MINUTE ITEM

45. ELECTRONIC DATA PROCESSING - W.O. 3293.

After consideration of Calendar Item 35 attached, and upon motion duly made and unanimously carried, the following resolution was adopted:

THE EXECUTIVE OFFICER IS AUTHORIZED TO ENTER INTO AND EXECUTE A SUPPLEMENTARY AGREEMENT TO THAT CERTAIN AGREEMENT KNOWN AS LC 34, DATED JULY 1, 1961, BETWEEN THE BENDIX CORPORATION - COMPUTER DIVISION AND THE STATE LANDS COMMISSION. THE SUPPLEMENTARY AGREEMENT IS TO PROVIDE FOR THE RENTAL AND MAINTENANCE OF A G-15 BENDIX COMPUTER, FLEXOWRITER, AND SYSTEMS ANALYSIS SERVICES FOR THE PERIOD JULY 1, 1962, THROUGH JUNE 30, 1963, AT A RENJAL RATE OF \$1530. PER MONTH, INCLUSIVE OF SERVICE AND MAINTENANCE. THE TOTAL SERVICES TO BE PURCHASED SHALL NOT EXCEED THE SUM OF \$18,360.

Attachment Galendar Item 35 (2 pages)

CALENDAR ITEM

35.

ELECTRONIC DATA PROCESSING - W.O. 3293.

On June 22, 1961, the Commission authorized the issuance of a contract to Bendix Corporation providing for the rental of a Bendix G-15 computer system at \$1530 per month. The agreement authorized services until June 30, 1962, and provides for renewal thereafter by supplementary agreement between the parties.

The practical value of this equipment is attested in part by the following:

A. Records maintained for computer use indicate productive time use on the computer as:

First 6 weeks' period - 7% Second 6 weeks' period - 20% Current 6 weeks' period - 50%

(Productive time is time spent on the computer directly and solely in solving mathematical problems. In addition to productive time, the computer has been used for "code checking" time. This is time spent on the computer in the checking and adjustment of programs used for problem solution. Such utilization is necessarily extensive in the development of new applications.)

- B. Installation of the equipment has:
 - 1. Resulted in a 20% reduction of a 38,000 man-hour backlog of work in the Civil Engineering Section, without additional staffing. This reduction was made despite the fact that during the 1961-62 fiscal year the section's assignments included 14 new projects for the survey of legislative grants of tide and submerged lands.
 - 2. Permitted the development of reservoir performance simulations for more effective primary and secondary petroleum recovery operations from State oil and gas leases.
 - 3. Permitted the solution and the development of a method for mathematically handling a problem (briefly described hereafter) in two man-days, which problem manually performed would have taken an estimated two man-months.

The problem referred to resulted from 1961 statutory changes under which lessees who invest capital to promote secondary ... overy through water-flooding or repressurization can be allowed to pay royalties on the basis of production rates estimated prior to engaging in a waterflooding program. For this purpose future well and lease production estimates are being determined by objective mathematical procedures. The mathematical solution is most desirable because, in addition to the innerent accuracy, all objections

CALENDAR LIEM 35. (CONTD.)

to possible personal bias in the estimates are eliminated.

The foregoing have been cited to summarize some of the major values of the computer in performing the Division's work. Funds have been allotted in the Commission's 1962-63 budget to continue rental of the equipment.

IT IS RECOMMENDED THAT THE EXECUTIVE OFFICER BE AUTHORIZED TO ENTER INTO AND EXECUTE A SUPPLEMENTARY AGREEMENT TO THAT CERTAIN AGREEMENT KNOWN AS LC 34, DATED JULY 1, 1961, BETWEEN THE BENDIX CORPORATION - COMPUTER DIVISION AND THE STATE LANDS COMMISSION. THE SUPPLEMENTARY AGREEMENT IS TO PROVIDE FOR THE RENTAL AND MAINTENANCE OF A G-15 BENDIX COMPUTER, FLEXOWRITER, AND SYSTEMS ANALYSIS SERVICES FOR THE PERIOD JULY 1, 1962, THROUGH JUNE 30, 1963, AT A RENTAL RATE OF \$1530. PER MONTH, INCLUSIVE OF SERVICE AND MAINTENANCE. THE TOTAL SERVICES TO BE PURCHASED SHALL NOT EXCEED THE SUM OF \$18,360.