MINUTE ITEM
This Calendar Item No. 58
was approved as Minute Item
No. 58 by the State Lands
Commission by a vote of 3
to 0 at its 05/03/95
meeting.

CALENDAR ITEM
58

A 37

PRC 91
PRC 163
PRC 425
PRC 426
E-392

S 33

Willard

CONSIDER IMPLEMENTATION OF A PRICE SENSITIVE
SLIDING SCALE ROYALTY FOR STATE OIL AND GAS LEASES
PRC 91, PRC 163, PRC 425 AND PRC 426, AND E-392,
OFFSHORE HUNTINGTON BEACH,
ORANGE COUNTY

LESSEE:

Shell Onshore Ventures, Inc.
Attn: Mr. Tom W. Broom
P. O. Box 11164
Bakersfield, CA 93389

AREA, TYPE LAND AND LOCATION:

State Oil and Gas Leases PRC 91 (589 acres), PRC 163 (640 acres), PRC 425 (835 acres), PRC 426 (640 acres), and E-392 (835 acres), are located in the offshore area of the Huntington Beach Oil Field in Orange County. There are approximately 850 wells developing the leases. Fifty of the wells have been drilled from Platform Emmy with the remainder drilled from onshore sites.

BACKGROUND:
These State oil and gas leases were originally issued between September 1938 and February 1950. There have been a number of lease assignments over the ensuing years. The current Lessee is Shell Onshore Ventures, Inc., (Shell) with an affiliated company, CalResources LLC (CalResources), serving as operator under the leases.

The leases have been modified for secondary recovery operations (waterflood program) with the original sliding scale royalty based on the rates of production of the wells amended to various fixed rates. The average of the fixed rates for the leases is 15-1/2 percent. On April 28, 1993, the Commission approved an expansion of the waterflood program to include the Upper Main Zone reservoir. However, Shell has yet to implement the expanded program because of the high capital investment needed and the

CALENDAR PAGE	321
MINUTE PAGE	786

additional operating costs which will be incurred.

Shell has requested renegotiation of the royalty provisions in order to implement the program and provide for the recovery of the significant remaining oil (39 MMBO) resource. **Staff is asking the Commission to consider Shells request in order to avoid premature abandonment of the field and to preserve an important economic asset for the local community.** If the Upper Main Zone waterflood is not implemented, this field will be totally depleted in 1998 leaving almost 29 million barrels of otherwise recoverable oil in the ground. With implementation of the program this oil can be recovered and the life of the field extended for at least another decade, probably longer.

The proposed royalty modification provides for a flat 16-2/3 percent royalty (current average royalty is 15-1/2 percent), until implementation of the Upper Main Zone Waterflood (within one year) and a price sensitive sliding scale schedule thereafter. A copy of the proposed price sensitive sliding scale royalty is attached as exhibit "A". During the initial year after approval of this modification, the Lessee will be actively working to reduce the field's operating cost structure to support the significant investments required for implementation of the waterflood.

Following implementation of the waterflood, the Lessee will invest $2 million the first year as Phase I; and in years two through five, Phase II, will invest not less than $5 million in the waterflood program. In the event the program is terminated before full implementation, whether during Phase I or II, the Lessee will return, with interest, the difference, if any, between royalty paid under the sliding scale schedule and a fixed 16-2/3 percent. If the program is not begun or fully implemented, the royalty will remain at 16-2/3 percent.

A study by Shirley C. Anderson, Ph.D., California State University, Northridge (covering the period 1989-93), showed that this field provided 407 jobs, with annual wages of $11 million, and provided $6.88 million per year to the State's General Fund and $2 million per year as direct tax revenue to Los Angeles and Orange Counties. The study, "Statistical Analysis of the Direct and Indirect Economic Impacts of the Shell Huntington Beach Field on the Los Angeles and Orange County Economy" expresses the impacts on employment, output, wages, value added and tax revenues of the local economy and direct impacts to the State economy. Financial highlights from that study are attached as Exhibit "B". Due to declining production, the jobs and revenues have decreased, but remain significant. If the Upper Main Zone Waterflood is implemented, the jobs, royalty, and tax revenues will increase significantly over present levels and be maintained for a much longer period.

Section 6830 of the Public Resources Code and provisions of the leases provide that the Commission shall promote the maximum economic recovery of oil and gas from the leased lands.

ECONOMIC EVALUATIONS REQUESTED BY THE COMMISSION:
At its March 1, 1995 meeting the Commission directed staff to obtain an independent analysis of the proposed royalty modification for the Shell leases at Huntington Beach. The staff has obtained two economic analysis. The first was prepared by Dr. Robert T. Deacon, Professor of Economics at the University of California, Santa Barbara. Dr. Deacon is a natural resource economist who has significant experience with oil issues. The second analysis was prepared by Mr. Peter Ashton of Innovation & Information Consultants, Inc. of Cambridge, Massachusetts, (IIC). This firm has provided consulting services to the City of Long Beach in the past on oil related matters. Although each report used somewhat differing analytical methodologies, both conclude that the proposed royalty modification will be advantageous for the State.

In his report Dr. Deacon analyzed the distribution of prices for the State's Huntington Beach Field for the period 1986 to 1995. After adjusting the prices to 1995 price levels and providing for a range of prices in the event the State is successful in marketing its share of the oil, he found that the probability of royalty rates falling below the current 15.5% is 17.4-22.9%, while the probability of higher rates is 77.1-82.6% with the expected royalty rate falling between 14.9-15.5%.

Dr. Deacon stressed that the State should not focus on the average royalty rate but on the State's revenue per barrel of oil produced which he concludes will be higher under the proposed sliding scale royalty than under the present fixed rate royalty. In addition, he emphasizes that the increase in production will overwhelm other royalty factors.

The ICC Report examined six separate crude oil price forecasts from the Department of Energy, the Society of Petroleum

Evaluation Engineers, Lehman Brothers, and economists and trade groups covering a spectrum of possibilities ranging from a prediction that crude oil prices will outpace inflation by over 2% annually, to a prediction that crude oil prices will lag slightly behind inflation. The report concluded that if the proposed royalty modification is adopted the average royalty rate will be 16.4%.

In addition, the report stressed that under the modified royalty rate the State can expect to receive significantly higher revenues. Even the most pessimistic forecast showed an increase in revenue to the State of $44 million. The range of increased revenues was $44 million to $77 million, with the average of the forecasts suggesting that the State will receive an additional $71 million.

Copies of these reports are on file with the Commission and are available for public inspection.

STAFF RECOMMENDATION:
Commission staff has evaluated the leases and believes that continued production from the leases is in the best interests of the State and that such additional production will not be achieved under the existing lease terms. In order to provide incentive for the Lessee to risk the investment capital in the expanded waterflood program and prevent the premature abandonment of the leases, Commission staff has developed a price sensitive sliding scale royalty schedule. The schedule provides a contingency for crude oil price fluctuations, maintaining a lesser State interest during low price periods but providing significant royalty increases as the price escalates. Under the proposed price sensitive sliding scale royalty, the State's royalty marketing program can have a significant positive impact on the royalty rate received by the State. The price used to compute the State's royalty share will be the highest price received for either the State's or Shell's oil during the production month.

It is anticipated that over the remaining life of the field, the State will receive considerably more royalty revenue under the price sensitive schedule than under the present fixed royalty rates, e.g., at a real price growth of two percent (price escalation over inflation), the price sensitive schedule would result in over $80 million, additional revenue to the state over the existing fixed royalty rates. Even if there is no additional real price growth the expanded program could bring in over an additional $67 million in royalty income, and as pointed out in the ICC report, it is likely that the program will produce no less than an additional $44 million. Staff estimates that had this royalty schedule been in effect over the past 20 years, the cumulative royalty received by the State would have been approximately $100 million greater than the actual royalty received.

Although there is great potential for increased royalty revenue for the State if the Upper Main Zone Waterflood is implemented, one of the most important reasons for going forward with the program is the very positive impact it will have on the local economy. Even a pessimistic price scenario of $13 per barrel would still generate oil production revenues approaching $500 million, most of which would be spent in Los Angeles and Orange Counties. Application of a conservative multiplier indicates that the result would be over $1 billion in economic activity. The State, and local governments, would reap the tax benefits and a significant job base would be maintained.

The Lessee has agreed to the proposed Lease Royalty Modification which includes a price-based sliding scale royalty schedule (Exhibit "A"). The proposed royalty modification is consistent with the requirements of P.R.C. Section 6827.2. Therefore, Commission staff recommends that the royalty provision of the leases be amended as provided in Exhibit "A".

OTHER PERTINENT INFORMATION:

1. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (14 Cal. Code Regs. 15061), the staff has determined that this activity is exempt from the requirements of CEQA because the activity is not a "project" as defined by CEQA and the State CEQA Guidelines (P.R.C. 21065 and 14 Cal. Code Regs. 15378).

AB 884:
N/A

EXHIBITS:
A. Royalty Modification
B. Direct and Indirect Economic Impacts of the Huntington Beach Field

IT IS RECOMMENDED THAT THE COMMISSION:

1. FIND THAT THE ACTIVITY IS EXEMPT FROM THE REQUIREMENTS OF THE CEQA PURSUANT TO 14 CAL. CODE REGS. 15061 BECAUSE THE ACTIVITY IS NOT A PROJECT AS DEFINED BY PRC 21065 AND CAL. CODE REGS.15378.

2. FIND THAT CONTINUED PRODUCTION FROM OIL AND GAS LEASES PRC 91, PRC 163, PRC 425, PRC 426, AND E-392 IS IN THE BEST INTEREST OF THE PEOPLE OF CALIFORNIA AND THAT SUCH PRODUCTION IS ECONOMICALLY UNFEASIBLE UNDER THE EXISTING LEASE TERMS.

3. IN ORDER TO PREVENT PREMATURE ABANDONMENT OF THE LEASES, APPROVE THE AMENDMENT OF THE ROYALTY PROVISIONS OF OIL AND GAS LEASES PRC 91, PRC 163, PRC 425, PRC 426 AND E-392 AS PROVIDED IN THE LEASE ROYALTY MODIFICATION ATTACHED HERETO AS EXHIBIT "A".

3/1/95
PRC 91
PRC 163
E-392
PRC 425
PRC 426
Willard

EXHIBIT "A"

LEASE ROYALTY MODIFICATION

From the effective date of these Lease amendments, the royalty rate shall be sixteen and two-thirds (16-2/3%) percent until the first day of the month following implementation of the Upper Main Zone Waterflood Program. Implementation of the Program shall be within one (1) year of the effective date of these amendments and shall consist of an approved Authority For Expenditure (AFE) for the initial drilling investment. Upon the first day of the month following implementation of the Program, the royalty rate shall be determined in accordance with the below Sliding Scale Royalty Schedule.

During the first 12 months following implementation of the Program, Phase I, the Lessee shall be obligated to invest not less than two ($2) million dollars in the Program. During the second through fifth years, Phase II, additional investment of not less than five ($5) million dollars shall be made in the Program, to complete Phase II. In the event of termination of the Program before full implementation, whether during Phase I, or II, the Lessee shall reimburse the State, with interest, for the difference, if any, between the royalty paid under the sliding scale schedule and a fixed sixteen and two-thirds (16-2/3%) percent royalty, if the sliding scale royalty paid was less than the fixed rate royalty. Interest shall be calculated in accordance with the provisions of Section 6224 of the Public Resources Code. If the Program is not implemented, the royalty shall remain at sixteen and two-thirds (16-2/3%) percent.

SLIDING SCALE ROYALTYSCHEDULE

*Oil Price Greater Than or Equal To	But Less than	Royalty Rate, Percent
$00.00	$13.00	4.00
$13.00	$14.00	[0.12667*(Oil Price)-1.606]*100
$14.00	$17.50	16.667
$17.50	$25.00	[0.01111*(Oil Price)-0.02777]*100
$25.00	and Greater	25.00

CALENDAR PAGE	321.6
MINUTE PAGE	792

The fair market price of oil, for application of the sliding scale schedule, during any month, shall be the highest weighted average price received in the sale of oil during the month by either Lessee or the State (its entire royalty share), deflated by the Producers Price Index to the effective date of the amendments. If the State is not taking its royalty oil in kind, the fair market price of oil shall be the higher of the highest weighted average posted price in the Huntington Beach Field, or the weighted average price received in the sale of oil during the month by the Lessee, deflated by the Producers Price Index to the effective date of the amendments. This conversion will be made using the first published monthly Producers Price Index as published by the U.S. Department of Labor, Bureau of Labor Statistics. This index will be used without regard to any subsequent revisions to the index or the parameters that define the index or changes to the base year included therein. The royalty rate determined from the deflated highest sales price shall be applied to the month ending production, and any overage or underage deliveries accounted for in the following month.

The provisions in each lease regarding the State reserving the right to take its royalty share of oil produced from the leased lands in kind shall be modified to:

1. At the State's option, exercised upon a minimum of ninety (90) days written notice, Lessee shall deliver to the State, in kind, a percentage, determined in accordance with this Exhibit "A",of all oil production removed or sold from the leased lands. If the State elects to take in kind its royalty share of oil, Lessee shall provide at the Lessee's shipping tanks, without charge to the State, tankage of sufficient capacity to store the State's royalty share during any continuous forty-eight (48) hours; and

2. If the State elects to take in kind its royalty share of oil, it may, upon a minimum ninety (90) days written notice, elect instead to take its royalty share in money, and may, from time to time, upon like notice, elect to take its royalty share either in kind or in money; provided, however, there must be a minimum of ninety (90) days between notices.

EXHIBIT B

* Quantitative Impacts of Abandonment of the Shell Huntington Beach Field on the Los Angeles/Orange County local economy

The following permanent annual impacts on the Los Angeles/Orange County economy would be sustained:

1. Loss of 407 jobs, of which approximately 175 would be high-income blue collar technical jobs, management, or engineering-related jobs.

2. Loss of $61,728,800 in annual Los Angeles/Orange County production output of goods and services, including loss of direct, indirect and induced output.

3. Loss of $10,895,300 in annual wages.

4. Loss of $22,869,200 in annual value added.

5. Loss to the State of California of $6.88 million in direct annual state royalty and production tax payments, plus indirect and induced taxes of $1 million.

6. Loss to the Los Angeles and Orange Counties of $2 million in direct tax revenue

7. Loss to the municipalities of Los Angeles and Orange Counties of $650,000 in direct annual tax revenue.

8. Loss to Los Angeles and Orange County municipal and county governments of an additional $570,000 in annual indirect and induced tax revenue.

The $61.7 million total output impact (Table 2 and Appendix 3) of Shell's Huntington Beach leases on the Los Angeles/Orange County area is 0.008 percent of California Gross State Product. (The 1989 California Gross State Product is the latest reported in the California Statistical Abstract but has been inflated to 1992 dollars, using the 1989-1992 Los Angeles-Anaheim-Riverside Consumer Price Index.) However, to avoid any possibility of double-counting of production, we can compare the total Shell value-added impact to the California Gross State Product, a ratio of 0.003 percent. Thus abandonment of the Shell Huntington Beach field would have a significant impact on the State of California, without considering the indirect and induced effects of State revenue losses on counties other than Los Angeles and Orange. The indirect impact on California tax revenues occurring outside the Los Angeles/Orange County area, although excluded from the model, appears to be an additional fifteen to twenty-five percent since Shell administrative and office staff supervising the Huntington Beach leases are located in Bakersfield, California.

* Anderson, Shirley C., Statistical Analysis of the Direct and Indirect Economic Impacts of the Shell Huntington Beach Field on the Los Angeles and Orange County Economy, School of Business Administration and Economics, California State University Northridge, 1994.