

MINUTE ITEM

This Calendar Item No. 31  
was approved as Minute Item  
31 by the State Lands  
Commission by a vote of 3  
to 0 at its 12/16/82  
meeting.

MINUTE ITEM  
31

12/16/82  
W 22872  
Louie  
Lipphardt

CERTIFICATION OF  
ENVIRONMENTAL IMPACT REPORT  
"PLATFORM EDITH" PROJECT

During consideration of Calendar Item 31, attached, the Commission approved the item subject to Executive Officer negotiation of the rental fee and subsequent ratification by the Commission.

Upon motion duly made and carried, Calendar Item 31 as amended was approved by a vote of 3-0.

Attachment: Calendar Item 31.

A 73

S 36

CALENDAR PAGE	<u>3356</u>
MINUTE PAGE	<u>3356</u>

CALENDAR ITEM

31 1

12/15/82  
W 22872  
Louie  
Lipphardt

CERTIFICATION OF  
ENVIRONMENTAL IMPACT REPORT - "PLATFORM EDITH" PROJECT

APPLICANT: Chevron U.S.A., Inc.  
2120 Diamond Boulevard  
Concord, California 94520

PROJECT TITLE: Proposed installation of "Platform Edith"  
(Chevron U.S.A., Inc.) and attendant oil  
and gas pipelines.

PROJECT LOCATION:  
Within the proposed OCS Beta Unit Development,  
San Pedro Bay, on OCS Lease P-0296 and  
pipeline right-of-way to Platform Eva (Union  
Oil Company) in State waters offshore the  
City of Huntington Beach.

PROJECT DESCRIPTION:  
The proposed project is the installation  
of: (1) an oil and gas platform on OCS  
Lease P-0296; (2) an oil pipeline from  
the platform to Shell Oil Company's Platform  
Elly on OCS P-0300; (3) a gas pipeline  
from the platform to Union's platform Eva  
in State waters; and (4) attendant electrical  
power cable from the City of Huntington  
Beach to the platform.

A 73  
S 36

Revised 12/15/82

-1-

CALENDAR PAGE	132
MINUTE PAGE	3357

OTHER PERTINENT INFORMATION:

1. The Commission, acting as lead agency under CEQA and the State CEQA Guidelines has prepared a final Environmental Impact Report (FEIR) for the total "Platform Edith" project. Public hearings on the document were held in Long Beach on November 16, 1982, at 2:00 p.m. and 7:00 p.m. The final EIR for the "Platform Edith" project is on file in the principal office of the Commission and is incorporated by reference as though fully set forth herein. An executive summary of the environmental document is attached as Exhibit "C".

As more fully set forth in the EIR, Chevron's "Platform Edith" project has the potential for having significant environmental effects within the meaning of CEQA and the State CEQA Guidelines. The general areas of concern that have such potential include: Biology, Socioeconomics, Marine Traffic and Navigation, Geology, and Water Quality. Below is a brief discussion of the environmental impacts and mitigation.

Biology - Disruption of benthic communities will occur at the platform site and along the pipeline routes. Impact occurs in the immediate project vicinity and would be significant locally but regionally insignificant. Additionally, there could be short-term population reductions in species affected by any major crude oil or fuel spill and a possible reduction in the quality of sensitive biological environments. These effects could be partially mitigated by implementing the best available spill prevention, containment, and cleanup measures.

CALENDAR ITEM NO. 3.1 (CONTD)

Socioeconomics - The platform placement will impact the view whenever the platform is visible from shore (about half the time).

A short-term disruption in land and water uses in areas affected by any major oil or fuel spill could occur and be partially mitigated by implementing best available spill prevention, containment and cleanup measures.

Marine-Traffic-and-Navigation - A slight incremental increase in vessel casualty risk will occur during project construction and operation. Partial mitigations include platform located navigation aids, visual identification, marine notification during construction, and establishment of safety zones around the platform. Impact would remain locally significant but minimal after mitigation.

Water-Quality - An increase in heavy metal concentration and turbidity may occur in area of submarine drilling muds and cuttings discharge. Mitigation can be accomplished by onshore disposal of muds and cuttings which may have onshore impacts by depleting space in the disposal sites.

Oil or fuel spills could cause short-term degradation of water quality which could extend to shore. This impact can be mitigated by implementing the best available spill prevention, containment, and cleanup measures.

Geology - Subsidence may occur due to fluid withdrawal which can be mitigated by proposed water injection program.

Revised 12/15/82

-3-

CALENDAR PAGE	132 <sup>B</sup>
MINUTE PAGE	3350

CALENDAR ITEM NO. 31 - (CONT'D)

2. This project is situated on land identified as possessing environmental values in that the State Lands Commission stated all waterways under the Commission's jurisdiction have environmental significance. Staff finds this project to be compatible with Commission policy.

EXHIBITS:           A. Location Map.  
                      B. EIR Summary.

IT IS RECOMMENDED THAT THE COMMISSION:

1. DETERMINE THAT A FINAL EIR HAS BEEN PREPARED FOR THIS PROJECT BY THE COMMISSION, FOLLOWING EVALUATION OF COMMENTS AND CONSULTATION WITH PUBLIC AGENCIES HAVING JURISDICTION BY LAW, INCLUDING ALL RESPONSIBLE AND TRUSTEE AGENCIES.
2. CERTIFY THAT A FINAL EIR, NO. 323, HAS BEEN COMPLETED IN ACCORDANCE WITH CEQA, THE STATE CEQA GUIDELINES AND THE COMMISSION'S ADMINISTRATIVE REGULATIONS, AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.
3. DETERMINE THAT THE PROJECT WILL HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT.
  - A. IMPACT: DISRUPTION OF BENTHIC COMMUNITIES WILL OCCUR AT THE PLATFORM SITE AND ALONG THE PIPELINE ROUTES DUE TO BURIAL AND TURBIDITY RESULTING FROM CONSTRUCTION AND FROM LARGE ANCHORS OF THE LAY BARGE. THE PRESENCE OF PLATFORM EDITH WILL CAUSE AN ALTERATION OF BOTTOM COMMUNITIES.

THE IMPACT OF THE TURBIDITY AND BURIAL ON BENTHIC COMMUNITIES OCCURS IN THE IMMEDIATE PROJECT VICINITY AND WHILE THE IMPACT MAY BE SIGNIFICANT LOCALLY, IT IS REGIONALLY INSIGNIFICANT.

CALENDAR ITEM NO. 31 . . . (CONT'D)

FINDING: THE COMMISSION FINDS:

- (1) "SPECIFIC ECONOMIC, SOCIAL, OR OTHER CONSIDERATIONS MAKE INFEASIBLE THE MITIGATION MEASURES OR PROJECT ALTERNATIVES IDENTIFIED IN THE FINAL EIR." (SECTION 21081(c) PRC)

THE IMPACT OF TURBIDITY AND BURIAL ON THAT PORTION OF THE PROJECT UNDER THE STATE LANDS COMMISSION'S JURISDICTION IS LOCALLY SIGNIFICANT BUT REGIONALLY INSIGNIFICANT. A DENIAL OF THE PROJECT WILL REMOVE THE POSSIBILITY OF ADDITIONAL REVENUES BEING COLLECTED BY THE STATE AND ELIMINATES THE POSSIBLE INCREASES IN THE AVAILABLE SUPPLY OF OIL AND NATURAL GAS.

- (2) "SUCH CHANGES OR ALTERATIONS ARE WITHIN THE RESPONSIBILITY AND JURISDICTION OF ANOTHER PUBLIC AGENCY AND SUCH CHANGES HAVE BEEN ADOPTED BY SUCH OTHER AGENCY, OR CAN AND SHOULD BE ADOPTED BY SUCH OTHER AGENCY." (SECTION 21081(b) PRC)

THE FEDERAL GOVERNMENT HAS JURISDICTION AND RESPONSIBILITY OVER THE PLATFORM, FACILITIES AND OFFSHORE PIPELINES IN THE OCS AND IS ADMINISTERED BY THE FEDERAL MINERALS MANAGEMENT SERVICE, WHICH HAS ALREADY APPROVED THIS PROJECT.

- B. IMPACT: THE PLATFORM PLACEMENT IN AN AREA WHERE FOUR PLATFORMS ARE ALREADY VISIBLE WILL INCREMENTALLY IMPACT THE VIEW FROM SHORE. DUE TO THE DISTANCE FROM SHORE AND TYPICAL FOG CONDITIONS, THE PROPOSED PLATFORM WOULD BE VISIBLE ONLY ABOUT HALF THE TIME.

FINDING: THE COMMISSION FINDS:

- (1) "SUCH CHANGES OR ALTERATIONS ARE WITHIN THE RESPONSIBILITY AND JURISDICTION OF ANOTHER PUBLIC AGENCY AND SUCH CHANGES HAVE BEEN ADOPTED BY SUCH OTHER AGENCY, OR CAN AND SHOULD BE ADOPTED BY SUCH OTHER AGENCY." (SECTION 21081(b) PRC)

CALENDAR-ITEM-NO. 3.1. (CONTD)

THE STATE LANDS COMMISSION HAS NO JURISDICTION IN THE SUBJECT AREA. THE PLATFORM IS REGULATED BY THE FEDERAL MINERALS MANAGEMENT SERVICE WHICH HAS ALREADY APPROVED THIS ACTIVITY.

- C. IMPACT: A SLIGHT INCREMENTAL INCREASE IN VESSEL CASUALTY RISK WILL OCCUR DURING PROJECT CONSTRUCTION AND OPERATION. THE POSSIBILITY OF COLLISION OF VESSELS TRANSITING THE AREA WITH VESSELS CONSTRUCTING OR SERVICING THE PLATFORM OR WITH THE PLATFORM ITSELF EXISTS.

FINDINGS: THE COMMISSION FINDS:

- (1) "SUCH CHANGES OR ALTERATIONS ARE WITHIN THE RESPONSIBILITY AND JURISDICTION OF ANOTHER PUBLIC AGENCY AND SUCH CHANGES HAVE BEEN ADOPTED BY SUCH OTHER AGENCY, OR CAN AND SHOULD BE ADOPTED BY SUCH OTHER AGENCY."  
(SECTION 21081(b) (PRC))

THIS ACTIVITY IS REGULATED BY THE FEDERAL MINERALS MANAGEMENT SERVICE WHICH HAS ALREADY APPROVED THIS ACTIVITY.

ADDITIONALLY, THE U. S. COAST GUARD HAS AUTHORITY WITH REGARD TO NAVIGATIONAL AIDS, VESSEL TRAFFIC LANES, ETC.

PARTIAL MITIGATIONS INCLUDE PLATFORM LOCATED NAVIGATION AIDS, VISUAL IDENTIFICATION, MARINE NOTIFICATION DURING CONSTRUCTION, ESTABLISHMENT OF SAFETY ZONES AROUND PLATFORM. CASUALTY RISK WOULD REMAIN LOCALLY SIGNIFICANT BUT MINIMAL AFTER MITIGATION.

RIGOROUSLY ENFORCING EXISTING SAFETY REGULATIONS AND IMPLEMENTING ALL AVAILABLE MARITIME CASUALTY RISK REDUCTION MEASURES WOULD REDUCE COLLISION POTENTIAL.

CALENDAR-ITEM-NO.31... (CONTD)

- D. IMPACT: SHORT-TERM DEGRADATION OF WATER QUALITY, SHORT-TERM POPULATION REDUCTION OF CERTAIN ANIMAL SPECIES, AND SHORT-TERM DISRUPTION IN LAND AND WATER USES DUE TO A MAJOR CRUDE OIL OR FUEL SPILL.

FINDINGS: THE COMMISSION FINDS:

- (1) "SUCH CHANGES OR ALTERATIONS ARE WITHIN THE RESPONSIBILITY AND JURISDICTION OF ANOTHER PUBLIC AGENCY AND SUCH CHANGES HAVE BEEN ADOPTED BY SUCH OTHER AGENCY, OR CAN AND SHOULD BE ADOPTED BY SUCH OTHER AGENCY."  
(SECTION 21081(b) PRC)

THIS ACTIVITY IS REGULATED BY THE FEDERAL MINERALS MANAGEMENT SERVICE WHICH HAS ALREADY APPROVED THIS PROJECT.

THIS IMPACT CAN BE PARTIALLY MITIGATED BY IMPLEMENTING BEST AVAILABLE SPILL PREVENTION, CONTAINMENT, AND CLEANUP MEASURES.

NO-PROJECT-ALTERNATIVE

THE OIL AND GAS RESERVES OF LEASE OCS-P 0296 WOULD NOT BE DEVELOPED. DEVELOPMENT OF THE BETA FIELD WOULD STILL OCCUR FROM SHELL'S PLATFORMS ELLY AND ELLEN ON ADJACENT LEASE OCS-P 0300.

FINDING

"SPECIFIC ECONOMIC, SOCIAL, OR OTHER CONSIDERATIONS MAKE INFEASIBLE THE MITIGATION MEASURES OR PROJECT ALTERNATIVES IDENTIFIED IN THE ENVIRONMENTAL IMPACT REPORT."  
(SECTION 21081(c) PRC)



DISCUSSION

THE COMMISSION REJECTS THIS ALTERNATIVE FOR THE FOLLOWING REASONS:

- 1) THE COMMISSION'S JURISDICTION EXTENDS ONLY TO THAT PORTION OF THE GAS PIPELINE WHICH CROSSES STATE LANDS AND WILL CONNECT TO PLATFORM EVA A. THE ELECTRICAL CABLE WHICH CROSSES STATE LANDS AND CONNECTS TO THE SUBSTATION AT THE CITY OF HUNTINGTON BEACH. THE REMAINDER OF THE PROJECT IS WITHIN THE JURISDICTION OF AND HAS ALREADY BEEN APPROVED BY THE FEDERAL MINERALS MANAGEMENT SERVICE.
- 2) SELECTION OF THIS ALTERNATIVE WOULD HAVE GREATER IMPACT THAN THE PROPOSED PROJECT. IN ADDITION TO THE BIOLOGICAL, WATER QUALITY AND OTHER SIGNIFICANT IMPACTS LISTED IN THE DOCUMENT, ADDITIONAL SIGNIFICANT AIR QUALITY IMPACTS WOULD OCCUR. AS A RESULT OF THIS ALTERNATIVE, CHEVRON WOULD NEED TO UTILIZE TECHNOLOGY OTHER THAN ELECTRICAL ENERGY FROM SHORE FOR PLATFORM POWER. THIS WOULD MOST LIKELY MEAN BURNING THE NATURAL GAS FOR ELECTRIC POWER GENERATION, RESULTING IN ADDITIONAL AIR EMISSIONS.
- 3) THE NO PROJECT ALTERNATIVE WOULD ELIMINATE THE BENEFICIAL USES OF THE GAS FROM THE PROJECT. CHEVRON WOULD EITHER REINJECT THE GAS INTO THE FORMATION, FLARE THE GAS, OR BURN IT FOR ELECTRIC POWER GENERATION.

PROJECT-POSTPONEMENT-ALTERNATIVE

UNDER THIS ALTERNATIVE, THE PROJECT WOULD BE POSTPONED TO A FUTURE, UNSPECIFIED, DATE. ALTERNATIVELY, THE OIL PIPELINE MAY BE POSTPONED, MAKING OIL TRANSPORT BY TANKER NECESSARY. IF THE GAS PIPELINE IS POSTPONED, REINJECTION AND PERIODIC FLARING WOULD RESULT.

FINDING

"SPECIFIC ECONOMIC, SOCIAL OR OTHER CONSIDERATIONS MAKE INFEASIBLE THE MITIGATION MEASURES OR PROJECT ALTERNATIVES IDENTIFIED IN THE ENVIRONMENTAL IMPACT REPORT."  
(SECTION 21081(c) PRC)

DISCUSSION

THE COMMISSION REJECTS THIS ALTERNATIVE BECAUSE:

PROJECT POSTPONEMENT WOULD HAVE MORE SIGNIFICANT IMPACTS THAN PROPOSED PROJECT. DELAYING THE PROJECT WOULD MOST LIKELY RESULT IN CHEVRON ABANDONING THE PROPOSED GAS PIPELINE AND ELECTRICAL CABLE AND DEVELOPING THE OIL FIELD WITHOUT THESE COMPONENTS. IMPACTS FROM THE PROJECT WOULD BE SIGNIFICANTLY WORSE THAN THE PROPOSED PROJECT AS DESCRIBED IN THE NO PROJECT ALTERNATIVE DISCUSSION.

ALTERNATIVE-OFFSHORE-FACILITIES

ALTERNATIVE-DRILLING-FACILITIES-AND-SUBSEA COMPLETIONS

IN PLACE OF A PLATFORM, DRILLING COULD BE ACCOMPLISHED FROM TEMPORARY MARINE FACILITIES AND SUBSURFACE PRODUCTION. CONTINUOUS SERVICING FROM SURFACE VESSELS AND A SUBSTANTIALLY HIGHER COST WOULD BE ASSOCIATED WITH THIS ALTERNATIVE.

PARTIAL DEVELOPMENT COULD OCCUR BY DRILLING DIRECTIONAL WELLS FROM SHELL'S PLATFORM ELLY. PARTIAL DEVELOPMENT IS THOUGHT TO BE ECONOMICALLY INFEASIBLE BY LEASE OCS-P 0296 OPERATORS. PARTIAL DEVELOPMENT WOULD ALSO RESULT FROM PLACEMENT OF PLATFORM EDITH IN AN ALTERNATIVE LOCATION ON LEASE OCS-P 0296. ALSO AN UNECONOMICAL PROSPECT FROM THE PERSPECTIVE OF THE LEASE OPERATORS.

FINDING

"SPECIFIC ECONOMIC, SOCIAL OR OTHER CONSIDERATION MAKE INFEASIBLE THE MITIGATION MEASURES OR PROJECT ALTERNATIVES IDENTIFIED IN THE ENVIRONMENTAL IMPACT REPORT." (SECTION 21081(c) PRC)

DISCUSSION

THE COMMISSION REJECTS THIS ALTERNATIVE BECAUSE:

THE COMMISSION HAS NO JURISDICTION OVER THE FACILITIES IN THE OUTER CONTINENTAL SHELF. SUCH FACILITIES ARE APPROVED AND REGULATED BY THE FEDERAL MINERALS MANAGEMENT SERVICE. THE PROPOSED OFFSHORE FACILITIES HAVE ALREADY BEEN APPROVED BY THE MINERALS MANAGEMENT SERVICE.

ALTERNATIVE-HYDROCARBON-TRANSPORT

OIL-TRANSPORT

IN PLACE OF AN OIL PIPELINE FROM PLATFORM EDITH TO PLATFORM ELLY, A PIPELINE COULD BE CONSTRUCTED FROM EDITH TO A PUMPING STATION AT HUNTINGTON BEACH. THE PIPELINE COULD CROSS A SUBMERGED REEF AND THE BEACH. STORAGE FACILITIES AND A PUMPING STATION WOULD BE CONSTRUCTED ONSHORE.

GAS-TRANSPORT

THE ONLY VIABLE ALTERNATIVE TO TRANSPORTING NATURAL GAS BY PIPELINE IS TO COMPRESS IT ON THE PLATFORM AND REINJECT IT INTO THE PRODUCING FORMATION. THIS WOULD RESULT IN THE LOSS OF A RESOURCE TO THE PUBLIC.

FINDING

"SPECIFIC ECONOMIC, SOCIAL OR OTHER CONSIDERATION MAKE INFEASIBLE THE MITIGATION MEASURES OR PROJECT ALTERNATIVES IDENTIFIED IN THE ENVIRONMENTAL IMPACT REPORT." (SECTION 21081(c), PRC)

DISCUSSION

THE COMMISSION REJECTS THE TWO ALTERNATIVE TRANSPORT METHODS:

- A) OIL PIPELINE CONSTRUCTION FROM PLATFORM EDITH TO HUNTINGTON BEACH WOULD HAVE SIGNIFICANTLY GREATER IMPACTS THAN THE PROPOSED PROJECT AND WOULD NOT FACILITATE THE USE OF COMBINED FACILITIES AS HAS BEEN THE POLICY OF THE STATE. AN OIL PIPELINE CONSTRUCTED FROM PLATFORM EDITH TO HUNTINGTON BEACH WOULD CROSS A SUBMERGED REEF AND BEACH AND ONSHORE FACILITIES NOT REQUIRED BY THE PROPOSED PROJECT WOULD BE NECESSARY.
- B) PIPELINE TRANSPORTATION OF NATURAL GAS IS THE ONLY VIABLE ALTERNATIVE FOR TRANSPORTING NATURAL GAS TO SHORE. ACCEPTANCE OF THIS ALTERNATIVE WOULD REQUIRE THAT THE GAS BE REINJECTED AT THE PLATFORM OR FLARED WITH SUBSEQUENT ATMOSPHERIC EMISSIONS. THIS WOULD CAUSE: 1) A SIGNIFICANT LOSS OF A NATURAL RESOURCE WHICH WOULD OTHERWISE BE MADE AVAILABLE TO THE PUBLIC UNDER THE PRESENT PROJECT; AND 2) POSSIBLE INCREASED AIR QUALITY DEGRADATION.
4. FIND THAT THIS ACTIVITY IS: (1) SITUATED ON LAND IDENTIFIED AS POSSESSING ENVIRONMENTAL VALUES IN THAT THE STATE LANDS COMMISSION FOUND ALL WATERWAYS UNDER THE COMMISSION'S JURISDICTION HAVE ENVIRONMENTAL SIGNIFICANCE; AND (2) DESIGNED IN SUCH A MANNER AS TO BE CONSISTENT WITH THAT FINDING AS IT APPLIES TO THE SUBJECT LAND.

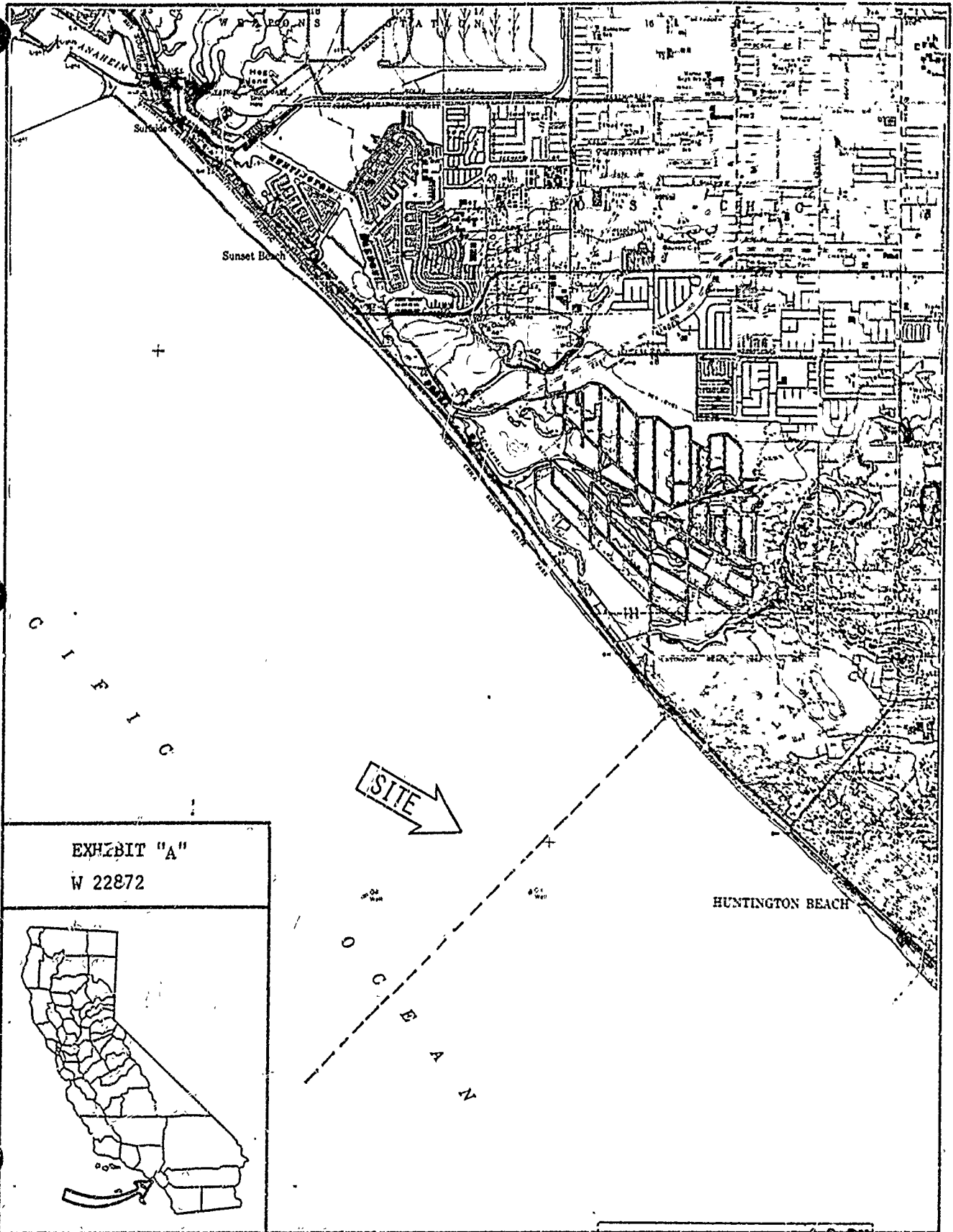


EXHIBIT "A"

W 22872



Added 12/15/82

CALENDAR PAGE

132<sup>K</sup>

MINUTE PAGE

3368

## EXECUTIVE SUMMARY

### 1.1 PROJECT DESCRIPTION

#### 1.1.1 Beta Field

Chevron USA Inc., et al., proposes to develop the proven oil and natural gas resources of Federal Lease OCS-P 0296 within the Beta Unit southwest of Huntington Beach. Recoverable reserves are estimated at 46,000,000 bbl of oil. Ultimate gas reserves have not been estimated. Shell Oil Company, et al., is already developing Beta Unit hydrocarbon resources on adjacent Federal Lease OCS-P 0300.

#### 1.1.2 Project Elements

The major elements of the proposed project are:

- o Placement and operation of an oil and gas drilling and production platform ("Edith") approximately 13.7 km (8.5 m) southwest of Huntington Beach at an ocean depth of 48 m (161 ft).
- o Placement and operation of a subsea oil pipeline to transport oil from the proposed platform to Shell's Platform Elly for eventual transport to shore.

EXHIBIT "B"

Added 12/15/82

CALENDAR PAGE	132 <sup>L</sup>
MINUTE PAGE	3369

- o Placement and operation of a subsea gas pipeline to transport gas from the proposed platform to Union's Platform Eva for eventual transport to shore.
- o Construction of a power substation onshore at Huntington Beach and placement of a power cable from the substation along the ocean floor to the proposed platform.

#### 1.1.2.1 Platform Edith

The platform comprises a 12-leg jacket support structure, a drilling deck, and a production deck. The jacket and piling (to secure the platform to the ocean floor) will be manufactured by Nippon Steel in Japan. Seventy drill slots will be available; 47 producing wells and 18 water-injection wells will be drilled, and the remaining 5 slots will be employed for field servicing and evaluation of alternative production zones.

#### 1.1.2.2. Oil Pipeline

Produced oil will be transported from Platform Edith in a 15-cm (6-in) outer diameter (O.D.) pipeline from the platform to Shell's Platform Elly on Lease UCS-P 0300, a distance spanning 2,073 m (6,800 ft). There, the oil will commingle with Shell production and will travel in Shell's existing 41-cm (16-in) O.D. subsea pipeline to Long Beach and, eventually, to Chevron's El Segundo refinery.

#### 1.1.2.3 Gas Pipeline

Produced natural gas will be transported in a 16.8-cm (5 5/8-in) O.D. subsea pipeline from Platform Edith to Union's Platform Eva in State waters, a distance spanning 10.4 km (6.5 mi). There the gas will commingle with Union

Added 12./15/82

CALENDAR PAGE	132 M
MINUTE PAGE	3370

production and travel in Union's existing 22-cm (8 5/8-in) O.D. pipeline to shore, where it will enter Amincill's existing 32.4-cm (12 3/4-in) O.D. gas pipeline for delivery and use at Chevron's Huntington Beach facilities.

#### 1.1.2.4 Power Cable

Power for most of Platform Edith's needs will be supplied in a 10-cm (4-in) O.D. power cable. The cable will tap into Southern California Edison's power grid through a substation to be constructed at Chevron's Huntington Beach facilities. The power cable will lie atop the ocean floor and enter an abandoned wastewater outfall 300 m (1,000 ft) offshore. The cable will resurface near the substation.

## 1.2 ALTERNATIVES CONSIDERED

### 1.2.1 No Project

The oil and gas reserves of Lease OCS-P 0296 would not be developed. Development of the Beta Field would still occur from Shell's Platforms Elly and Ellen on adjacent Lease OCS-P 0300.

### 1.2.2 Project Postponement

Under this alternative, the project would be postponed to a future, unspecified date. Alternatively, the oil pipeline may be postponed, making oil transport by tanker necessary. If the gas pipeline is postponed, reinjection and periodic flaring would result.

Added 12/15/82

CALENDAR PAGE	132 N
MINUTE PAGE	3371



### 1.3 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

In this section environmental impacts are summarized by sector. The scope, mitigation, and residual (after mitigation) impacts are given. The reader is referred to the report text (noted parenthetically) for further discussion.

#### 1.3.1 Unavoidable Significant Environmental Impacts

Biology (4.6.2) - Disruption of benthic communities at platform site and along pipeline routes (4.6.2). Impact occurs in immediate project vicinity. Impact may be significant locally but is regionally insignificant.

Socioeconomics (4.7.2) - Incremental increase in industrial component of aesthetic resources offshore the project area (4.7.2.7). Impact occurs whenever platform is visible from shore (about half the time).

No mitigation (4.7.3).

Marine Traffic and Navigation (4.9.2) - Slight incremental increase in vessel casualty risk during project construction and operation (4.9.2.1, 4.9.2.2). Partial mitigations include platform located navigation aids, visual identification, marine notification during construction, establishment of safety zones around platform (4.9.2.3). Impact remains locally significant but minimal after mitigation.

Added 12/15/82

1.3.2 Significant Environmental Impacts That Can Be Feasibly Mitigated or Avoided

Geology (4.2.2) - Potential subsidence due to fluid withdrawal. Mitigated by proposed water injection program (4.2.2).

Water Quality (4.5.2) - Increased heavy metal concentration and turbidity in immediate area of submarine drilling muds and cuttings discharge. Mitigated by onshore disposal of muds and cuttings. May have onshore impacts (e.g. depleting space in disposal sites [4.5.2.3]).

1.3.3 Significant Environmental Impacts With a Low Probability of Occurrence

Water Quality (4.5) - Short-term degradation of water quality due to a major crude oil or fuel spill in the vicinity of the spill which may extend to shore possibly up to 72 km (45 mi) south of the project (4.5.2, 4.10.2). Partially mitigated by implementing best available spill prevention, containment, and cleanup measures (4.10.6).

Biology (4.6) - Possible short-term population reductions in species affected by a major crude oil or fuel spill. Possibly would reduce quality of sensitive biological environments (4.6.2.1 - 4.6.2.9). Partially mitigated by implementing best available spill prevention, containment, and cleanup measures (4.10.6).

Socioeconomics (4.7) - Short-term disruption in land and water uses in areas affected by a major oil or fuel spill (4.7.2.1, 4.7.2.3). Partially mitigated by implementing best available spill prevention, containment, and cleanup measures. This would reduce impacts (4.10.6).

Added 12/15/82

CALENDAR PAGE	132 P
MINUTE PAGE	3373

Marine Traffic (4.9) - Collision of vessels transiting the area with vessels constructing or servicing the proposed platform and pipeline or with the platform itself (4.9.2). Mitigated by rigorously enforcing existing safety regulations and implementing all available maritime casualty risk reduction measures. This would reduce collision potential (4.9.2.3).

1.3.4 Other Environmental Impacts That Are Adverse But Not Significant

Geology (4.2) - Withdrawal of an unrenovable mineral resource for current instead of future use in the region (4.2.2). No mitigation.

Air Quality (4.3) - Projected emissions from the proposed project are not expected to produce appreciable change in ambient air quality measurements onshore, but will represent incremental increases on the order of  $10^{-4}$  to  $10^{-3}$  in the Orange County emission inventory and  $10^{-6}$  to  $10^{-5}$  in the total South Coast Air Basin inventory. Potential effects of these emissions will be mitigated to the extent that these emissions are offset by tradeoff emission reductions.

Oceanography (4.4) - Temporary increases in turbidity during platform and pipeline construction in the immediate vicinity of these project elements, and during discharge of drilling muds and cuttings (4.4.2, 4.5.2.5).

Water Quality (4.5) - Small, localized increases in water temperature and salinity at platform site from cooling water and produced water discharges to ocean (4.5.2.1, 4.5.2.4). No mitigation.

Small, localized decrease in water quality at platform site due to ocean discharge of produced water and sewage (4.5.2.2, 4.5.2.4). Partially mitigated by following applicable OCS orders and other water quality regulations and guidelines (4.5.2.2)

Added 12/15/82

CALENDAR PAGE	132.0
MINUTE PAGE	3374

Temporary increased turbidity during platform and pipelines construction and during discharge of drilling muds and cuttings (4.5.2.5).

Biology (4.6) - Localized impact on plankton from discharge of produced waters and treated sewage in vicinity of platform. No mitigation (4.6.2.3).

Potential temporary reduction in foraging by marine mammals, birds, and fish in turbid waters during platform and pipeline construction and drill mud disposal in the vicinity of the platform and pipelines (4.6.2.4, 4.6.2.5, 4.6.2.6).

Potential incremental increase in the risk of injury to marine mammals by collision with project-related vessels along pipeline routes during construction and the platform during construction/operation.

Socioeconomics (4.7) - Short-term, sporadic increase in noise level during project construction within 15 m (50 ft) of construction sites. No mitigation (4.7.2.6).

Approximately 50 vehicles per day will be added to existing arterials in region of construction yard. No mitigation (4.7.2.8).

#### 1.3.5 Beneficial impacts of the Proposed Project

The project provides an incremental increase in the available supply of oil and natural gas.

The proposed project may temporarily increase local employment opportunities, or may support current workers after existing drilling programs or other drilling projects are completed, and other platforms -- complete their missions.

Added 12/15/82

Royalties of 16-2/3 percent will be paid to the Federal Government on all hydrocarbons sold. Based on current values this would represent approximately \$260 million (4.7.2.5).

Construction of the pipelines and Platform Edith will create artificial reefs on which such organisms as mussels, scallops, and kelp can live. Fishes will aggregate around these structures, which may, thus, benefit sports fishing in the area (4.6.2.2).

The platform may serve as an aid to navigation for recreational boaters (4.9.2.3).

Added 12/15/82

CALENDAR PAGE	132 S
MINUTE PAGE	3376