

**CALENDAR ITEM  
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**CONSIDERATION OF THE LONG BEACH UNIT  
PROGRAM PLAN (JULY 1, 2011 THROUGH JUNE 30, 2016) AND  
ANNUAL PLAN (JULY 1, 2011 THROUGH JUNE 30, 2012),  
LONG BEACH UNIT, WILMINGTON OIL FIELD,  
LOS ANGELES COUNTY**

**APPLICANT:**

City of Long Beach  
Long Beach Gas and Oil Department  
Attn.: Mr. Christopher J. Garner, Director  
211 East Ocean Boulevard, Suite 500  
Long Beach, CA 90802

**BACKGROUND:**

In accordance with Chapter 941 of the Statutes of 1991 (Chapter 941) and the Agreement for Implementation of an Optimized Waterflood Program (OWPA) for the Long Beach Unit (LBU), the City of Long Beach (City), as Unit Operator, submitted the LBU Program Plan (July 1, 2011 through June 30, 2016) and the LBU Annual Plan (July 1, 2011 – June 30, 2012) to the California State Lands Commission (Commission).

At its meeting on March 8, 2011, the Long Beach City Council approved the proposed Program Plan and Annual Plan and authorized formal submission of both Plans to the Commission for review. The Commission received the Plans on March 17, 2011. As provided by Chapter 941, the Commission has 45 days to review the Program Plan and the Annual Plan, otherwise the Plans are deemed to be reviewed and accepted.

The Program Plan and Annual Plan are requirements of the Optimized Waterflood Program Agreement (OWPA) pursuant to Chapter 941, and Chapter 138, Statutes of 1964, Extraordinary Session, respectively.

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Pursuant to Section 3 of Chapter 941, the Program Plan as submitted is subject to review by the Commission for consistency with good oil field practices, the OWPA, the Long Beach Unit and Unit Operating agreements, and for environmental and safety concerns. The Commission's authority is limited to a review of whether the Program Plan:

- 1) is consistent with good oil field practice;
- 2) is consistent with the Optimized Waterflood Agreement;
- 3) is consistent with the Long Beach Unit and Unit Operating agreements; or
- 4) does not involve significant safety or environmental risks.

The Commission may revise the Program Plan to provide consistency with the categories identified above. Pursuant to the Optimized Waterflood Agreement, the changes ordered by the Commission must be in writing, fact driven, with the reasons set forth with specificity.

The Annual Plan must be consistent with the Program Plan.

### **LBU PROGRAM PLAN:**

The proposed Program Plan is a five-year plan prepared by the City's Gas and Oil Department (LBGO) covering fiscal years 2011-12 through 2015-16. Preparation and submittal of Program Plans began in 1991 as required by Chapter 941 and the OWPA. The purpose of the Program Plan is to describe how the OWPA will be implemented during the five-year period. The Program Plan addresses reservoir management objectives, methods of continuing field development, results and performance of the prior year's development activities, economic projections, and anticipated drilling schedules for the five-year period. The Program Plan includes anticipated rates of production, revenues, expenditures, and net income as projected by the City. The Program Plan is prepared every two years and modified as necessary to reflect changes in actual field performance, economic factors, and reservoir management practices. Prior to the OWPA, only Annual Plans were prepared, but they were similar in detail to the current Program Plans.

### **LBU ANNUAL PLAN:**

The proposed Annual Plan is a one-year plan submitted by the City covering fiscal year 2011-12. The Annual Plan is an itemized budget of anticipated expenditures needed to carry out Program Plan objectives. There are five expenditure categories in the Annual Plan – Development Drilling, Operating Expense, Facilities-Maintenance-Plant, Unit Field Labor and Administrative, and

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Taxes-Permits-Overhead. For the 2011-12 Annual Plan, the total budgeted expenditure of \$377.6 million for the five categories is consistent with the 2011-12 expenditure objectives in the Program Plan.

### **ECONOMIC PROJECTIONS IN PROGRAM PLAN:**

For 2011-12 through 2015-16, the City estimates the LBU net income will be \$188.5 million after total expenditures of \$1,915.2 million. This net income projection is based on the City's crude oil price forecast of \$45 per barrel (bbl) and a natural gas price of \$4.50 per thousand cubic feet (mcf). Most of the net income will be from oil revenues. The City forecasts production to range from an average of 24,900 bbl/day in 2011-12 to 24,300 bbl/day in 2015-16. These rates assume the continuation of development activity to involve an average of 46 wells to be re-drilled from existing wellbores in each of the five years for a total of 231 wells over the Plan period. Expenditure levels and the types of development projects may be adjusted as necessary to respond to fluctuations in oil price and other economic conditions. Pursuant to Article 2, paragraph 2.07 of the OWPA the field contractor may exceed any budget category in the Plan budget up to 20%, without obtaining additional authority from the City and Commission.

### **OIL PRICE FORECAST:**

In planning the expenditures needed to accomplish LBU objectives, and the revenues needed to fund those expenditures, the City has used a conservative crude oil price forecast of \$45/bbl. The City takes this approach for planning purposes in order to ensure that revenues will be sufficient to pay for LBU proposed expenditures and still provide net income to the State and the City's field contractor, Occidental Long Beach, Inc. (OLBI) and its agent, THUMS Long Beach, Inc. (THUMS), and the other working interest owners. The severe and unanticipated drop in crude oil prices during 2008 and 2009 resulted in an over-projection of oil revenues in fiscal year 2008-09 leaving some of the City's budgeted spending categories under-funded. Exhibit E shows the volatility for oil prices. The City's budget projected a barrel price for 2008-09 going from \$45 in the prior year to \$85 -- only to see prices fall from over \$128 a barrel to \$25, with an average that year of less than \$49.

The \$45/bbl oil price basis in the proposed plans, which are low compared to the current actual price, yields a conservative projection of net income. It is, however, a factor relevant only for determining that the expenditures for the LBU can be met. Commission staff believes the expenditure levels proposed in the Program Plan and Annual Plan will satisfactorily provide for all LBU development objectives and is not in conflict with any of the four factors to be reviewed by the

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Commission.

Estimates prepared by Commission staff for State revenue projections for fiscal year 2011-12 use an oil price forecast that better reflects the current commodity price environment. The price for LBU crude oil currently exceeds \$110/bbl (week of April 18<sup>th</sup>). Staff projects that net income from the LBU during 2011-12 will be much greater than that projected in the Annual Plan. At an average oil price of \$92/bbl, staff estimates the net income for fiscal year 2011-12 from the LBU to be \$481 million. That level of profit under Chapter 941 would provide \$282 million of non-tax revenue to the State of California. All net profits allocated to the State's share go directly to the State General Fund, with no monies directed to fund Commission staff expenses.

### **REVIEW OF PROGRAM AND ANNUAL PLANS:**

Commission staff has reviewed the proposed Program Plan and Annual Plan submitted by the City and finds that the economic basis upon which the Plans were prepared will support and provide an engineering framework to meet the objectives of the OWPA and LBU objectives. Commission staff has concluded that the Program Plan is consistent with good oil field practice. The Plans are based on all engineering and geologic information available at the time of preparation. Further, to support the conclusion that the Program Plan was prepared to ensure good oil field practice, Commission staff maintains direct involvement in ongoing LBU development activities and the planning of future activities. Staff involvement includes, among other things, monthly meetings of an engineering committee, onsite inspector presence in the field, reservoir management consultation with the City and the field contractor, analysis of drilling safeguards involving blowout prevention equipment certification, oil spill prevention exercises, and subsidence monitoring and prevention.

In addition, Commission staff has concluded that the Program Plan is consistent with Articles in the OWPA, Unit Agreement, and Unit Operating Agreement pertaining to development and operations, subsidence prevention, preparation and submittal of plans of development and expenditures, re-pressuring operations, and drilling schedules. Commission staff also has concluded that the Annual Plan is consistent with the Program Plan.

Commission staff's ongoing participation in meetings, onsite inspections, and engineering review was the basis for staff to believe that operation of LBU was being conducted in a safe manner and the basis for recommending no changes to the Program Plan at the April 6, 2011 Commission meeting. Staff also

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believes that the field contractor adheres to industry codes and standards, including the American Petroleum Institute (API) recommended practices, state oil and gas regulations, and safety and environmental regulations of all state and local governmental agencies having jurisdiction over LBU operations.

However, following a number of questions raised by the Lt. Governor's office and upon a more critical review of the Program Plan, staff believes that the Program Plan as a stand-alone document does not include sufficient detailed information on the safety and environmental programs for the LBU for Commission staff to make a recommendation that the Plan does not involve any significant environmental or safety risk. The LBU is one of the largest oil and gas production operations in the nation and is equivalent to six platforms or facilities in scope and complexity. Yet the discussion on safety and environmental programs in the Program Plan is less than a page in the Program's 48-page plan. For example, there is no detailed discussion on any injuries to workers and pollution events that may have taken place since the last Program Plan was reviewed, why such events occurred, what was the response, and what is being done to make sure that similar incidents do not occur again in the future. Further, there is no discussion of what programs are in place to ensure that latent defects in equipment or procedures that could lead to injuries or pollution events are intercepted before they occur.

A comprehensive safety audit was conducted by Commission staff as a condition of the Commission's approval of the field contractor assignment from ARCO to OLBI in 2002. That audit provided considerable enhancements to the LBU's safety systems and minimized further the risk of an offshore pipeline spill. Specifically, Commission staff found approximately 200 action items that posed a potential safety or environmental risk. Commission staff worked closely with the field contractor (OXY/THUMS) to resolve all of those items identified.

It has been almost ten years since that audit where the LBU was assessed for environmental and safety risks. Commission staff, therefore, recommends that the Commission order the Program Plan to be revised to include an updated environmental and safety review and assessment of the Long Beach Unit operations to be completed by staff within 15 months.

### **OTHER PERTINENT INFORMATION**

1. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines [Title 14, California Code of Regulations, section 15060(c)(3)], the staff has determined that this activity is not subject to the provisions of

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CEQA because it is not a "project" as defined by CEQA and the State CEQA Guidelines.

Authority: Public Resources Code section 21065 and Title 14, California Code of Regulations, sections 15060 (c)(3) and 15378.

### **EXHIBITS:**

- A. Letter from the City of Long Beach submitting the LBU Program Plan and Annual Plan to the California State Lands Commission
- B. LBU Program Plan (July 1, 2011 through June 30, 2016)
- C. LBU Annual Plan (July 1, 2011 through June 30, 2012)
- D. LBU Briefing Document
- E. Oil Price Comparison Graph and Average Price Chart for 2007-2011

### **RECOMMENDED ACTION:**

It is recommended that the Commission:

### **CEQA FINDING:**

Find that the activity is not subject to the requirements of CEQA pursuant to Title 14, California Code of Regulations, section 15060(C)(3) because the activity is not a project as defined by Public Resources Code section 21065 and Title 14, California Code of Regulations, section 15378.

### **RECOMMENDED FINDINGS:**

Pursuant to Section 3, Chapter 941, Statutes of 1991, order the Program Plan be revised to include an environmental and safety review and assessment of the Long Beach Unit operations. The Commission staff shall return to the Commission within 60 days with a detailed scope of the proposed environmental and safety review and assessment. Commission staff shall consult with the City of Long Beach and OLBI on the scope of the review and assessment. At a minimum, the scope of the review and assessment shall include an identification and analysis of environmental and safety risks that could lead to potential human injury, an adverse environmental impact, or significant property damage. The review and assessment shall also include recommendations to improve the operations and Program Plan to address any identified risks. The environmental and safety review and assessment shall be completed within 15 months.