OF THE APPLICATION OF RESEARCH EQUIPMENT DIRECTED TOWARD THE OBJECTIVE OF SECURING OPTIMUM FUTURE OPERATING CONDITIONS IN THE WILMINGTON FIELD;
2. TO PUT INTO IMMEDIATE OPERATION ALL PROGRAMS FOR INTEGRATION OF ENGINEERING DATA FILES AND ENGINEERING DATA PROCESSING AS RECOMMENDED BY THE CITY'S MANAGEMENT CONSULTANTS.