

MINUTE ITEM

1.

4/23/84  
W 17082  
Lammers

1984-85 PLAN OF DEVELOPMENT  
AND OPERATIONS AND BUDGET,  
LONG BEACH UNIT, WILMINGTON OIL FIELD

During consideration of Calendar Item 1, attached, Mr. W. M. Thompson, Chief, Extractive Development Division, made a presentation on some of the statistics relative to the Plan of Development and Operations and Budget.

Upon conclusion of Mr. Thompson's presentation, Calendar Item 1 was approved as amended, by a vote of 2-0, to read as follows:

THE COMMISSION:

1. DETERMINED THAT THE ACTIVITIES CONTEMPLATED BY THE "PLAN OF DEVELOPMENT AND OPERATIONS AND BUDGET, LONG BEACH UNIT, JULY 1, 1984 THROUGH JUNE 30, 1985" ARE PLANNED TO BE CARRIED OUT PURSUANT TO AGREEMENT APPROVED BY THE COMMISSION BEFORE APRIL 5, 1973, AND ARE THEREFORE ONGOING PROJECTS WITHIN THE MEANING OF 14 CAL. ADM. CODE 15007(B), AND DO NOT REQUIRE THE PREPARATION OF EITHER AN EIR OR A NEGATIVE DECLARATION.
2. APPROVED THE "PLAN OF DEVELOPMENT AND OPERATIONS AND BUDGET, LONG BEACH UNIT, JULY 1, 1984 THROUGH JUNE 30, 1985, AS ADOPTED BY THE CITY OF LONG BEACH CITY COUNCIL ON MARCH 24, 1984, WITH AGREED-TO CHANGES IN THE PLAN LANGUAGE THAT WILL BE INCORPORATED INTO THE FIRST MODIFICATION OF THE PLAN AND BUDGET.

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MINUTE ITEM

This Calendar Item No. 1  
was approved as Minute Item  
No. 1 by the State Lands  
Commission by a vote of 3  
2 at its 4/23/84  
meeting.

CALENDAR ITEM

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1.

1984-85 PLAN OF DEVELOPMENT  
AND OPERATIONS AND BUDGET, LONG BEACH UNIT  
WILMINGTON OIL FIELD, LOS ANGELES COUNTY

Section 5, Chapter 38, Statutes of 1964, 1st E.S.,  
(Exhibit "A"), and Article 4 of the Long Beach Unit Agreement  
require adoption by the City of Long Beach of an annual Plan of  
Development and Operations and Budget for the Long Beach Unit.  
The Plan and Budget is then to be submitted to the State Lands  
Commission at least 100 days prior to submission to the  
participants of the Long Beach Unit.

The City Council of the City of Long Beach, at its meeting of  
March 13, 1984, adopted this proposed Plan of Development and  
Operations and Budget for 1984-85, and authorized its submittal  
to the State Lands Commission for consideration and approval.  
The Plan and Budget was submitted to the State by the City on  
March 14, 1984.

Under Section 5(b), the Commission has 45 days after submittal  
to take action. If no action is taken, the Plan and Budget is  
deemed to be approved as submitted. The Commission may  
affirmatively approve the Plan and Budget or modify it after  
holding a formal hearing. Under Section 5(g) the Plan and  
Budget as submitted may be modified without a hearing upon  
mutual agreement by the City and the Commission. For the past  
two years, in its Plan and Budget consideration, the Commission  
acted jointly with the City in modifying the Plan and Budget  
under the Section 5(g) procedure. This allowed the use of the  
most current data available since preparation of the Plan and  
Budgets start in the prior December.

The Plan was changed in 1983-84 to a programmatic format plan  
with comparable Budget funding. To date, the programmatic  
approach has been mainly a rearrangement of budgeted funds and  
expenditures. The consideration of alternatives, for the Plan,  
Budget and Modifications, contemplated by the Commission when  
it directed the adoption of this format have not been provided.

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The proposed Plan provides for continued development of the Long Beach Unit and the operation and maintenance of necessary facilities in six programs. These programs combine the investment and expense expenditures included in the scope of the program as well as the administrative overhead costs related to those expenditures. Allocation between programs is required for some budget items and these program budget items are designated with the letters A, B, or C after the account number.

To accomplish the development and facility additions that are proposed in the 1984-85 Plan and to manage, operate and maintain the various existing facilities, a 1984-85 Budget totaling \$233,447,000 has been submitted by the City of Long Beach. This provides funding in the six budget programs as follows:

A. Drilling and Development	\$69,308,000	29.7%
B. Oil and Gas Production	\$85,780,000	36.8%
C. Enhanced Recovery and Stimulation	\$ 4,131,000	1.7%
D. Water Injection	\$31,735,000	13.6%
E. Management	\$17,803,000	7.6%
F. Taxes Permits & Land Rental	<u>\$24,690,000</u>	<u>10.6%</u>
	\$233,447,000	100.0%

Administrative Overhead is included in the above figures.

Past Unit expenditures and proposed Budget are shown on Attachments 1 and 2. The program expenditures to date are shown on attachments 6-11. Expenditures for previous years were calculated using the same percentage split for allocated budget items as the 1983-84 Budget. However, the allocation factors have been changed during the current year and for the proposed Budget. Past and expected future changes in the allocation factors and changes in annual investment expenditures make valid comparisons of past, current and future program or subprogram expenditure difficult. Therefore, comparisons of current and past expenditures with proposed funding are made by the Commission staff on the unallocated Budget Item and Historical Budget Item groupings.

Expenditures for electrical energy are in four of the six programs with estimated expenditures in the current year of \$31 million and over \$33 million in 1984-85. Electrical energy is used primarily for lifting to the surface oil and water and injection of the produced water. More than 400 million barrels

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of fluid will be handled in 1984-85. Electrical Energy expenditures and rates are shown on Attachments 3 and 4. Large rate increases due to fuel costs are not anticipated and future costs increases will depend upon fuel oil costs and the availability of hydroelectric power. 1984-85 expenditures for electrical energy will be higher than the 1983-84 level due to increased fluid volumes and energy costs.

A. DRILLING AND DEVELOPMENT PROGRAM

The proposed plan provides for eight drilling rig years for 1984-85 and states that this same level of activity is contemplated for the balance of a five year plan. The Commission staff has reservations about effectively using eight rigs for the entire 1984-85 budget year or for four additional years. The first sentence of the last paragraph on Page 12 is changed to read "The proposed 1984-89 Five-Year Plan contemplates a continuous program of development drilling activity for the balance of the Five-Year Plan, subject to continual periodic engineering and economic reviews."

The City has agreed to the above Program Plan changes and to update by July 1, 1984 the new well drilling part of the five year plan which was developed at the first of 1983.

Attachment 5 shows the total producing wells in the Unit, the active producing wells, the down time of the active wells and the resulting full time equivalent active wells. The number of active wells has been only increased by about forty wells during the past two years although over 100 new wells were drilled during that time. The economics of this substitution process and an evaluation of how to utilize these idle wells, with a replacement value of \$40-50 million, should also be part of the a revision of the five year plan.

Funding of \$60,308,000 is proposed for this program. 29.7% of the Budget. Investment funding is \$41,670,000 the major portion, \$41,030,000 is for the drilling of new wells. The expense funding of \$24,972,000 has the major components of \$10,900,000 for redrilling of existing wells, \$9,690,000 for drilling support, waste disposal \$1,408,000. \$2,663,000 is for administrative overhead.

The estimated expenditure in the Drilling and Development Program for the current year is \$74 million excluding Administrative Overhead. The investment portion is \$49 million

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with the drilling of new wells accounting for the major part, \$39 million, and \$10 million for Island and cellar construction. The expense expenditure is estimated at \$25 million with the major components \$9.6 million for redrilling of wells, \$9.6 million for drilling support and \$5.1 million for waste disposal. Attachment 6 is a plot of the calculated monthly expenditures prior to July 1983 and actual expenditures since that time for the program. Attachment 6A is a plot of the annual total expenditures. Attachment 6B is a plot of the Monthly Investment Expenditures in the Program and the lower curve shows the decline in funding for new facilities from \$10 million in 1983-84 to \$640,000 in 1984-85. Attachment 6C shows monthly expense expenditures and indicates the proposed 1984-85 funding for development drilling and redrilling is considerably in excess of the current level of expenditures. These funds cannot be spent except for work on wells approved by the State. Conversely additional funds may be required in the waste disposal budget item if the ocean disposal of drilling cuttings and mud is delayed.

B. OIL AND GAS PRODUCTION PROGRAM

Funds for new oil well surface equipment, oil well maintenance and operation and oil and gas gathering, metering, processing and shipping are provided by this program. Total proposed funding is \$85,780,000 36.8%, of the total budget. The Investment funding is \$4.6 million, expense costs are \$77.9 million and Administrative Overhead is \$3.3 million. The main sub programs are Oil Well Repairs, \$24,658,000, Fluid Lifting, \$22,184,000, and Production Maintenance, \$28,270,000, excluding administrative overhead. These are ongoing expenditures effected by the increasing number of active wells, increasing gross fluid rate, and ageing of existing facilities and producing wells in addition to inflation.

The estimated program expenditures for the current year are \$71 million and for the main Sub Programs are Oil Well Repairs, \$21 million, Fluid Lifting and Handling, \$25 million, and Production Maintenance, \$23 million. Attachment 7 is a plot of the calculated monthly expenditures prior to July 1983 and actual expenditures since that time for the program. Attachment 7A is a plot of the annual total expenditures for the program and Attachments 7B-F are similar plots for the subprograms.

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In the Surface Fluid Handling subprogram are expense funds of \$1,610,000 for repair of submarine pipelines with polyethylene inner liners. Since this is not a routine procedure this work will be done in phases to evaluate the method or to find alternatives.

The last Paragraph on Page 4 is worded to read as follows: "An additional project to provide an alternate power supply service is funded here. With the age, vulnerability and current inaccessability for repair of the dual submarine cables to Is<sup>land</sup> and Grissom from Edison's Pico Substation, this back-up so is necessary to protect the daily gross income (approximately \$1.2 million) from the Offshore Islands."

C. ENHANCED RECOVERY AND STIMULATION PROGRAM

This program was designed to administer the costs associated with enhanced recovery and stimulation projects and to determine the economic feasibility of such expenditures. It was intended as a means for more easily identifying costs related to projects such as the caustic flood and the steam drive to aid in determining project economics. Proposed funding is \$4,131,000, 1.7% of the Budget, the major part of this, \$3,105,000 is for the caustic flood. The injection of caustic was terminated in December 1983. Production response in the project was uneconomic and well maintenance costs became excessive. Currently and in the 1984-85 Plan year expenditures will be required to overcome some of the negative effects of the caustic injection.

The estimated expenditures for 1983-84 are \$3.5 million. The calculated monthly expenditures and funding for the program are shown on Attachment 8, 8A, 8B and 8C. The monthly expenditures do not include the cost of chemicals in the caustic pilot, as they were prepaid, and therefore do not reflect all of the costs of the project. At some time in the future, funding for the operating of the wells and facilities now in this program will be transferred to the appropriate budget items in the Oil and Gas Production and Water Injection programs.

The one pattern steam drive pilot project is showing a small production response.

There are ongoing efforts to improve the performance of the field-wide water injection secondary recovery program.

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There are no firm plans for any field-wide tertiary oil recovery program during the next 2-3 years. As to the midrange period, 5-10 years in the future, the Unit has to decide whether it will proceed under a plan utilizing a conventional water flood with existing injection patterns, a plan for a water flood with modified injection patterns or one that considers the injection of some other substance. The City will continue to address this issue in the revision of the Unit five-year plans to be done by July 1, 1984.

D. WATER INJECTION PROGRAM

The pressure maintenance and waterflood operations in this program are required by the Unit Agreements. The funding is for the necessary work on injection well operation of the surface installations used for filtering of produced water and pressuring water for injection, the purchase of pressured water and for additional injection water. The calculated monthly expenditures, prior to July 1983 and actual expenditures after that time are shown on Attachment 9, 9A, and 9C. The estimated expenditure for 1983-84 is \$30 million.

Proposed funding for 1984-85 is \$31,735,000, 13.6% of the Budget, this program provides the required reservoir pressure maintenance and serves as the secondary oil recovery mechanism for the Unit. Funds are provided for injection well maintenance, processing produced water, providing make up water from other sources and pressuring and injecting this water.

E. MANAGEMENT PROGRAM

This program covers the cost of the Field Contractor management staff's salaries and office expense, the cost of Unit accounting and the City of Long Beach Unit Operator's billable costs. Monthly program expenditures prior to July 1983 and actual after that time are shown on Attachment 10, 10A, 10B and 10C. The 1983-84 expenditures are estimated at 16.5 million excluding prior year adjustments.

The proposed 1984-85 funding of \$17,803,000, 7.6% of the Budget, provides for the Field Contractor's management and reservoir engineering staff, supporting personnel and facilities, and the Unit Operator's billable costs. Also included are the continuing non-recurring costs to establish a data base management system. In addition \$3,800,000 (excluding administrative overhead) is budgeted to complete the island

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rockwork repair under Extraordinary Losses and Claims. The total unit management expense cost for the Field Contract and Unit operator organizations is steadily increasing as shown on Exhibit 10D.

F. TAXES, PERMITS AND LAND RENTAL PROGRAM

This program contains the funding for the various taxes, licenses and fees paid to the counties of Los Angeles and Orange, the City of Long Beach and other governmental agencies. The 1983-84 personal property and mining rights taxes and the Long Beach oil production license taxes will be \$19.8 million and \$2.7 million. The annual expenditures are shown on Attachment 11.

OLD BUDGET FORMAT

The proposed INVESTMENT funding of \$48,578,000 includes \$42,114,000 for DRILLING AND DEVELOPMENT of which \$41,030,000 is to drill new wells and \$1,084,000 for injection well equipment. The monthly expenditures and proposed funding for the new wells, budget item account 401, \$41,030,000 is shown on Attachment 12. The 1983-84 expenditures is estimated to be \$38 million. The proposed funding, for FIELD AND WELL FACILITIES is \$6,464,000. The major construction projects for island expansion and additional surface locations for new wells will be completed by the first of 1984. The 1984-85 proposed expenditures for new facilities is the lowest level of the last five years as shown on Attachment 1. The monthly expenditures and proposed funding for this Budget Division are shown on Attachment 13.

Proposed EXPENSE funding provides \$23,040,000 for Taxes and Licenses, \$135,466,000 for Operating, \$13,684,000 for General Administrative and \$4,746,000 for Other Expense. The total is \$176,936,000. Expenditures for 1983-84 are estimated to be \$150 million.

The proposed OPERATING EXPENSE funding is \$135,466,000, 60% of the total Budget. The monthly expenditures of this Budget Division IIIB2 is shown on Attachment 14. Expenditures for 1983-84 is estimated to be \$122 million. A major part of the funding, \$39,740,000, is for the budget category WELLS for which the estimated expenditure for 1983-84 is \$34 million. The anticipated increase in active wells during 1984-85 is not consistent with this funding increase. The monthly expenditures

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and funding for this category are shown on Attachment 15. The Direct Well Changes budget items accounts 900 and 920 have estimated 1983-84 expenditures of \$19 million compared to proposed 1984-85 funding of \$22,425,000. For 1984-85 the expenditure level for this category will be determined by workover and redrill activity as there will be a small increase in the number of active wells to be serviced which should be offset by the reduction in contract production rig costs. The Field System category funding is \$47,586,000. The monthly expenditures and proposed funding are shown on Attachment 16. The category Other Production Expense has funding of \$48,140,000. A large part of the contractor's field personnel costs are in this budget category. The monthly expenditures and proposed funding are shown on Attachment 17. A historical comparison of the cost and total number of field contractor employees is shown on Attachment 18. A schedule of the number of such employees and their salaries and benefits must be approved by the Long Beach City manager. He is required to give due regard to the requirements of good oil field engineering and operating practices and the compensation and other benefits normally allowed to comparable oil field operations. The selection of employees used by the field contractor in conducting operations, their hours of labor, their conditions of employment and their supervision are the responsibility of the field contractor. With the reduction in construction and drilling activity, the number of employees should continue to decrease.

Crude prices should remain at the present level through the Plan year. The estimate of 1983-84 net revenue, without consideration of windfall profits tax, is \$320 million. For 1984-85, if crude oil prices do not decrease, it is anticipated that there will be higher net revenues than shown in Exhibit C-4 due to an increased oil rate. This upward trend is shown on Attachment 19.

Producing and Expenditure Charts and Graphs are available to the Commissioners in the Sacramento Office of the State Lands Commission.

AB 884: N/A.

IT IS RECOMMENDED THAT THE COMMISSION:

1. DETERMINE THAT THE ACTIVITIES CONTEMPLATED BY THE "PLAN OF DEVELOPMENT AND OPERATIONS AND BUDGET, LONG BEACH UNIT, JULY 1, 1984 THROUGH JUNE 30, 1985" ARE PLANNED TO BE CARRIED OUT PURSUANT TO AGREEMENT APPROVED BY THE

CALENDAR ITEM NO. 1 (CONT'D)

COMMISSION BEFORE APRIL 5, 1973, AND ARE THEREFORE ONGOING PROJECTS WITHIN THE MEANING OF 14 CAL. ADM. CODE 15007(B), AND DO NOT REQUIRE THE PREPARATION OF EITHER AN EIR OR A NEGATIVE DECLARATION.

2. APPROVE THE "PLAN OF DEVELOPMENT AND OPERATIONS AND BUDGET, LONG BEACH UNIT, JULY 1, 1984 THROUGH JUNE 30, 1985, AS ADOPTED BY THE CITY OF LONG BEACH CITY COUNCIL ON MARCH 14, 1984 PLAN AND BUDGET, WITH AGREED-TO CHANGES IN THE PLAN LANGUAGE THAT WILL BE INCORPORATED INTO THE FIRST MODIFICATION OF THE PLAN AND BUDGET.