

File: ~~CC-36-84~~ Pt. Pedernales  
OCS-P-0441 DPP/Corresp  
12-0 yes

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REGULAR CALENDAR

FINAL STAFF RECOMMENDATION ON CONSISTENCY CERTIFICATION



PROJECT DESCRIPTION

Applicant for federal permit:

Union Oil Company of California  
OCS Development and Production Plan

Project Location

Offshore Lease OCS P-0441, approximately 4.89 miles west of Point Pedernales; pipeline route to shore with landfall approximately one half mile north of the Santa Ynez River on Vandenberg Air Force Base; running 11.7 miles to Lompoc, Santa Barbara County (see Exhibit 1).

Project Description:

One 72-slot drilling and production platform (Irene) on Lease OCS P-0441; three subsea pipelines (oil, gas, and produced water return line) from platform to shore; continuation of pipelines onshore to new heatings, dehydration and pumping facility at Lompoc; a one-quarter acre electrical substation at Surf and a submarine power cable from the substation to the platform.

Substantive File Documents:

See Appendix 1

STAFF NOTE

This consistency certification contains the entire project proposed by Union, including the consolidated onshore pipelines areas Vandenberg Air Force Base (VAFB) to a new consolidated heating, dehydration and pumping facility at Lompoc; and a one-quarter acre electrical sub-station on Vandenberg Base at Surf. The section of the pipeline on VAFB will require the granting of a right of way to Union by the Air Force. The Air Force will not grant this right of way until environmental work for the EIR/EIS has been completed, but the Air Force has given Union a preliminary notice of intent to grant such a right of way (see Exhibit 3). Coastal Commission staff, Minerals Management Services (MMS), and VAFB have agreed that, after the environmental work for the EIR/EIS is completed, if there is a substantial change in the final pipeline alignment from Union's preferred route presented in the DPP, then either VAFB or MMS will submit the new route to the Commission as a revised consistency determination or certification.

STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following resolution, findings, and declarations:

I. CONCURRENCE

The Commission concurs with the consistency certification made by Union Oil Company of California for its Development and Production Plan (DPP) for the Point Pedernales Field because while the DPP affects the coastal zone, it does meet the policies of the approved California Coastal Management Program (CCMP), and is therefore consistent with the CCMP. Specifically, the Commission finds that Union's proposed project includes adequate information to permit an assessment of its probable coastal zone effects, including cumulative impacts, and it complies with the enforceable policy requirements of Chapter 3 of the California Coastal Act (Public Resources Code Section 30000 et seq.). This concurrence is contingent upon various commitments made by Union to mitigate the adverse impacts of its project to the maximum extent possible as further described below. The Commission furthermore finds that the DPP implements the national interest as required by Chapter II of the CCMP and Sections 302 and 303 of the CZMA.

The findings and declarations that follow explain in detail (1) the effects that this proposed activity has on the coastal zone where sufficient and adequate data has been submitted to so determine; and (2) how the activity is consistent with the specific mandatory provisions of the CCMP.

II. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

A. COMMISSION REVIEW OF DEVELOPMENT PLANS

A Development and Production Plan (DPP), which is prepared by an applicant for a federal permit, includes an Environmental Report describing environmental impacts and a technical drilling and production plan. Two federal laws govern the content and review of a DPP: (1) the Coastal Zone Management Act (CZMA); and (2) the Outer Continental Shelf Lands Act (OCSLA). The Commission has the authority to review DPPs for consistency with the California Coastal Act because the federal government has approved the California Coastal Management Program (CCMP) under the CZMA. The Coastal Act policies are the enforceable standards of the CCMP. The Commission must act on DPPs within six months of their receipt.

Union has stated that it has applied, or will be applying for the federal licenses and permits listed below. Union certifies that the proposed activities described in the Development and Production Plan for Platform Irene and its associated pipeline do not significantly affect any land or water use in the coastal zone in the State of California and are therefore consistent with the CCMP. By concurring in Union's certification, the Commission informs the federal agencies listed below that Union's project is consistent with the CCMP.

<u>Agency</u>	<u>Federal License or Permit</u>
U.S. Minerals Management Service	Approval of the Development and Production Plan (DPP) and EIS. Right of-Way Approval for Pipeline.
U.S. Army Corps of Engineers	Platform and Pipeline Structure.

U.S. Environmental Protection Agency	NPDES Permit.
U.S. Coast Guard	Approval of Navigation Aids. Certificate of Financial Responsibility.
Federal Aviation Administration	Heliport.
Federal Communications Commission	Private Radio Licenses.
U.S. Air Force	Pipeline right-of-way across Vandenberg Air Force Base

Because the Minerals Management Service (MMS) has determined that Union's project is a "major federal action" under the National Environmental Policy Act (NEPA), the MMS must prepare an Environmental Impact Statement (EIS) on the project. This document is being prepared jointly with an Environmental Impact Report (EIR), required by the California Environmental Quality Act (CEQA). The scope of the EIR/EIS includes a Point Pedernales Area Study extending from Point Arguello to north of Purisma Point. This document will be completed in mid-1985.

The applicant controls the schedule for consistency review by its submittal of the DPP to the MMS. Once the MMS determines that the plan is complete, MMS forwards it to the Commission, which starts the six month schedule for consistency review. Even though the MMS has determined that an EIS is required, the six month schedule for a state's consistency review remains unchanged.

Due to schedule limitations imposed by the federal regulations which implement the CZMA, the Commission must complete its review of the Union DPP prior to the completion of the joint EIS/EIR for the project and before action is taken on the permits. Therefore, the Commission does not have the benefit of all the environmental documents in reviewing this project, and must base its determination on the Environmental Report (ER) and other information provided by Union as part of the DPP. The Commission finds it has adequate data and information to render its consistency certification despite the absence of the EIR/EIS in this case because Union has provided additional information and mitigation that satisfies the requirements of the CCMP.

#### B. PROJECT DESCRIPTION AND HISTORY

Union Oil Company of California proposes to begin development of the Point Pedernales Field by:

- Installing a 72 well slot drilling and production platform (Irene) on OCS lease P-0441, approximately four and one-half miles west of Point Pedernales;
- Installing three subsea pipelines for transportation of oil, gas, and produced water leading from the platform to shore;
- Building a pipeline from shore to facility at Lompoc;
- Constructing onshore a separation and dehydration facility on existing Union owned land at Lompoc.

Union Oil Company of California, Gulf Oil Company, and Superior Oil Company are the co-lessees of OCS Lease P-0441. Union is the operator of this tract, purchased in Lease Sale 53. State Tidelands are to the east of the tract, Exxon's OCS P-0438 is

to the north, Arco's OCS P-0444 is to the south, and Exxon's OCS P-0440 is to the west (see Exhibit 2). Union plans to transport its Point Pedernales Field oil and gas to a proposed separation and dehydration facility on Union property near Lompoc. From there, pipelines will carry the gas to Union's Battles gas plant near Santa Maria and the oil to Union's Santa Maria Refinery. Gulf and Superior have also committed to transporting their crude to refineries by pipeline.

Union's three proposed associated pipelines are for crude oil with entrained natural gas and water, associated gas, and to return separated water from the Lompoc separation facility to Platform Irene for disposal. The Point Pedernales Field is being developed under a unit concept similar to the Point Arguello Field platforms previously approved by the Commission. Platform Irene will be the main platform through which any future platform in the field will feed its production. The pipelines between Platform Irene and the processing facility at Lompoc, as well as that facility, are sized to carry the full production of the Point Pedernales Field. The electric power cable to the platform will have the capacity to provide power for other platforms that may be installed.

Installation of Platform Irene, now being built in Japan, is expected to commence in August 1985. Drilling operations are expected to begin in early 1986, with peak daily production set at 20,000 BBL/D (Barrels of Oil Per Day) and 13.25 MCF/D (Million Cubic Feet per Day of gas). The ultimate recovery is estimated as 42.8 million barrels of oil and 51.1 billion cubic feet of gas.

There are currently no platforms in the project area. The closest approved OCS development is Chevron's Platform Hidalgo, approximately eight miles south. Exxon has proposed a platform (Shamrock) approximately two miles northwest of Platform Irene. As with any Point Pedernales Field platform, as noted above, Platform Shamrock will have pipelines to Platform Irene, and will receive electric power from Irene. City Services has proposed to place Platform Julius approximately 20 miles north on OCS P-0409.

### C. COASTAL DEPENDENCY AND RELATION TO INDUSTRIAL DEVELOPMENT

Section 30101 of the Act defines a coastal dependent development or use as that which "requires a site on or adjacent to the sea to be able to function at all." Ports, commercial fishing facilities, offshore oil and gas development, and mariculture are specifically mentioned in the Coastal Act as coastal dependent, although not all activities or facilities associated with such development would necessarily be considered coastal dependent uses. Coastal dependent developments are given priority over other development on or near the shoreline.

A special provision of the Act, Section 30260 (and Sections 30261 and 30262, which are incorporated within 30260 by reference) provides for further consideration of coastal dependent industrial facilities if they fail to meet the policies contained in Sections 30200-30255 of Chapter 3. Under Section 30260, a coastal dependent industrial facility may be permitted if: (1) there are no feasible less environmentally damaging locations for the project; (2) denial of or objection to the project would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible. Section 30260 therefore provides special standards for coastal dependent facilities that otherwise fail to satisfy Coastal Act requirements.

Offshore oil and gas extraction is by its very nature "coastal dependent" because the operations to develop the petroleum resources take place where the resources are located, underneath the sea. In this particular project, the Commission finds that

Platform Irene and the related pipelines and power cable between the platform and land are coastal dependent industrial facilities which must be evaluated under the overriding considerations provided in Section 30260 of the Act, if they are found to be inconsistent with other Chapter 3 policies.

#### D. COASTAL ACT ISSUES

##### 1. Transportation of Crude Oil

Section 30232 of the Coastal Act states that:

Protection against the spillage of crude oil, gas petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Sections 30230 and 30231 of the Act require protection of the biological productivity of the marine environment, and Section 30253 requires protection of air quality. Section 30260 provides for possible approval of coastal dependent industrial facilities (which includes offshore oil and gas development) not otherwise consistent with Chapter 3 of the Coastal Act, if among other provisions, the adverse impacts are mitigated to the maximum extent feasible. Section 30262 requires consolidation to the maximum extent feasible and legally permissible of new or expanded oil and gas facilities. Taken individually or together, all of these Coastal Act provisions mandate the use of the most environmentally protective method of oil transportation.

The Commission has made detailed findings in past federal consistency actions which demonstrate the superiority of onshore pipeline transportation of crude over transportation by tanker because of the reduced risk of oil spills and reduced air pollutant emissions. These findings are supported by data from the Commission, the Department of the Interior and the Council of Environmental Quality (1975), the Rand Corporation (1975), the State Lands Commission (1982), the Oil Spill Intelligence Report (1981), the U.S. Coast Guard (1981, 1982), the Department of the Interior (1983), the County of Santa Barbara (1984), and the All American Pipeline Company (1984) (see for example the Commission's findings for Exxon's Santa Ynez Unit [CC-7-83], Chevron's Platform Hermosa [CC-12-83], Texaco's Platform Eureka [CC-4-84], Chevron's Platform Hidalgo [CC-24-84], which are incorporated by reference). These findings demonstrate the environmental and economic advantages of pipeline transportation over the use of tankers.

Union has committed to transport its oil produced from platform Irene by pipeline to its new processing facility at Lompoc and then on to the Santa Maria refinery. The oil will then be transported by pipeline to Union's San Francisco Refinery located at Rodeo, California. The pipeline to shore will be sized to handle all crude production from the Point Pedernales field.

Union's commitments to transport its oil by pipeline will protect marine resources and reduce air quality impacts. These assurances of pipeline transportation provide the maximum feasible mitigation and consolidation for the project. Union's partners in this project (Gulf and Superior Oil Companies), have also committed to transporting their oil by pipeline, as long as pipelines are available to their market destinations. The Commission's finding of consistency is contingent upon Union, Gulf, and Superior Oil Companies firm commitment to transport Platform Irene crude by pipeline. Only on this basis is the development mitigated and consolidated to the maximum extent feasible and is therefore consistent with Section 30260.

## 2. Containment and Cleanup of Crude Oil Spills

Section 30232 of the Coastal Act, cited previously, requires protection of the marine environment from any spilling of crude oil, gas petroleum products, or other hazardous substances. For any development or transportation of these materials, the section further requires "... Effective containment and cleanup facilities and procedures..." to be provided for spills that do occur.

The Commission interprets the word "effective" to mean that spill containment and recovery equipment must have the ability to keep oil off the coastline. Unfortunately, this equipment does not currently have the capability to clean up large oil spills in the open ocean. Spill clean up efforts could not keep oil off the beaches during the Ixtoc I oil spill in the Bahia de Campache, Mexico; the Amoco Cadiz spill off the coast of France; the 1969 Santa Barbara oil spill from Union's Platform A; the 1984 Alvenus tanker spill offshore Galveston Texas, or the 1984 Puerto Rican tanker spill off San Francisco. Clean up of large spills is extremely difficult. A 1980 report from the International Tankers Owners Pollution Federation states:

If a large volume of crude is released into the sea relatively close to shore, it's highly unlikely that even the best organized cleanup flotilla can prevent some, if not most, of the oil from reaching the coastline. The only real saviors of the beaches in the case of a major spill are favorable winds and currents which take the oil out to sea where it can be dispersed naturally.

While oil spill clean up equipment can function with about 50 percent recovery efficiencies in calm seas, recovery efficiencies are drastically reduced in moderate or rough seas, thus limiting or eliminating the ability of the equipment to recover oil. Union has submitted data showing that seastates in the area of OCS P-0441 are greater than nine feet over 50 percent of the time for seven months per year. The DPP states that, in January and February, waves exceed nine feet 95 percent of the time.

Thus, the Commission cannot find that the proposal is consistent with Section 30232 due to the limited effectiveness of existing oil spill equipment in open ocean conditions.

As found in part C of this report, the platform and subsea pipelines components of the project are found to be coastal dependent industrial facilities and therefore are given additional consideration under Section 30260 of the Act. Oil spill containment and clean up equipment, including response time and contingency planning, associated with Platform Irene and the pipelines to shore, must provide maximum feasible mitigation for the project to be consistent with Section 30260 of the Act.

### a. Increased Risks of Oil Spills.

The construction and operation of the proposed platform and associated pipelines increase the risk of an oil spill in the Point Pedernales/Point Arguello area. Union has proposed to use a pipeline instead of marine tankers for transporting crude oil to refineries. This will significantly reduce the risk of a large marine oil spill resulting from this operation.

An oil spill could seriously affect marine resources. According to Union's Oil Spill Contingency Plan, oil spilled from Platform Irene would move offshore in the

general direction of the Channel Islands most months of the year. Specifically, oil may move close to the islands in January, March, April, May, September, and October. The rest of the year, oil would move offshore to the west of the islands. However, drift bottle studies (1973) performed by the Scripps Institute of Technology have shown a tendency for oil movement north during some months, thus threatening the sea otter range. The oil spill trajectories used during the Puerto Rican oil spill predicted southeasterly oil movement, but the oil ended up going in the opposite direction. Although trajectory analysis provides a good planning tool, planners and spill responders must exercise caution in the level of dependence on the information. Experience in some field operations such as the Puerto Rican spill response has demonstrated that oil spill trajectories can be incorrect.

If oil does contact the islands or the sea otter range, the feathers of birds and the fur of marine mammals would be fouled. Birds, mammals, fish and invertebrates could ingest the oil. Both fouling and ingestion can result in the death of the animals. Commercial fish species could become oil-tainted and therefore could not be sold by the commercial fishermen. Depending on the extent of a spill, kelp beds, wetland areas, streams, and rocky intertidal areas could be damaged. The southern sea otter, an endangered species, is not now a resident of the area, but could move into the kelp beds in the future. According to the Fish and Wildlife Service the sea otter population ranges from Pismo Beach to Santa Cruz, with the highest population densities at the ends of the range. The sea otter is especially susceptible to injury or death from oil contact. Therefore, it is essential that Union provide the maximum feasible mitigation measures for response to oil spills.

b. Oil Spill Containment Equipment and Response.

The Commission has determined in past permit and federal consistency certification decisions that the following oil spill containment and cleanup equipment must be located at the site of offshore drilling operations to help provide the first line of defense against oil spills:

- 1500 feet of oil spill containment boom capable of open ocean use;
- An oil recovery device (skimmer) capable of open ocean use;
- Oil storage capacity to handle skimmer throughput until the oil spill cooperative can arrive from shore with additional equipment;
- A boat located at the site of drilling operations or within 15 minutes of the site at all times; and
- Oil sorbent material capable of absorbing 15 barrels of crude oil.

To provide the maximum feasible response time with the most appropriate equipment, Union is planning with other oil companies to locate a large spill response vessel (160-200 foot range) operated by the oil spill cooperative Clean Seas, at or near the site of oil operations. This vessel will be equipped with major open ocean oil skimmers (both advancing and stationary), at least 3,000 feet of oil containment boom, an onboard boat to assist boom deployment, adequate oil storage capacity, dispersant supplies and application equipment. This boat will provide an onsite capability which far exceeds the Commission's standard equipment requirements. However, if this vessel cannot be onsite by the time operations are to begin, Union will provide a large vessel fully equipped with boom, and appropriate oil recovery equipment until the new vessel is available.

c. Clean Seas Oil Spill Cooperative.

The Clean Seas oil spill cooperative is composed of numerous oil companies which have pooled their personnel and financial resources for response to oil spills. The cooperative's inventory of tools for oil spill clean up include eight onshore vans with equipment for shoreline protection, equipment at its Carpinteria storage yard, and two large oil spill response vessels, Mr. Clean I and Mr. Clean II. As mentioned, Clean Seas plans to acquire and operate a large vessel for response to spills in the Point Pedernales/Arguello area. The cooperative's role is to provide assistance for spills exceeding Union's onsite capability and for initial response to large spills. Clean up operations for large spills will probably require the assistance of other spill cooperatives, numerous contractors, and the U.S. Coast Guard Pacific Strike Team located in the San Francisco Bay area.

The Coast Guard Oil Pollution Response Planning Guide for extreme weather limits the performance of these systems to Sea State 3 or 4. (Sea State 3 includes waves 3.1 to 5.4 feet and Sea State 4 includes waves 5.4 to 7.5.) Waves in the Point Arguello area exceed six feet during 20 percent of the year.

Presently the Mr. Clean vessels can store only about 500 barrels of fluid onboard. The Commission has found in previous actions that 1,000 barrels of oil storage capacity is required to provide maximum feasible mitigation of oil spillage. Union has committed to assuring that 1000 barrels of oil storage will be available within six hours prior to the operation of platforms within the Pedernales field. This commitment assures that the project meets the maximum feasible mitigation requirements of Section 30260 of the Act.

d. Oil Spill Contingency Plan.

According to Coast Guard requirements, oil companies operating offshore must submit oil spill contingency plans with specific dispersant procedures to be used in a spill. This information must include a description of wind and wave conditions in areas where dispersants may be necessary, spill sizes where dispersant use is warranted, detailed descriptions of dispersant application systems, and, most importantly, an evaluation of whether the dispersant can function on the type of oil being produced.

In the preliminary dispersant information provided by Union, the oil spill dispersant planned for use is Exxon's Corexit 9527. This dispersant does not work well on many heavy oils. In addition, the dispersant and oil mixtures may be more toxic than the oil alone, according to a recent Environment Canada report, Acute Lethal Toxicity of Prudhoe Bay Crude Oil and Corexit 9527 to Arctic Marine Fish and Invertebrates, 1982. Therefore, Union has committed to providing additional information and to participate in effectiveness and toxicity testing of dispersants, prior to the operation of platforms within the Point Pedernales field. Union has also provided some preliminary data which indicates that a new dispersant (Exxon's Corexit 9550) will be more effective on their oil. This dispersant is not yet licensed, but Union is encouraging the federal and state governments to license the product. When it is licensed Union or Clean Seas will stockpile it.

Based on Union's commitment to provide: (1) adequate onsite oil spill containment and cleanup equipment, including open ocean booms, skimmers, sorbents, and deployment vessels; (2) adequate oil spill containment and cleanup equipment and procedures for larger spills; and (3) adequate dispersant information or an approved



dispersant use plan, the Commission finds that Union will provide the maximum feasible mitigation for oil spill impacts as required by Section 30260(3).

### 3. Marine Resources

The Coastal Act requires the protection of marine resources in Sections 30230-30236. Section 30230 of the Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that it will sustain healthy populations of all species of marine organisms adequate for long-term commercial, recreation, scientific, and educational purposes.

Section 30231 of the Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment.

Union's proposal raises significant marine resource issues under these Coastal Act sections because the development plan will result in the following: (1) disturbance of marine mammals and other marine organisms from platforms, pipelines, construction equipment, crew and supply boats, and helicopters; (2) increased risk of oil spills; (3) ocean disposal of drilling muds and cuttings; and (4) adverse effects on both the commercial and sport fishing industry (discussed further under part D. 4 below).

#### a. Resources of the Point Arguello - Point Conception Area.

The prevailing ocean currents meet at Point Conception, creating a complex hydrographic regime (patterns of surface water circulation and temperatures). The convergence of warm and cold water masses create a biogeographical barrier to shallow-water fauna, and may be the most important factor in the distribution of these species along the west coast of the United States. Relatively large numbers of species terminate their north-south ranges at or near Point Conception and the offshore islands. Consequently, this region contains species associated with both of the major eastern north Pacific biotic provinces: the cold and warm temperate. The region is also thought to support endemic species adapted to this transition area.

Due to its remoteness and to frequently severe weather conditions, the Point Arguello/Point Conception area has been subjected to relatively little human degradation compared to most of the coastal and marine communities in the Southern California Bight. This factor, combined with the hydrogeographic factors discussed above, contribute to a diverse and abundant coastal and marine fauna assemblage.

The open water, shores and islands support marine mammals, seabirds and a healthy fishery. The coastal shallow water areas support large kelp beds and productive intertidal and subtidal communities. Kelp beds and rocky outcroppings provide excellent habitat for abalone. Large concentrations of intertidal abalone have been recorded south of Rocky Point, for example. There are harbor seal haul out areas

west of the Point Arguello Boathouse, at Jalama, and at Point Conception. Several species of seabirds nest at Point Arguello, Rocky Point and Point Conception. Gray whales pass through the area twice each year during migration. The endangered California brown pelican is often found feeding in the area. Union's proposal for one new platform and associated subsea pipelines and power cable corridor presents numerous possibilities for disturbance and damage to these marine resources.

b. Marine Biological Survey of Platform Irene Site and Corresponding Pipeline Route.

The environmental impacts on benthic communities which are always associated with production platforms, due to drilling, installation of the platform and associated pipelines, and the disposal of drilling muds and cuttings, have been described in the Commission's findings on Chevron's Platform Hermosa (CC-12-83) and Texaco's Platform Harvest (CC-27-83), which are incorporated by reference.

A biological characterization of Union's proposed Platform Irene site, and its associated pipeline and powercable corridors to shore was undertaken by McClelland Engineers during September 1983. The project is within the Santa Maria Basin area of the Pacific OCS Lease Sale 53 and California State Tidelands. The proposed platform site is located on OCS Lease P-0441 where the pipeline and powercable corridor originates. Approximately 11,000 feet of the more than 50,000 foot corridor occurs on Lease P-0441 while the remainder occurs in state waters.

The benthic in fauna identified in this survey exhibit a high degree of similarity with those identified in a comparable survey of the area surrounding Chevron's Platform Hermosa, located approximately 12 miles to the south. In general, the characteristic fauna of the soft bottom habitats observed during the Platform Hermosa survey along the proposed pipeline routes in less than 100 m (330 ft) of water include the sea pens (Acanthoptilum gracile and Stylatual elongata), shrimp (Crangon spp.), starfish (Petalaster (Luidea) foliolata), and the Pacific Sanddab (Citharichthys sordidus). These fauna were also characteristic of the Platform Irene project area.

According to McClelland (1984), the habitat and biota observed in this survey were not unique to this area and it was generally apparent that there was a similarity of species compositions for surveys conducted in the Point Conception and Point Arguello areas. Most of the biota recorded from this survey are expected to have broad geographical ranges. Those species that may represent endemic species from the "California Transition Zone" are expected to exist along the entire range (approximately 300 miles) considered to comprise the zone.

There is only one area of hard bottom substrate identified on the "Geologic Hazards with Biology Map," produced by McClelland Engineers. Originally Union's pipeline corridor intersected an outcropping of rocky substrate at a depth of 30 feet. However, as presently proposed, the pipeline corridor has been rerouted to the south of and entirely bypasses this rocky area. Aside from this single occurrence of a rocky outcrop, the remainder of the proposed pipeline and powercable corridor in the nearshore area is over a region of predominately dense packed sand. Construction impacts associated with the pipeline will be similar to those associated with the construction of the platform. Repopulation of the disturbed areas should occur shortly after completion of construction activities with the exception of the area directly beneath the pipelines.

The nearshore waters where the pipeline and powercable come ashore is a very high energy environment. The pipelines and power cable will therefore be weighted and buried. Their burial will result in a short-term impact to disturbed infaunal species. However, due to the low population densities of the biota in the nearshore soft bottom habitat areas, impacts should be insignificant.

c. Disturbance to Marine Mammals from Supply Boat and Helicopter Traffic.

Construction and supply boats, and helicopters could affect marine mammals (especially gray whales) by collisions or disturbance of migration patterns. The California gray whale moves through the Point Conception area twice each year, in the early winter and spring months. Noise and collision disturbance is therefore a seasonal impact which Union has agreed to mitigate by limiting all offshore construction activities to the months of May through November to avoid the peak migration period.

In addition, Union has agreed to the following mitigation measures: (1) supply boats will adhere to prescribed vessel traffic routes as much as possible to minimize channel-wide noise impacts; and (2) Union will cooperate with the Fisheries and Environmental Training Program and the Western Oil and Gas Association to improve, if necessary, the information presented in the program on gray whales and the avoidance of any harassment.

The Commission finds that only with these mitigation measures, can it find that Union has included maximum feasible mitigation measures to protect marine mammals. Contingent upon the fulfillment of these mitigation commitments the project is consistent with Section 30260 and the CCMP.

d. Ocean Disposal of Drilling Muds and Cuttings.

1) Commission Authority Over The Discharge of Drilling Muds and Cuttings. The Commission reviews OCS Development and Production Plans (DPPs) under Section 307(c)(3)(B) of the Coastal Zone Management (CZMA) to determine if these plans are consistent with the California Coastal Management Plan (CCMP). The discharge of drilling muds and cuttings is tested under all applicable policies in Chapter 3 of the Coastal Act, including Sections 30230 and 30231 (quoted above), and under the cumulative impacts policy contained in Section 30250 (quoted in part D. 12, below).

Based upon an extensive review of substantive evidence pertaining to the effects of drilling muds and cuttings on marine habitat areas and biota, the Commission finds, in general, as follows: (1) discharges within 1,000 meters of the Coastal Zone or especially sensitive marine habitat areas, or in shallow waters less than 100 feet in depth, affect land and water uses in the coastal zone; and (2) any and all discharges cumulatively may affect land and water uses in the coastal zone.

2) Affects on the Marine Environment from Drilling Muds Discharge.

The Commission finds that the scientific studies and information available on the fate and effects of drilling muds and cuttings have not addressed essential questions about the marine environment and the effects of drilling muds (Brannon and Rao, 1979; Cal. DFG, 1983; Dames and Moore, 1981; Duke and Parrish, 1984; Jenkins and Sanders, 1984; Klapow and Lewis, 1978; Neff, 1984 and 1979; Petrazzuolo, 1983 and 1981; and Tagatz et al., 1978). For example, most studies on the bioaccumulation of metals contained in drilling fluids measure only total tissue or body burdens, and therefore their usefulness in predicting biological effects is limited. Only recently have studies been devised to examine the subcellular

distributions of the contaminants and to determine the ecological implications of this data. In addition, despite theoretical chemical principals which suggest that a substance such as barium sulfate should not be bioavailable, it is apparently bioavailable. In the Santa Barbara Channel, the marine biological system is so complicated that scientists cannot distinguish natural changes from perturbations caused by drilling discharges (Dr. Ken Johnson, University of California, Santa Barbara, personal communication).

The evidence shows that drilling muds may cause adverse effects on the environment on a cumulative basis. The Commission is compelled by the Coastal Act to take a conservative approach because land and water uses in the coastal zone will be degraded or destroyed if these effects occur. The Western Oil and Gas Association estimates that, by the year 2000, approximately 1,500 exploratory and production wells will be drilled in just the Santa Barbara Channel and Santa Maria Basin. This amount of drilling could result in roughly one million tons of drilling muds and cuttings being discharged into the ocean (Henry W. Wright, Manager, Land and Water, WOGA, personal communication--based upon MMS's EIS for Lease Sale 80). Only upon completion of scientifically rigorous long-term monitoring programs in the California offshore environment can the Commission arrive at firm conclusions regarding cumulative impacts. Such studies are currently being planned or conducted by the MMS and EPA.

The Commission finds that the standards contained in Sections 30230 and 30231 as applied to the discharge of drilling muds and cuttings cannot be satisfied by reliance on the current state of knowledge. Discharges resulting from Union's Platform Irene may cause adverse impacts upon the marine environment when considered on a cumulative basis with other development. Therefore, the Union project is inconsistent with Section 30250(a). However, because this project is a coastal dependent development, it must also be analyzed under the requirements of Section 30260, under which a project may be approved even if inconsistent with certain policies contained in Chapter 3 of the Coastal Act.

### 3) Quantities and Types of Drilling Muds Proposed for Discharge.

Union proposes to drill 43 wells initially, but Platform Irene may eventually support up to 72 wells to maintain a 20,000 BBL/D production rate. Each well will require approximately one month to complete, and is expected to produce approximately 30 BBL/D of cuttings, and 107 BBL/D of muds.

Before discharge, the concentrated drilling mud will be diluted with sea water to facilitate dispersal. It is estimated that 2.5 gallons of drilling mud will be diluted with 100 gallons of sea water prior to discharge through the driller's outfall. Platform Irene will have two driller's outfalls, terminating at 150 feet below MLLW on opposite sides of the platform. Each outfall will be used individually as the drill rig is moved from one side of the platform to the other. All discharges of muds will be in accordance with an EPA NPDES permit and in accordance with Pacific Area OCS Order No. 7, both of which limit allowable discharges. Any oily or otherwise contaminated drilling muds will be collected and transported to Port Heuneme for disposal at approved onshore sites.

The settling of the cuttings on the bottom should not result in any significant adverse effects since there are no sensitive hard bottom habitat areas within range of the bulk of the discharge plume. The platform is in deep water and in excess of 1,000 meters from the coastal zone or any specifically designated biologically sensitive area, but the discharge may still cumulatively affect land and water uses

in the coastal zone. Maximum feasible mitigation must be provided for possible cumulative effects, as discussed below.

4) Maximum Feasible Mitigation. Under Section 30260, all offshore oil operators must provide the maximum feasible mitigation for the discharge of drilling muds and cuttings. Since the discharge will be subject to an EPA NPDES permit (which must also be consistent with the CCMP), and the platform is not near any biologically sensitive areas, the only other mitigation feasible is to further reduce the toxicity of the discharge beyond that which is currently required by EPA. Union has committed to do this by using chrome-free lignosulfonates. This will reduce the risk that may be associated with introducing chrome into the environment. In addition, a joint government/industry study on drilling muds and cuttings discharge mitigation techniques is currently being conducted. Union has agreed to implement all feasible mitigation measures appropriate to Platform Irene which may be identified in that study.

The Commission finds, based upon the information cited above, and further elaborated in the Commission's general policy statement on the ocean disposal of drilling muds and cuttings, that while the project is inconsistent with the marine resource policies of Chapter 3 of the Coastal Act (Sections 30230 and 30231), and with Section 30250, the discharge is proposed in the least environmentally damaging location. Adverse environmental effects are mitigated to maximum extent feasible due to Union's commitment to use chrome-free lignosulfonates and to implement all feasible mitigation measures appropriate to Platform Irene which may be identified in the study referenced above.

However, the Commission will be conducting another review of the drilling muds and cuttings issue when it considers EPA's consistency certification on the General NPDES permit. Thus, while the Commission finds that project is consistent with the CCMP because of Union's commitment to the mitigations listed above, Union's project is still subject to the General NPDES permit, which must also be consistent with the CCMP. The Commission reserves the right to object to the EPA's consistency certification which must be reviewed for the General NPDES permit under the CZMA, in which case Union may not discharge muds and cuttings until the provisions of the permit are brought into conformance with the CCMP.

#### 4. Commercial Fishing

Coastal Act policies which protect commercial fisheries and associated commercial fishing industries are contained in Sections 30230, 30231, 30234 of the Coastal Act. Sections 30230 and 30231 require that development sustain the biological productivity of all marine species for long-term commercial purposes. These policies also require protection of areas with special biological significance. Together these sections require marine habitats and species to be protected and call for special protection of commercial uses which depend upon these resources.

Section 30234 protects and requires upgrading, where feasible, of onshore support facilities such as ice plants and fish processing plants. Section 30255 and 30703 establish commercial fishing as a priority use of the coastal zone which must be protected in ports and all other coastal areas.

The Coastal Act also requires the consideration of social and economic impacts of proposed development. Section 30001(d) provides that, "...the economic and social well-being of the people of this state..." are critical considerations for the Coastal Commission. Section 30001.5 requires the Commission to take into account, "...the social and economic needs of the people of the state." Section 30260 also requires the Commission to consider the public welfare.

Effects upon the state's commercial fishing industry will affect the land and water uses of the coastal zone. The industry generates many additional secondary jobs for seafood processors, brokers, dock workers, truck drivers, and boat yard crew members. Most businesses which support these workers are located in local harbors and ports and require a waterfront location to function. These coastal dependent industries are dependent on the commercial fishing industry, and thus a significant reduction in the commercial fishing effort could affect these businesses, and their use of land and water in the coastal zone. According to San Luis Obispo County, in Research Report: Proposed Offshore Oil & Gas Development and the Commercial Fishing Industry, during 1980 commercial fishermen at Port San Luis and Morro Bay landed almost \$4.4 million worth of fish. When the contributions of the onshore support facilities are considered, with a multiplier of 3.1 (DEIS, OCS lease sale 73), the commercial fishing industry contributed almost \$13.64 million to the County.

Union's Platform Irene will be located within DFG fish block 644. The proposed offshore pipeline will travel through blocks 644, 643, and 637. DFG fish catch data for blocks 644 and 643 for the years 1975 through 1983 indicate that the predominate fisheries include rockfish (trawl, set gill net, hook and line), crab (trap) abalone (dive), halibut (trawl, set gill net), shark (set gill net), albacore (trawl), mackerel (purse seine), and white croaker (set gill net).

Major species caught in block 637 include abalone, halibut, and rockfish. A map submitted by DFG on CC-6-83 (Exxon-P-0438 and 0440) shows that halibut, pink-shrimp, rockfish, ling cod, petrale sole, english sole, and prawns are trawled in block 644. Union's consultants, Urban Resource Systems, states that over 50 percent of the harvest in block 643 is comprised of rockfish which are either trolled or set gill netted, and 60 percent of the catch in block 644 is comprised of rockfish, flatfish, sablefish, and prawns which are trawled. Maps prepared by MMS (July 1984) depicting trawl areas in central and southern California show that fishing for halibut occurs in the vicinity of the proposed project. Comments from DFG state that trawling, gill netting, and trap fisheries are located in the project vicinity. The Department recommends that upon completion of pipeline construction all impediments to trawling activities be removed and severe alterations of benthic substrate be returned to their original configurations. DFG also recommends that cumulative impact analyses be done for development projects, and that consolidation of pipeline facilities be considered.

Commercial fishermen are informed of oil and gas exploration and development by direct communication with the applicant and/or by notice in the "Oil and Gas Project Newsletter for Fishermen and Offshore Operators," published monthly. The newsletter is widely distributed to fishermen and other interested parties in ports from Port San Luis in San Luis Obispo County to San Diego. The Commission, applicants, and fishermen rely on this form of communication for information on the timing and location of offshore oil and gas related activities. If fishermen perceive a conflict will occur between fishing and oil and gas related activities, they inform the applicant and the Commission.

Union's project proposal was noticed in the December 1984 issues of the newsletter. To date, no comments from commercial fishermen have been received in response to the notice. Normally, a lack of response suggests that little or no impact would occur from a project. However, because the subject proposal will be a permanent development, Commission staff contacted several trawlers from Morro Bay and Avila Beach.

Responses indicate that halibut trawling occurs in the project vicinity. In addition, petrale sole and shark (drift gill netting) are also fished in the area. The platform will preclude the gill netting activities. Currently few boats are in the fishery, however, the platform may preclude more boats as the fishery grows in popularity north of Point Conception. The trawlers were most concerned that the pipeline be designed to be compatible with their operations and that the pipeline and platform construction areas be void of any oil and gas related obstructions which could damage their gear. They also indicated that while one platform may not seriously impede their activities, several platforms in the area may decrease their accessibility to the fishing grounds.

In previous Commission decisions, general concerns regarding drilling muds and cuttings disposal, oil spills, and crew and supply boats have been raised by fishermen. Drilling up to 72 wells from the proposed platform will entail ocean disposal of drill muds and cuttings. In previous Commission reviews of DPPs and POEs, commercial fishermen and the Commission have expressed concern about the effects of these materials on commercially recoverable fish. Part D.3 Marine Resources, above, provides further analysis of the fates and effects of drill muds on marine biota.

Production from Platform Irene will increase the chance of oil spills, which could adversely impact commercial fisheries. Economic losses to the fishing industry can occur in the following ways: (1) marine organisms may be tainted by direct coating or ingestion of hydrocarbons; (2) the total available catch could be reduced; (3) fishing gear and vessels may be contaminated, requiring either cleaning or replacement of the gear and cleaning of the vessels; and (4) fishermen may be prevented from leaving port due to placement of oil containment booms. Additional discussion of impacts from oil spills is provided in part D. 1, above.

Supply boats traveling between Port Hueneme and Platform Irene may conflict with nearshore (set gill netting and trapping) fishing activities by running over buoys and surface lines, leading to loss of the gear. Fishermen from Port Hueneme have stated in a petition to the U.S. Coast Guard that some support vessels anchor within traditional halibut grounds outside Port Hueneme, thereby blocking access to the Hueneme Flats. To mitigate against these conflicts, Union will use support boat routes adopted by the Joint Committee in Santa Barbara Channel Oil Service Vessel Corridor Programs, and will refrain from mooring its support vessels within 10 fathoms of the Hueneme Flats. Helicopters will be used for crew transportation.

Construction and operation of the platform and pipeline could also impact the fishing activities by blocking access to traditional trawl areas, disposing project related debris in the fishing areas, or snagging trawl nets. To minimize these conflicts Union has agreed to: (1) design and construct the pipeline protrusions so that they will be shrouded; (2) use pipeline installation methods which eliminate or minimize anchor scarring; (3) use pipelines with a minimum of surface obstructions; (4) conduct post-construction surveys within the platform and pipeline construction zones; (5) remove all artificial obstructions related to the pipeline and platform construction activities; (6) notify commercial fishermen of the schedule and locations of construction activities through the Santa Barbara Marine Advisory Program Newsletter and the Notice to Mariners; and (7) place the platform mooring buoys in the same water depth as the platform and as near to parallel to the shore line as possible.

In addition to analyzing individual impacts of proposed development, the Commission also analyzes the effects of past, present, and future development in accordance

with Section 30250 of the Act. The waters offshore California have historically supported and will continue to support the oil and gas and commercial fishing industries. Future development and production facilities for oil and gas will be proposed on other Lease Sale 53 and 68 tracts and future exploration and development could occur in Lease Sale 73 and 80 areas. In addition to future activities in the OCS, activity may increase in state waters, as evidenced by the proposed state tidelands lease sale between Points Arguello and Conception.

The Commission is in the midst of reviewing several production projects which will impact trawling activities in the Santa Maria Basin and the Santa Barbara Channel. The EIR/S for development of the Santa Ynez Unit states that 27 percent of the trawling operations in the area will be affected by construction activities, and less than 10 percent will be affected by operation of the platforms and pipelines. The MMS maps show that the ARCO Coal-Oil Point project will be located within halibut trawling grounds. Tanker traffic associated with the marine terminal proposed by Getty could also interfere with trawling activities. Recent announcements of commercial hydrocarbon discoveries by Exxon, City Services, and Sun in the Santa Maria Basin will lead to proposals for additional offshore development which could conflict with the trawl fisheries. Further assessment is required to establish whether these projects and future exploratory work will cause a significant cumulative impact on the trawl fisheries. Union's proposed mitigation measures will reduce conflicts between the project and the trawlers. As a result cumulative impacts both on the fishing operations, and the coastal dependent onshore fishing-related businesses, will be lessened.

Since the mitigation measures will reduce but not eliminate the impacts the Commission finds that the project proposal will indeed impact commercial fishing operations. Use of the vessel corridors will displace a portion of the nearshore trapping and gillnetting grounds, and trawling activities will be displaced during construction and operation of the pipeline and platform. Although expected impacts from this project may be small, future development in the Santa Maria Basin and Santa Barbara Channel may compound the impacts on the fishing operations and fishing-related businesses. Thus, the Commission finds that the project is inconsistent with Sections 30230, 30231, 30234, 30250, 30255, and 30703 of the Coastal Act.

The Commission found in part C Coastal Dependency and Relation to Industrial Development, above, that the platform and subsea pipelines portion of the project are coastal dependent industrial facilities. The proposed development does not comply with the Coastal Act sections cited above, but because the project is coastal dependent, it must be further analyzed under the requirements of Section 30260, cited previously.

A major relocation, to reduce impacts on fishing activities is infeasible since these measures would limit efficient production of the field. In addition, relocation of the pipeline could adversely affect its geologic stability. Platform Irene producers are committed to using pipeline transportation of their crude to market, if pipelines are available. Other available methods would only be used until the pipelines are available and during emergencies. The project is therefore consistent with Section 30260(1) of the Act, since Union has chosen the least environmentally damaging alternative.

As stated above, Union has committed to mitigation measures for the pipeline and platform construction and operation which significantly decrease impacts on the commercial fisheries. Only upon the fulfillment of these commitments can the project be found to meet the requirements of 30260(3) and the CCMP. However, the Commission may find that future development, coupled with Union's proposal may cause a cumulative impact.



When the cumulative impacts are determined to be significant, measures to improve or replace income producing fishing opportunities may be used to mitigate these impacts. However, development of such programs will be very difficult because they must benefit the parties who are impacted by the displacement. Identifying these parties will be a complicated challenge to the administering agency. The Joint Committee is studying this issue and may negotiate an approach to this problem. The Commission will address the issue if it is not successfully undertaken by the Joint Committee, or if the Committee's solution does not satisfy Coastal Act policies. Given Union's mitigation measures and the efforts of the Joint Committee, the Commission finds the impacts of the project proposal are mitigated to the maximum extent feasible and it meets with the requirements of 30260(3).

##### 5. Vessel Traffic Safety

Section 30262 (d) of the Act states, in part, as follows:

Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:

...(d) Platforms or islands will not be sited where a substantial hazard to vessel traffic might result from the facility or related operations, determined in consultation with the United States Coast Guard and the Army Corps of Engineers.

Union proposes to site Platform Irene approximately 23 miles north-northwest of the Santa Barbara Channel Vessel Traffic Separation Scheme (VTSS). Although there are no platforms currently in the area, three platforms have been approved off Point Arguello. The closest of these is Chevron's Hidalgo, approximately eight miles south. In the Point Pedernales Field, Exxon has proposed a platform, (Shamrock) approximately two miles northwest of Platform Irene. Presently, most vessels traveling between the Santa Barbara Channel and ports on the North American coast pass west of the general area of the proposed platform site. However, U.S. Coast Guard radar tracking confirms that some vessels pass through the area where platform Irene would be located. The U.S. Coast Guard request for a northwesterly extension of the present Santa Barbara Channel Vessel Traffic Separation Scheme has been rejected by the International Maritime Organization (IMO), but the Coast Guard is reapplying for the extension. If it is granted, the vessel traffic lanes will pass approximately ten miles west of the platform. Use of the proposed lanes is not mandatory, so even if they are approved by IMO, some vessels may continue to pass through the area of the proposed platform.

In addition, the proposed platform site is in an area of extreme weather conditions. According to the U.S. Coast Pilot (NOAA), "Off Point Arguello, sea fog becomes a persistent and frequent navigational hazard. ...These fogs are often thick, and Point Arguello is considered by mariners to be the most dangerous along the coast." Union has submitted data showing that seastates in the area of OCS P-0441 are greater than nine feet over 50 percent of the time for seven months per year. The DPP states that, in January and February, waves exceed nine feet 95 percent of the time.

The Union DPP does not give figures for anticipated vessel traffic increase in the Point Arguello/Point Pedernales area. Development and Production Plans for other projects show that vessel traffic in the Channel and the Point Arguello area will increase in the next decade due, in part, to the many oil and gas projects proposed for the area. The Chevron Hermosa DPP states that the Point Arguello operators will

generate 144 tanker trips per year and Exxon's Santa Ynez production will result in 132 tanker trips per year if pipelines to refinery centers are not available. Additional vessel trips will be generated by other developments such as the remaining areas of the Santa Maria Basin, Sockeye Field, and State Lands leases.

In the years 1970-1982 inclusive, 93 collisions occurred between offshore installations and vessels. Thirty of these resulted in loss of life. Twenty-four of the 93 collisions took place in the United States, where, after blowouts, collisions are the greatest cause of accidents resulting in structural damage.

In addition, 58 of the collisions resulted in oil spills. Because the platform will be sited where it will pose a substantial hazard to vessel traffic safety and this could increase the likelihood of oil spills, the Commission finds Platform Irene inconsistent with Sections 30262(d) and 30232.

Union has added measures to the DPP to mitigate the vessel hazard problems resulting from project. These include an Automatic Radar Plotting Aid (ARPA) which will alert platform personnel of an approaching vessel's location. Union will install four quick-flashing white lights visible for five miles on each corner of the platform, and red clearance lights at the top of the drilling mast and the tip of each crane boom. Union will provide lighting when daylight visibility is less than three miles. The heliport perimeter lighting will consist of dual fixtures equipped with one blue and one amber globe. The platform will have a foghorn with a two-mile audible range. Platform Irene will be painted in accordance with the USCG recommendations to increase the platform's visibility to vessels. The platform will be equipped with two 50-man self-propelled and contained escape capsules.

With these measures, the Commission finds that, though the platform will be sited where it could pose a hazard to vessel traffic, Union has mitigated vessel traffic hazards of the project to the maximum extent feasible. Therefore, the Commission finds the project consistent with Section 30260 of the Coastal Act.

## 6. Geologic Hazards

Section 30253(1) and (2) of the Act states that:

New development shall:

- (1) Minimize risk to life and property in areas of high geologic flood, and fire hazard.
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Section 30262 of the Act states in part that:

Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:

- (a) The development is performed safely and consistent with the geologic conditions of the well site.

(b) Such development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from such subsidence.

Where appropriate, monitoring programs to record land surface and near-shore ocean floor movements shall be initiated in locations of new large-scale fluid extraction on land or near shore before operations begin and shall continue until surface conditions have stabilized. Costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators.

Section 30263 (a)(4) of the Act further states that:

New or expanded refineries or petrochemical facilities not otherwise consistent with the provisions of this division shall be permitted if...(4) the facility is not located in a highly scenic or seismically hazardous area, on any of the Channel Islands or within or contiguous to environmentally sensitive areas...

Platform Irene will be located on the submarine Mainland Shelf in 242' of water approximately 4.9 miles west of Point Pedernales. The platform will be a jacket type, pile founded structure with space for 72 well conductors. The primary objective of the platform is to produce hydrocarbons from the Miocene Monterey formation.

Three submarine pipelines and an electric power cable will extend from the platform to the landfall located approximately 9.5 miles to the northeast. The pipelines One will cross the intertidal area and proceed to the southeast through Vandenberg Air Force Base. One 16 inch pipeline will transport wet crude oil and a second 8 5/8" pipeline will transport gas. Both lines terminate at an onshore treatment and separation facility. A third 8 5/8" pipeline will return separated water from this facility to platform Irene for disposal. An electric power cable will follow the pipeline alignment to a point approximately 4,000 feet from shore and then trend due east to landfall at Surf, which is located at the southern end of Ocean Park Beach.

Seafloor gradients within the project area are less than 2 degrees. The seafloor is generally smooth with some isolated depressions of up to 15 feet. No exposed hardbottom areas are located near the platform or along the pipeline route. However, the pipeline has been routed so as to avoid hardbottom outcrops in the nearshore area.

a. Seismicity.

Union has evaluated the earthquake history of the seismotectonic provinces in the vicinity of OCS Parcel 0441. The proposed project is located within the California Continental Borderland province which is characterized by long, northwesterly trending fault zones. The Hosgri, Offshore Lompoc, and the San Andreas faults have the most importance to the project area due to their proximity to the platform location and their capacity to produce maximum credible earthquakes (Ertec, 1984). Ertec (1984) has identified a magnitude 7.5 earthquake on the Hosgri fault as the controlling event. The closest approach of the Hosgri fault to the center of OCS parcel 0441 is 18 kilometers. Union has taken a conservative approach (Craig, 1984) in Platform Irene's seismic design because the historical data base on which Ertec (1984) analyses are based may not be representative of the long term seismicity in the west end of the Western Transverse Ranges province, and particularly in the California Continental Borderland province.

b. Liquefaction.

The development of high pore-water pressures in certain types of sediments due to ground vibrations (which can occur during an earthquake), can cause sediments to be altered from a solid state to a liquid state (liquefaction). In some cases, liquefaction of sand induced by earthquake ground motions can cause overlying, sloping soil to slide laterally along the liquified layer.

Soils at the platform site and along most of the pipeline route have a low potential for liquefaction under seismic loading. However, that portion of the pipeline situated on sandy material near the pipeline landfall is more likely to liquefy during an earthquake (Craig, 1984, personal communication). This problem will be mitigated by engineering design so as to enable the pipeline to remain buoyant should the surrounding sediments liquefy due to seismic shaking.

Subsidence of the land or seafloor can pose potential problems for oil development. The main causes of subsidence in California oil fields have been the result of extraction of oil, water, and gas. Union maintains that surface subsidence is not expected to occur from drilling operations or the extraction of reservoir fluids in the producing formation (Monterey) because of the depth and nature of the underlying formation (DPP, p. 4-5).

Commission technical staff discussions with the U.S. Geological Survey and the MMS reveal an absence of measured subsidence at locations where there has been oil or water extraction from the Monterey Formation at onshore Santa Barbara or offshore in state or federal waters (R. Castle, USGS, and J. McCarthy, MMS, personal communication, 1983). Should any subsidence occur, it is expected to be negligible and will be restricted to the offshore area. Minor subsidence that may pose a threat to oil field production facilities could be eliminated by implementing a repressurization program. Therefore, subsidence should not pose a significant hazard to the structural integrity or stability of the development, either onshore or offshore.

c. Faulting.

Special engineering is required where pipelines cross active faults. Fault surface rupture or creep can severely damage a marine or onshore pipeline. For this reason, the age and location of active faulting is critical to pipeline design.

Five faults have been identified within the project area (McClelland, 1983). Two faults have been identified within 2200 feet of the platform site and three faults cross the pipeline corridor. These features are covered by 50 to 110 feet of unbroken late Quaternary and younger sediments; therefore, they have been classified as inactive (DPP, p. 4-1).

d. Shallow Gas Zones.

Shallow gas and gas charged sediments have been identified throughout the project area. McClelland (1983, p. 6) summarizes the geophysical data as follows:

Geophysical records indicate that shallow gas is common in much of the surveyed area. Shallow gas is abundant near the platform site. Tops of gassy areas are at the seafloor or at depths shallower than 25 feet in almost half of the platform study area. Gassy areas whose tops are deeper than 25 feet below the seafloor, but still within the

upper sediment unit are common in the platform study area. Where gas is present in the upper sediment unit, it is probably also in the older rocks; tops of these gassy areas do not extend into the upper sediment unit.

Hazards presented by shallow gas and areas of gas-charged sediments can be mitigated by properly identifying these areas before drilling, applying proper drilling muds and casing programs.

e. Seafloor Slumping.

No seafloor slumping has been identified at the platform site or within the pipeline corridor that could pose a hazard to development.

f. Pipeline Landfall.

All three pipelines will cross the intertidal zone at the same location at Vandenberg Air Force Base. Union (Union response letter, Dec. 17, 1984) will begin a detailed beach profiling program for a minimum of six months beginning in January, 1985. The purpose of this program will be to determine the maximum depth of scour represented by the winter beach profile. This study is necessary to ensure that the pipelines will never be exposed during their intended design lives. The installation of a large groin at this landfall location could have a dramatic impact on littoral transport within the Santa Ynez River Littoral Cell. The proposed monitoring program will help ensure that protective devices will never be necessary to protect the pipelines from future storm waves. Contingent upon this study, the Commission finds that Sections 30253 and 30262 of the Coastal Act have been complied with.

g. Power Cable Landfall.

The platform power cable will cross the intertidal zone at Surf. A small dune field exists at the site and it will be necessary to disrupt the dune area at the point where the cable route passes through the dune area. These dunes are approximately 15 feet in height, have a thirty foot base, and are poorly vegetated. Unions installation techniques will be as follows. (DPP, p. 2-32):

1. A pulling line, brought ashore by small boat, is used to pull the cable through the beach zone to the substation.
2. Within the surf zone, the cable is buried to a depth of 6 feet by jetting.
3. Across the beach to the substation, the cable is buried at a depth of 3 feet using a backhoe.
4. The cable will be placed under the Southern Pacific Railroad Tracks in a previously installed conduit.
5. Prior to back filling, red concrete will be poured over the cable for its protection and identification in the event that any future excavations are made in the area.
6. Replacement of vegetation removed during the placement and burial of the cable.

The Commission's review of offshore geotechnical studies have revealed no major geologic hazards that would preclude development of the Pedernales Field at the

proposed platform location and pipeline route. No geologic constraints exist at the platform site or within the pipeline corridor. Therefore, the Commission finds that the proposed platform and pipeline corridor meet the requirements of Section 30253 and 30262 of the Coastal Act as they relate to geologic hazards.

## 7. Air Quality

Section 30253(3) of the Coastal Act states in part, that:

New development shall:

(3) Be consistent with requirements imposed by an air pollution control district or the State Resources Control Board as to each particular development.

Section 30250 further requires new development to be located where it will not have "significant adverse effects, either individually or cumulatively, on coastal resources."

Air pollutant emissions from the proposed project will occur individually as a result of the construction and operation of the proposed offshore platform and pipelines and onshore facilities. Construction and drilling emissions will be of short duration, while emissions from production will occur throughout the life of the project. Cumulatively, air pollutant emissions will occur as a result of the construction and operation of other existing and proposed developments in the area.

### a. Applicable Regulations.

The air pollutant emissions from the project must meet all applicable standards and conform to both federal and local rules and regulations to be found consistent with the CCMP. These federal and local air quality regulations include: the Department of the Interior (DOI) regulations established under the OCS Lands Act Amendments (OCSLAA); the U.S. Environmental Protection Agency (EPA) standards for attaining and maintaining air quality standards established under the Clean Air Act (CAA); the California Air Resources Board standards and limitations established under the Health and Safety Code; and the local air quality management district regulations and management plans for meeting the federal and state standards under the CAA and Health and Safety Code.

The Commission has previously expressed concern for the adequacy of the DOI regulations to protect California's onshore air quality in its Findings for Lease Sale 73 (CD-28-83), Chevron (CC-12-83), and Texaco (CC-27-83). The ARB and local air pollution control districts do not accept the DOI regulations as providing adequate protection to onshore air quality in California. The DOI is considering revisions to these regulations.

The South Central Coast Air Basin which may be impacted by air emissions from the project includes Santa Barbara County and portions of Ventura and San Luis Obispo Counties. Santa Barbara County has been designated as nonattainment for ozone, although the northern portion of the county is being considered for redesignation to attainment. The County favors retention of the ozone nonattainment designation throughout the county because of potential onshore transport of ozone and other impacts from future OCS development. The Santa Maria portion of Santa Barbara County currently does not meet federal standards for total suspended particulates (TSP) and has been designated as nonattainment. Ventura County is in attainment of

the federal standards except for ozone, and TSP in more populated areas. San Luis Obispo County is in attainment.

As air pollutant emissions in the area increase from offshore development, it will be difficult, if not impossible, to meet the statutory requirements under the CAA and state law, particularly since emissions from offshore oil and gas production were not considered in the Counties' Air Quality Management Plans (AQMP).

The CCMP requirement that new development be consistent with the requirements of the air quality management district or ARB includes the state's plan for attaining and maintaining federal ambient air quality standards. Thus, if the emissions from Union's project, either individually or in combination with other existing or proposed project emissions, impede the state's strategies for and progress toward attainment, the project cannot be found consistent with the CCMP.

b. Impacts of Project.

Impacts to onshore air quality from emission sources on the OCS and sources onshore and within State waters from associated facilities, whether individually from Union's project or in combination with other offshore development in the area, are likely to occur. In addition to potential environmental and public health impacts, there may be severe economic impacts if the districts continue to be classified or are re-classified to nonattainment status under the CAA. These impacts could include the cost to local businesses of retrofitting facilities, the cost of EPA-imposed sanctions, the cost to local government to develop and enforce nonattainment plans, increased health care costs, and losses to tourist and agriculture based industries.

The Commission is not alone in its assessment of the potential significance of the cumulative effect from offshore development on coastal resources. The State Lands Commission DEIR for the State Lease Sale proposed for Point Arguello to Point Conception concluded that the most significant cumulative impacts will be the "... likelihood that progress toward attainment will be completely offset by the impact of new offshore emissions." In comments to Secretary Duffy on the Chevron plan of development for the Arguello Field, a few miles south of Union's project, the ARB called for analyses to identify the impacts from all proposed, existing, and anticipated development in the area to ensure that state and federal ambient air quality standards will not be violated or that reasonable further progress towards attainment of these standards will not be jeopardized.

In a letter commenting on the Arguello Field development, Major General Jack L. Watkins, Commander at Vandenberg Air Force Base, also stated his concern that "...air quality impacts of offshore oil development are not being considered on a cumulative basis," and recommended that oil development in federally controlled waters "... have air quality management requirements consistent with the APCD." In addition, in a letter commenting on the Exxon Company, U.S.A., plan of development for the Santa Ynez Unit, Pasquale A. Alberico, Acting Director of the U.S. EPA's Office of Federal Activities, stated his concern that "... a comprehensive look needs to be taken of the cumulative impacts of offshore development and the ability of the State to accommodate these emissions and still meet the statutory requirements of the Clean Air Act."

Union's present plans call for a single platform to develop the lease. A power cable will be installed from shore to Platform Irene to conduct electricity

purchased from a new public utility substation at Surf. The cable will be of sufficient capacity to supply other operators in the vicinity of Platform Irene.

At the Lompoc Field, new facilities will be built to separate the oil, gas and water. Water will be piped back to the platform. Gas will be piped to Union's Battles gas plant near Santa Maria. No modifications will be needed at the Battles plant. Dry oil will be transported to Union's existing Santa Maria Refinery, which will require modifications to its sulfur and gas handling facilities to process the OCS crude oil. From the refinery, oil will be transported through existing pipelines to Union's Rodeo Refinery in the San Francisco Bay area. No modifications are needed to the pipelines or the Rodeo facility to handle Platform Irene oil, which will displace Alaskan crude oil.

Emission sources associated with the platform include fugitive hydrocarbons from oil and gas handling facilities, combustion emissions from a flare, and combustion emissions from diesel engines used to power cranes, emergency generators, cement pumps, and logging operations associated with drilling. Additional emissions will come from the use of supply boats and helicopters.

New onshore emission sources at the Lompoc Field oil treating facility include fugitive hydrocarbon sources, three heater treaters, and hydrocarbon emissions from a 100,000 barrel oil storage tank. Proposed controls include the use of low NO<sub>x</sub> burners on the heater treaters, a vapor recovery system to control fugitive and tank hydrocarbon emissions, and an H<sub>2</sub>S scrubber for the fuel gas used in the heater treaters.

The DPP/ER states that emissions and impacts will be negligible from these project sources; however, no substantiation is provided. Instead, Union relies on its calculations for emissions from the proposed facilities which show no exceedances of the DOI exemption levels to determine that no significant onshore air quality impacts are expected to occur, and that no further review of air quality impacts is required.

Even the limited analysis provided in the DPP/ER has serious shortcomings. The air quality data is dated, and fugitive emission estimates are much lower than those from similar analyses, resulting in an underestimation of hydrocarbon emissions. The DPP/ER dismisses all air quality impacts from construction activities as being minor and of short duration, but there is no demonstration that these emissions will not result in exceedances of short term air quality standards and there is no analysis of potential cumulative impacts which would result if the various construction projects are built at the same time. Moreover, the DPP/ER assumes that transport of pollutants over water will result in sufficient dispersion to eliminate onshore effects. However, nearby tracer studies have shown much less dispersion offshore than was previously believed.

In addition, some aspects of the project remain unclear. For example, it is not clear what modifications will be needed at the Santa Maria Refinery or what emission changes will result. While overall emissions from the project are substantially reduced by using purchased electrical power rather than diesel or gas-fired generators on the platform, the DPP/ER states that increases in emission levels from any PG&E power generating station "would probably be minimal and could not be quantified." Upper limits of power plant emissions can and should be estimated. Furthermore, PG&E's Morro Bay Power Plant is located in the same air basin as the proposed project, so incremental increases in emissions at this power station could impact the local area.



The deficiencies in Union's DPP/ER preclude the Commission from adequately evaluating the extent of onshore air quality impacts expected to result from the proposed project. The EIS/EIR for this project, which will not be available until late March, 1985, will contain the necessary analyses of these impacts. However, in the absence of this document and without an adequate analysis in the DPP/ER, the Commission cannot determine if the project, either individually or in combination with other existing and proposed projects, will result in violations of the national or state ambient air quality standards. Therefore, the Commission finds that it lacks sufficient information to find the project consistent with Sections 30250 and 30253(3) of the Coastal Act with regard to air quality.

c. Maximum Feasible Mitigation.

Although the Commission finds that the proposed project cannot be found consistent with the air quality policies, the coastal dependent industrial facilities can nevertheless be permitted in accordance with Section 30260 of the Coastal Act if they meet the tests of this section.

It is the ARB's position that OCS emissions sources be treated similarly to onshore sources. Consequently, the ARB believes that projects must incorporate not only the best controls currently available, but mitigation measures which provide a level of protection to onshore air quality at least equivalent to the protection provided by the Lease Sale 73 Memorandum of Agreement (MOA) between the U.S. Department of the Interior and the State of California. The Commission agrees that it is appropriate to consider the provisions of the MOA in order to determine whether companies are proposing minimally acceptable levels of control.

Union is committed to using Best Available Control Technology throughout the project. The proposed project design currently includes the following measures:

- o All vessels, both onshore and offshore, will be connected to a low pressure gas gathering system or vapor recovery system to reduce hydrocarbon emissions;
- o An emergency flare will be provided both on the platform and at the onshore site;
- o A gas scrubber will be installed upstream from each flare to remove and contain any entrained liquids;
- o A special heat recovery economizer will be used to recover waste heat from the heater treaters;
- o Low NOx burners will be used on all heater treaters;
- o Fuel gas will be treated to essentially eliminate H<sub>2</sub>S;
- o Project-related supply vessels will employ retarded injection timing to reduce NOx emissions to the extent that vessel operators and the American Bureau of Shipping considers it safe and feasible;
- o Water sprays will be used during the construction phase to reduce fugitive dust emissions;
- o A fugitive emission inspection and maintenance program will be instituted to

reduce fugitive hydrocarbon emissions; and

- o H<sub>2</sub>S monitors will be installed both onshore and offshore.

Union's commitment to transport its Platform Irene oil by pipeline further mitigates the air quality impacts of its project. Thus, the Commission finds that the air quality impacts from the proposed Platform Irene are mitigated to the maximum extent feasible with Union's commitments to the mitigations listed above and, therefore, that the proposed project is consistent with Section 30260(3) of the Coastal Act.

## 8. Land Resources

### a. Onshore Impacts from Pipeline Construction.

The pipeline route passes through the boundaries of Vandenberg Air Force Base. Therefore, this aspect of Union's project is not in the coastal zone. Under the provisions of Section 304(a)(5) of the federal Coastal Zone Management Act of 1972, as amended, "excluded from the coastal zone are lands the use of which is by law subject solely to the discretion of or which is held in public trust by the federal government, its officers or agents."

However, in accordance with NOAA's consistency regulations (15 CFR 930.77), Union's DPP must contain information assessing probable coastal zone effects of the platform and "associated facilities", including the onshore portion of the pipeline, and findings relating to the consistency of such facilities with the CCMP. The Commission considers the relevant resources of the area below, and the effects of the pipeline on the coastal zone.

The coastal zone resources which could be affected by the pipeline route include the Santa Ynez River estuary and associated wetlands, and the California least tern, a federally listed endangered species.

The Santa Ynez River estuary with associated wetlands, located about 0.8 miles south of the pipeline, is the largest such area in south central California and is relatively undisturbed. The estuary provides a nursery area for such marine species as the Pacific staghorn sculpin and starry flounder. A wide variety of birds, including two federally listed endangered bird species, the California least tern and the brown pelican, use the estuary and adjacent habitat areas.

Section 30231 requires that the "biological productivity" and the quality of coastal waters, streams, wetlands estuaries, and lakes appropriate to maintain "optimum populations of marine organisms" shall be maintained, through, among other means, "controlling runoff." If construction of the pipeline were to result in excessive erosion and sedimentation of the Santa Ynez River, the marine species such as those referenced above could be adversely affected. Nursery habitat for fish could be degraded or displaced by sediments entering the estuarine system from the watershed.

The least tern could also be adversely affected by construction of the pipeline. The least tern forages in the estuary and breeds in the sand dunes just north of the river mouth during some years. Noise and human presence during the breeding season could cause least terns nesting near the landfall to leave. If these displaced terns had begun nesting, impacts would be high. Section 30230 requires that special protection be given to species of special biological significance. Since the least tern is an endangered, coastal habitat dependant species, it must be afforded protection under section 30230. The Commission further finds that development proposed within and adjacent to least tern habitat areas would both adversely affect

sensitive habitat areas on the base and result in spillover effects on this endangered species in the coastal zone, outside the base. The spillover effects are a result of the scarcity of appropriate habitat in the project area and the continued loss of such habitat due to development, rendering remaining sites particularly valuable and necessary for the continued existence of the species utilizing these habitats. Scheduling construction activities to occur outside of the breeding season, approximately April 15 through August 15, would avoid the potential for impact on least terns.

The Commission also notes that the coastal sand dunes, while not in the coastal zone, are being developed in a way which will minimize impacts to rare plant species. The proposed right-of-way crosses coastal strand vegetation in a somewhat disturbed area adjacent to a firing range on the base. However, less than one acre of this habitat type would be disturbed, and the pipeline would cross the dunes at their narrowest point. It is possible that a small number of rare plant species, such as the Surf thistle, could be removed, depending upon the precise location of the pipeline. According to Union's ER, over 1,600 acres of this type of habitat are estimated to be present on Vandenberg AFB. The dunes become wider, less disturbed, and, from a biological point-of-view, more constraining between this point and the Santa Ynez River, and the frequency of rare plant species becomes greater. Thus, impacts would be substantially greater if the alignment were shifted to the south. Union has thus selected the least environmentally damaging route, and plans to implement other mitigation measures, discussed below.

b. Mitigation for Project Impacts Under Sections 30230 and 30231

The Department of Fish and Game (DFG), in a memorandum of October 1, 1984, recommended mitigation measures to offset and reduce the effects of pipeline construction. Union has committed to implementing these measures. With these mitigation measures, the onshore pipeline construction is consistent with Sections 30230 and 30231, and therefore is consistent with the CCMP.

All cut and fill areas along the pipeline route will be regraded to match the existing contours and revegetated with native plant species. In areas of sensitive species and habitat types, pipelines will be rerouted to avoid these areas. If this is infeasible, then revegetation of disturbed areas with sensitive species will be undertaken.

Construction activities in the vicinity of the Santa Ynez River mouth will be timed to avoid impacts to the endangered California least tern. The most advantageous time for pipeline construction in this area is from September through March. This will avoid potential nesting and feeding activities of the California least tern.

The pipeline route through the sand dunes will be carefully chosen to avoid, if possible, two important plant species, Castilleja mollis, Cirsium rhotophilum. Although neither plant is as yet listed as endangered, the world population of both is confined to San Luis Obispo and Santa Barbara Counties. Both plant species are candidates for federal listing as threatened or endangered species, and the state considers both plants to be potential candidate species. An evaluation of pipeline routes through the dunes will be undertaken to avoid significant disturbance of these plants. If significant losses cannot be avoided, then measures to offset identified losses will be included.

Erosion control measures to prevent excessive sedimentation to the Santa Ynez River and tributary crossings will be included. Excessive sedimentation to these systems could significantly impact terrestrial and aquatic resources. Implementation of these erosion control measures will be planned so as to not interfere with the

timing of construction activities near the Santa Ynez River mouth, as discussed above.

The Commission finds, based upon the mitigation measures cited above, that the onshore pipeline route is consistent with the marine resource policies of Chapter 3 of the Coastal Act (Sections 30230 and 30231). The pipeline is proposed in the least environmentally damaging location and adverse environmental effects are mitigated to the maximum extent feasible. The pipeline is therefore consistent with the CCMP.

## 9. Visual and Scenic Resources

Section 30251 of the Act states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and where, feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Section 30262, quoted previously, specifically pertains to oil and gas development. Union's Platform Irene will be one of four permanent offshore structures visible from the coast. Construction of the platform and pipeline will present temporary visual impacts from the Point Arguello and Santa Ynez River areas.

The scenic areas and views of the entire Santa Barbara County coastline are resources of public importance. The coastal area has major parks and recreation areas of statewide significance, and the tourist and recreation industries rely heavily in the natural scenic quality of the coast. The Santa Barbara County LCP states that the scenic quality of the coastal zone in the North Coast planning area (Gaviota to Santa Maria River) is outstanding. The area north of Point Arguello offers highly valuable, relatively undisturbed, and varied views. One of the most striking views in the area is of the expansive open ocean from the elevated coastal terrace. Currently, there are three fixed structures which have been concurred with by the Coastal Commission in the offshore project area.

According to the DPP, Platform Irene and the associated offshore construction activities will be potentially visible from Ocean Beach County park and the Southern Pacific Railroad line in the vicinity of Point Arguello. Because of the onshore topography, the platform and associated construction activities are likely not to be visible from Point Conception. The platform will be visible by beach users along the Point Arguello to Point Sal shoreline from Point Pedernales and by surfers and boaters in the proposed platform vicinity. Although the DPP states that coastal fog will obscure the offshore project area about 10 to 38 percent of the time, primarily July through October, and that the distance from shore will reduce its apparent size, the platform, together with Chevron's Platforms Hermosa and Hidalgo and Texaco's Platform Harvest, will introduce long-term industrial structures to a

previously natural seascape. Associated with the platforms will be helicopters and support boats traveling to and from the site, adding to the project's visual impact.

The Commission finds that the project will cause a permanent visual impact on the scenic and recreational qualities of the Point Conception-Point Arguello area and is therefore inconsistent with Section 30251 of the Coastal Act. However, Union has designed the project to be mitigated to the maximum extent feasible. The project consists of a self-contained drilling and production platform with onshore separation and dehydration facilities. By proposing to construct the separation and dehydration facility onshore, visual impacts offshore are minimized. Utilization of a pipeline system to carry the crude onshore will further reduce visual impacts because tankers will not be used. During production the platform will utilize helicopters for crew changes and minimal supply boat activity greatly reduces these potential visual impacts. The onshore facilities will be located beyond the coastal zone boundary and hidden by geologic features, and thus will not present visual impacts.

The pipeline and power cable come onshore at a beach area adjacent to the County's Ocean Beach Park and north of the Santa Ynez River. The pipeline will be buried 3 feet deep onshore and this will therefore mitigate potential visual impacts.

While the visual impacts of the platform will be significant and therefore inconsistent with Section 30251 of the Coastal Act, the proposed project is mitigated to the maximum extent feasible and is therefore consistent with the prevailing Section 30260(3) of the Coastal Act.

#### 10. Public Access and Recreation

Sections 30210 - 30212 and Section 30252 of the Act provide for maximum public access to the coast and the maintenance and enhancement of public access.

Section 30210 of the Act states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreation opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211 of the Act states:

Development shall not interfere with the public's right of access to the sea where acquired through use of legislative authorization, including but not limited to, the use of dry land and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212(a) of the Act states:

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources; (2) adequate access exists nearby; or (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to

public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Section 30252 of the Act states:

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service; (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads; (3) providing non-automobile circulation within the development; (4) providing adequate parking facilities or providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high rise office buildings; and by (6) assuring that the recreational needs of new residents needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisitions and development plans with the provision of onsite recreational facilities to serve the new development.

Furthermore, Sections 30213, 30220, and 30221 of the Act provide that lower cost visitor serving and recreational facilities be protected, encouraged, and where feasible, provided, and coastal areas and oceanfront land be protected for recreational use.

Section 30220 of the Act states:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Finally, Section 30221 of the Act states:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

The proposed project will disrupt recreational use of 5 percent of the County's Ocean Beach Park for approximately one week during construction and installation of the landfall for the pipeline. This effect is not a significant deterrent to recreational use or access to the shoreline. Construction of the power cable terminus, at the Southern Pacific Railroad Station substation, will occur simultaneously with the pipeline installation and will last approximately four weeks, but will not involve any restriction of public access to the shoreline. While there will be increased activity, construction equipment and personnel in the vicinity; impacts upon Highway 246, the access road to the Park, are not considered substantial nor found to be inconsistent with Coastal Act Sections 30210-30212, and 30252.

In the Union DPP, Union states that during the construction phase, Union plans on using local labor. During the drilling and operation phase, Union plans on using local contractors and hiring operating personnel from the immediate area (Lompoc,

Santa Maria, and San Luis Obispo.) Service personnel located in this area would be used. The impacts on onshore vehicular transportation systems is considered negligible to minor. Since workers will come from the local area, additional park use or strain on recreational facilities is minimized.

However, there do appear to be moderate to major impacts on a cumulative basis.. Because of the number of projects proposed for the 1985 to 1988 period, the cumulative impacts would be moderate to major during the construction phase, moderate during the drilling phase and minor during the production phase.

When considered with Texaco's Platform Harvest, located 11 miles south of Platform Irene; Chevron's Platform Hermosa, located 11½ miles southeast of Platform Irene; Chevron's Platform Hidalgo, located 8 miles south of Platform Irene; and Exxon's Shamrock Prospect, immediately west of Platform Irene; there will be significant cumulative impacts (Figure 4.9.5(d) of the E.R.-DPP) on the capacity of Highway One. Therefore, the Commission finds this aspect of the proposed project inconsistent with Sections 30210-30212, and 30252 of the Coastal Act. By using exclusively local labor, and helicopter trips from Lompoc, this will minimize the number of trips on Highway One and mitigate to the maximum extent feasible adverse impacts on onshore vehicular traffic during construction phases. During drilling and production phases, related traffic on Highway One will taper off to near pre-project levels. The Commission finds that the proposed project is mitigated to the maximum extent feasible, through the use of local labor and the minimal restriction of public use of the County's recreation area, and is therefore consistent with Section 30260(3).

#### 11. Compatibility with the Local Coastal Program

The Commission notes that the Santa Barbara County Local Coastal Program's standards are not yet incorporated into the California Coastal Management Program. Under the CCMP procedures, the Commission's consistency authority will never be delegated to local government, likewise the LCP is advisory only on federal land such as Vandenberg. However, the Commission notes that the LCP's importance to its review of associated facilities under the DPP because the Santa Barbara County Local Coastal Program (LCP) was certified by the Coastal Commission in August 1982. Any coastal onshore facility associated with the DPP will be evaluated under the County's permit authority and must be consistent with the LCP. Any major energy facility may be subject to appeal to the Commission. Facilities seaward of the MHT line fall within the Commission's original permit jurisdiction.

The LCP's Energy Component provides for a new coastal-dependent industry designation for all existing energy facility sites. This designation includes the landward support facilities of existing marine terminals and oil and gas separation and treatment facilities supporting offshore petroleum development. Most energy-related facilities are principally permitted uses in these designated areas. These facilities also may be conditionally permitted in other land use designations. For instance, crew boat facilities, marine terminals, and oil and gas processing facilities are conditionally permitted uses in the Agricultural II and Rural Residential designations and View corridor overlay. Pipelines are a permitted use in all land use designations, and are conditionally permitted in the sensitive habitat overlay. Special conditions apply to pipelines through sensitive habitat, recreational and archaeological areas.

Furthermore, the County LCP gives priority to the transportation of crude oil to refineries by onshore pipeline rather than by marine tankering, and contains several policies that trigger the use of an onshore pipeline. If the County determines an

onshore pipeline to be technically and economically feasible, then existing marine terminals will become non-conforming uses. Crude oil will be transported by pipeline, unless the County finds that this is infeasible for a particular operator.

The proposed DPP by Union involves pipelines for transport of crude oil from the platform, under the sea, up onto the shore and buried underground inland finally reaching processing facilities outside of Lompoc, beyond the coastal zone. Tankers will not be used to transport the oil, therefore the Commission finds that the proposal is compatible with County transportation policies in the LCP.

## 12. Archaeological Resources

Section 30244 of the Act states:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The Environmental Report summarized the results of studies used to identify cultural and archaeological resources around proposed Platform Irene and along the route of the proposed pipeline from Irene to Vandenberg AFB.

An extensive underwater cultural survey of OCS-P 0441 and the surrounding area was made in September, 1981, indicating no obvious archaeological finds within the survey area.

During July and September 1983, McClelland Engineers made a site specific, subsea cultural resource survey of OCS-P 0441 and the associated pipeline and power cable corridors. The purpose of this study has been to identify and inventory any cultural resources within the project and nearby area, and evaluate potential impacts of the proposed project on such resources, should they occur. In addition to an examination of existing literature, an examination of the area using high-resolution geophysical soundings and extensive video tapes of the area were made as part of a biological survey of the project and its adjacent areas.

A literature search of the project area has revealed evidence of two historic shipwreck sites in the vicinity of the powerline corridor. These are identified as the Steamer, Sibyl Marsden, lost about 1905, and the Barque, Robert Sudden, lost in 1887. Both Vessels were reported lost near Surf, California.

Evaluation of the marine geophysical survey data indicated one potential anomaly indicative of a possible shipwreck site approximately 300 feet south of the proposed powerline in 60 feet of water. No features indicative of former environments favorable for the preservation of prehistoric aboriginal sites were identified.

As a mitigating measure to protect the possible shipwreck (Barkentine, Robert Sudden), Union will, prior to installing the subsea power cable, employ divers to locate the anomaly shown in McClelland Engineers Cultural Survey Report (1983). This anomaly will be marked with buoys and carefully avoided during subsea cable laying operations. As the cable will be installed by a self propelled ship and will not employ anchors, it will be possible to install the cable some 500 feet north of the anomaly which will avoid any disturbance to the area. When the job is completed, the buoys will be removed.



Since Union has committed to locate the pipeline route to avoid anomalies, the Commission finds that this provides reasonable mitigation and the project is consistent with Section 30244 of the Act as it relates to the protection of archaeological resources offshore.

### 13. Cumulative Impacts/Consolidation of Facilities

The Point Pedernales Field lies under at least four tracts, Arco's OCS P-0437, Exxon's OCS P-0438 and 0440, and Union's OCS P-0441 (see Exhibit 2). The field, which is still being explored, may also extend under adjoining State Tidelands to the east. Development of the OCS portion of the field will include at least two platforms, Union's Irene and Exxon's Shamrock. Future production from these platforms will more closely delineate the extent of the field.

The Platform Irene DPP is the first development proposal in the Point Pedernales Field, and will be the central platform for the field. It is on a Lease Sale 53 tract, which the Commission found could be offered for sale consistent with the CCMP. Since that sale the DOI has held Lease Sales RS-2, 68, 73 and 80. Development for tracts sold in 1968 and Lease Sale 48 are still in the planning stage. The cumulative effects of the exploration and development, especially the timing, pace, and nature of the development triggered by these sales has not been addressed by the DOI in a comprehensive manner. As a result, impacts on marine and coastal resources, most notably air quality, vessel safety, and land use planning have been addressed on a case-by-case basis with the burden falling on the OCS operator proposing the activity. Clearly, this process does not provide the protection from cumulative impacts nor does it provide the certainty OCS operators deserve.

Section 30250 of the Coastal Act provides protection against these cumulative impacts to the coastal environment:

- (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources....

In the Cumulative Impacts section of the Environmental Report for Platform Irene, Union lists the oil and gas exploration, development, and production projects occurring within the Point Arguello, Point Pedernales, Bonita, Rocky Point, and San Miguel fields which comprise the southern Santa Maria Basin. The Point Arguello field will be developed by installing three platforms, a consolidated pipeline system and an onshore processing facility. The three platforms, Chevron's Hermosa (OCS P-0316) and Hidalgo (OCS P-0450), and Texaco's Harvest (OCS P-0315), have already received consistency certification from the Commission. Cities Service Oil and Gas Corporation is submitting a DPP to Minerals Management Service for OCS P-0409 in early 1985. Several other operators are drilling or have proposed drilling exploratory wells in the southern Santa Maria Basin area.

Exxon is proposing platform Shamrock for OCS P-0440, which will produce from that lease, Arco's OCS P-0437, and Exxon's OCS P-0438. MMS has required Union and Exxon to arrive at an agreement to develop the Point Pedernales Field with the minimum number of platforms. This agreement is still under negotiation between the

companies. It is possible that Exxon may produce a section of OCS P-0441 from Shamrock.

As noted in Sections D3, D4, and D7 above, the Commission finds the proposed project will have significant and adverse cumulative impacts in relation to marine resources, commercial fishing, and air quality. Thus the proposed project fails to meet the requirements of Section 30250(a).

The project therefore must be analyzed under Section 30260 requirements, which provides for further consideration of certain facilities even if they fail to meet other Chapter 3 policies. Under Section 30260, a coastal dependent industrial facility may be permitted if: (1) there are no feasible less environmentally damaging locations for the project; (2) denial of or objection to the project would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

The Commission finds that the first requirement of feasible alternative locations for Union's project is met for the proposed OCS facilities. Even if the platform location could be moved within limited distances and still allow production of the hydrocarbon structure, such a move would not reduce environmental impacts due to similar substrate and habitats in the area. The second requirement relating to public welfare is discussed in the following section (13).

Mitigation of adverse environmental effects to the maximum extent feasible is the third requirement of 30260. As stated in the previous sections, Union and its partners are proposing maximum feasible mitigation to reduce impacts on coastal resources. The Commission emphasizes that the commitment to use consolidated pipelines power cable, and processing facilities is the major step towards developing maximum feasible mitigation measures to reduce impacts on the resources. Union's proposed Platform Irene project is designed to transport oil and gas production from other platforms in the central Santa Maria Basin to an onshore separation and dehydration facility. The electric power cable, from the existing Pacific Gas and Electric Company grid system, is rated to allow other operators in the vicinity to hook in. Thus, site-specific impacts from processing plants, pipelines, and other associated developments will be minimized. Due to consolidation and to Union's commitments to mitigate impacts to the maximum extent feasible, the Commission finds the project consistent with Section 30260(3).

#### 14. Public Welfare.

Under Section 30260(2) of the Act, the Commission must determine that Union's project will not adversely affect the public welfare. Included in the concept of public welfare is consideration of the "national interest."

The Commission considers the national interest when it reviews federal licenses and permits. In addition to the Coastal Act, the Commission's approved CCMP includes a separate chapter (Chapter 11) that describes the process used for considering the national interest. The federal government has determined that the California coast is a resource of national significance, comprising more than half the western coastline of the contiguous 48 states. In reauthorizing the federal Coastal Zone Management Act in 1980, Congress identified ten national objectives to be achieved by states through their coastal management programs. Nine of the ten objectives recognize the critical need to protect coastal zone environmental resources. However, the Congress, the California Legislature, and the Commission also recognized that a balancing must be made with respect to the protection of land and water resources and the development of domestic energy resources. This balancing

takes place under the provisions of the "public welfare" test embodied in Section 30260 of the Coastal Act. Thus, under Section 30260, the Commission is empowered to balance the national interest in both resource protection and energy development as is required under the CZMA.

The Air Force has sent Union a preliminary notice of intent to grant a right of way for a pipeline across Vandenberg. The Air Force has emphasized that their primary mission is national defense, but they do not find <sup>a</sup>the pipeline to be incompatible with that mission.

The Commission recognizes the national interest in meeting the nation's domestic energy needs and supports OCS lease sales and development projects in areas where petroleum resources are high and an infrastructure exists to support offshore oil development. In keeping with this policy, the Commission finds that Platform Irene and the accompanying pipeline can only be found to be in the public interest only because of the with mitigation for the adverse impacts identified in the previous sections of this report. The commitment of the Platform Irene producers to use pipelines for transportation of the crude if they are available with accessible capacity to their market destinations, and the proposed consolidation of the transportation and processing facilities with Exxon's Platform Shamrock mitigate the majority of these impacts. Other measures for protection of marine resources, commercial fishing activities, air quality, vessel traffic safety, visual and scenic resources, and public access and recreation complete mitigation of adverse impacts on coastal resources. These commitments allow the Commission to find the project consistent with the public welfare since the impacts are mitigated to the maximum extent feasible. Therefore, the Commission finds the proposed construction and operation of Platform Irene, the pipeline between the platform and the separation facility, and related facilities to be consistent with Section 30260(2) and hence with the California Coastal Act of 1976.

#### APPENDIX I

##### Substantive File Documents

##### California Coastal Commission Findings and Reports

Consistency Determination File CD-28-83, Department of the Interior, Lease Sale 73

Consistency Certification File CC-27-83, Texaco U.S.A., Inc., Platform Harvest.

Consistency Certification File CC-12-83, Chevron U.S.A., Point Arguello Field.

Consistency Certification File CC-7-83, Exxon Company, U.S.A., Santa Ynez Unit.

Consistency Certification File CC-24-84, Chevron U.S.A., Point Arguello Field Supplement.

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Policy Statement on Oil Spill Response Measures, December 15, 1983.

General Policy Statement on the Ocean Disposal of Drilling Muds and Cuttings, October 10, 1984.

General Policy Statement on Conflicts Between the Commercial Fishing and Oil and Gas Industries, October 10, 1984.

Environmental Documents and Studies.

California Air Resources Board. Air Quality Aspects of Offshore Oil and Gas Resources, February 1982.

California Air Resources Board. Report of the California Legislature on Air Pollutant Emissions from Marine Vessels (Draft), June 1983.

California State Lands Commission, Program EIR: Leasing, Exploration, and Development of Oil and Gas Resources on State Tide and Submerged Lands, Point Conception to Point Arguello, Santa Barbara County, California. April 1982.

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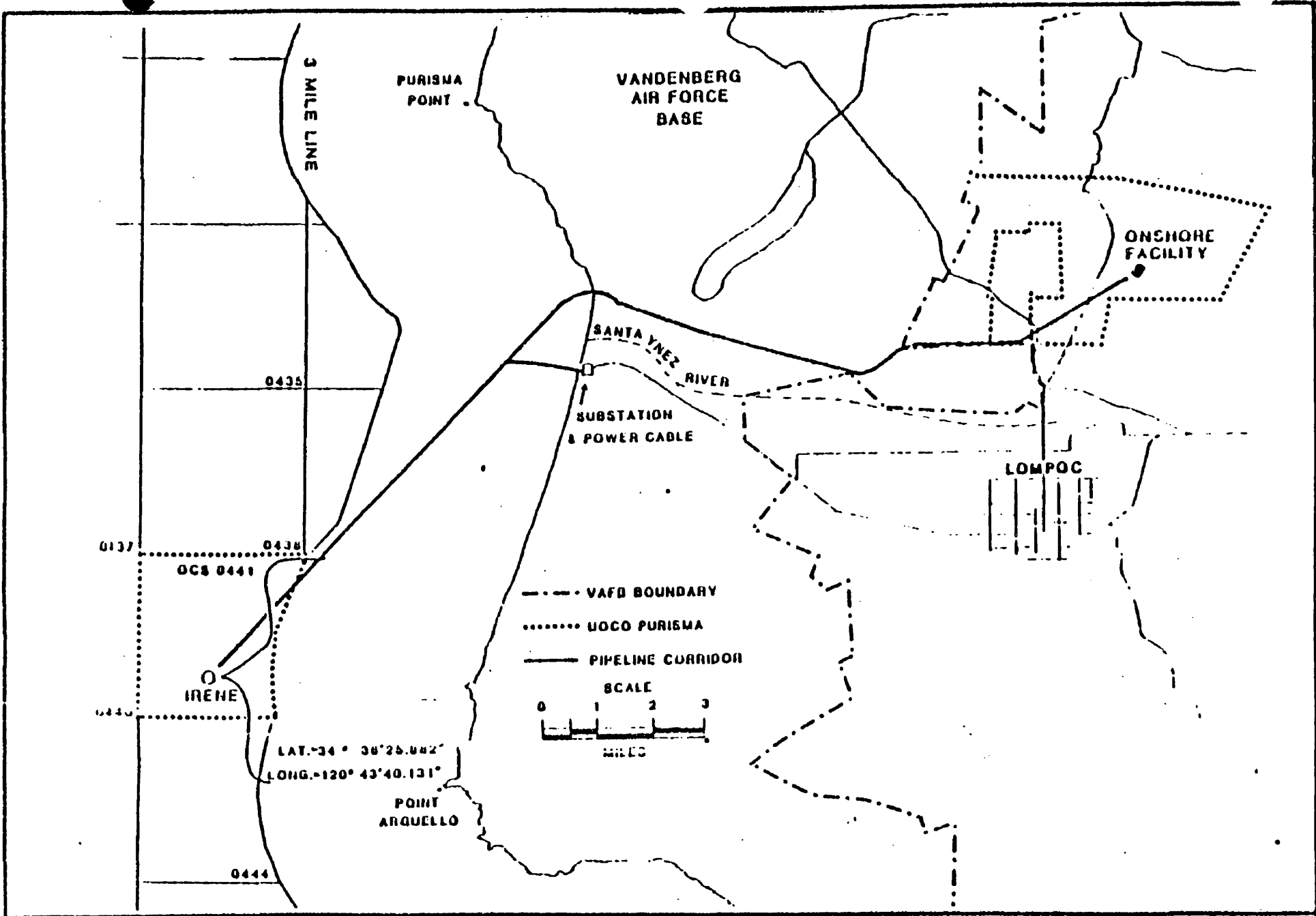
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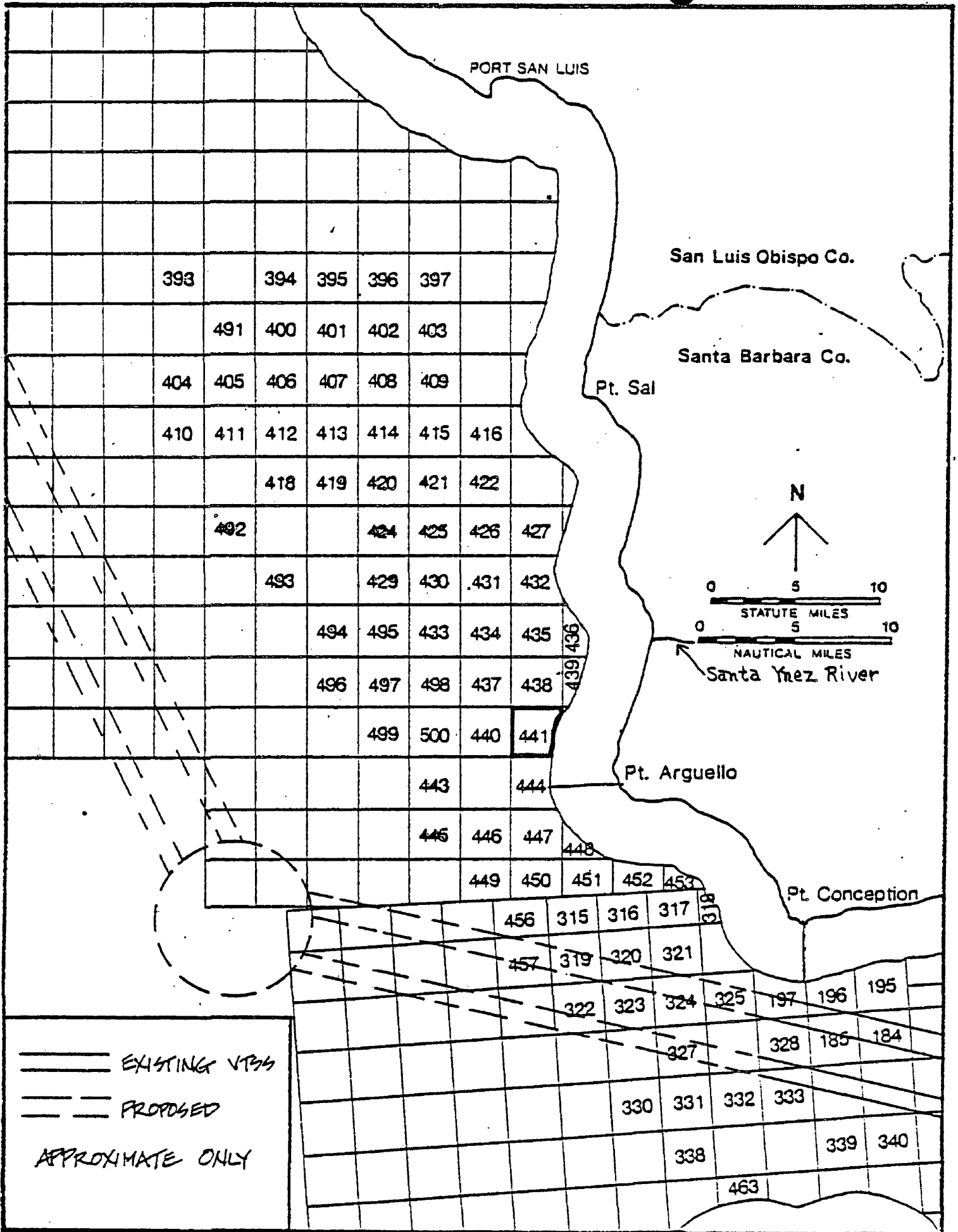
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Preferred Pipeline Route

EXHIBIT 1







DEPARTMENT OF THE AIR FORCE

WASHINGTON 20330

ROY W. MARTENS  
MAY 31 1984

OFFICE OF THE ASSISTANT SECRETARY

22 MAY 1984

Mr. Roy W. Martens  
Northern District Land Manager  
Union Oil Company of California  
2323 Knoll Drive, P. O. Box 6176  
Ventura, California 93006

Dear Mr. Martens:

For several months Union Oil Company of California and the Air Force have been examining the possibility of a pipeline across Vandenberg Air Force Base. The purpose of my letter is to provide Union Oil Company with a preliminary notice of intent to grant a fifty-foot right of way for a pipeline across our property at Vandenberg.

Before the Air Force can grant anything more than this notice of intent, an acceptable environmental impact analysis examining the effects of the proposal must be completed. After reviewing the environmental analysis, the Air Force will give you a prompt final decision on the pipeline. Before proceeding, a formal memorandum of agreement between your company and Vandenberg Air Force Base, settling the details of the project, would also be necessary. In addition, the Air Force would require Union Oil to devise a legal instrument binding all offshore developers, to the effect that they and all prospective pipeline users will share this one pipeline. We have determined that, due to mission and operational requirements, only a single oil pipeline can cross Vandenberg. This instrument is deemed necessary because we need it made abundantly clear that no precedent is to be set by the granting of such a single pipeline.

Because of operational mission concerns at Vandenberg, we feel any memorandum of agreement must contain the following stipulations: (1) Oil companies using the pipeline agree to minimize the impact construction and operation of the pipeline will have on our operational missions; and (2) using oil companies must reimburse the Air Force for any operational expenses incurred as a result of the construction or operation of the pipeline. Specific details and conditions of the agreement are to be worked out by commanders responsible for conducting

EXHIBIT 3

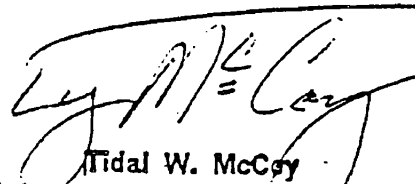
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MAY 31 1984

operational missions at Vandenberg and the oil industry. The agreement developed at the local level will then be evaluated by higher management levels within the Air Force, as I am sure it will be by Union Oil officials.

Amiable negotiations between Union Oil, the oil industry, and the Air Force should produce an agreement that benefits your interests while protecting the vital national defense programs conducted at Vandenberg Air Force Base. The Air Force looks forward to being a partner in these negotiations.

Sincerely,



Tidal W. McCoy  
Assistant Secretary of the Air Force  
(Manpower, Reserve Affairs and Installations)

cc: Mr. Richard F. Hall

H. S. Harry  
C. H. Chadband  
R. S. Gillen  
R. J. Boyle