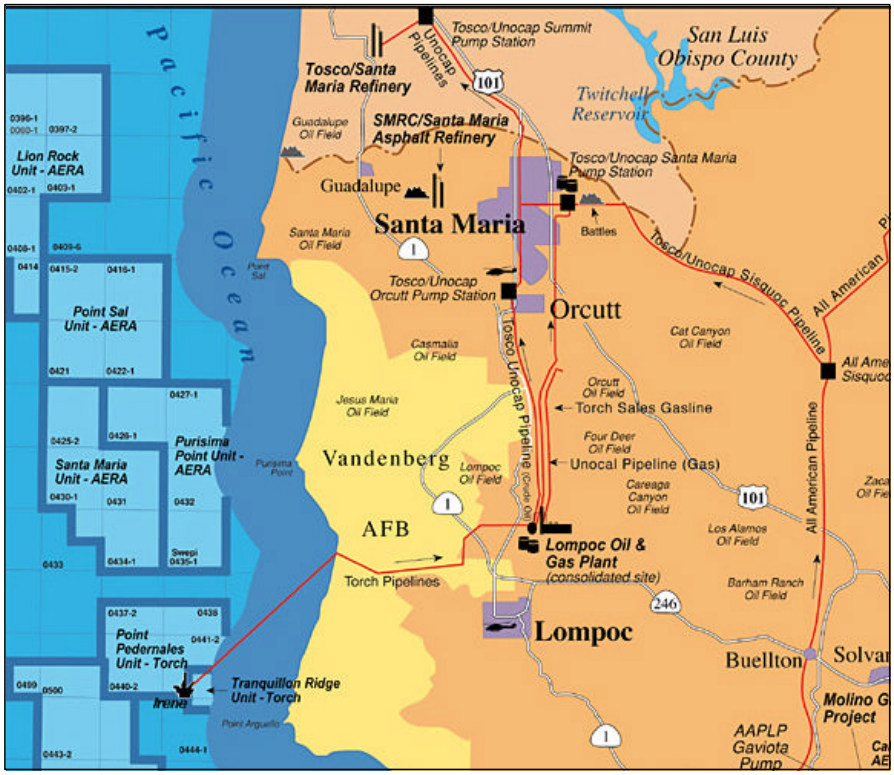
SANTA BARBARA COUNTY PLANNING COMMISSION
Staff Report for The Tranquillon Ridge Oil and Gas Development Project,

Hearing Date: June 20, 2002 | **Supervisorial District: 3rd & 4th**
Staff Report Date: June 6, 2002 | **Staff: Joddi Leipner/Alice McCurdy**
Case No.: 94-DP-027 RV02 | **Phone #: 568-2514/568-2542**
Environmental Document: 01-EIR-04 (SCH #200071130)

APPLICANTS:
Torch/Nuevo Energy Company
201 S. Broadway
Orcutt, CA 93455

Mission Resources Corporation
1331 Lamar, Suite 1455
Houston, Texas 77010

AGENT:
Jennifer Foster
Dudek and Associates



LOGP: Assessor Parcel Number (097-360-010), located 2.7 miles northeast of the City of Lompoc; Site address is 3602 Harris Grade Road in the Fourth Supervisorial District
Platform Irene and Off- to 0nshore Pipelines: Assessor Parcel Numbers (multiple); from landfall near Surf Beach, across Vandenberg Air Force Base, to the LOGP, Third and Fourth Supervisorial Districts.
Sales Gas Pipeline: Assessor Parcel Numbers 099-010-049; 101-080-050, -069, -070, -089; and 101-020-070; between Lompoc and Orcutt. Fourth Supervisorial District.

1.0 REQUEST

Torch Operating Company (Torch) on behalf of Nuevo Energy Company (Nuevo) requests approval of revisions to the Final Development Plan (94-FDP-027 RV02) for the Torch Pt. Pedernales project to allow oil and gas development and production from a state tidelands lease (Tranquillon Ridge unit).

Application Filed: January 18, 2000

Application Complete: May 9, 2000, July 26, 2001[1]
Processing Deadline: 180 days from certification of EIR

2.0 RECOMMENDATION AND PROCEDURES

Consider application for Tranquillon Ridge Project (Case No. 94-DP-027 RV02) to approve amendments to Final Development Plan permit number 94-DP-027, to allow project modifications and approvals necessary to transport oil and gas from Tranquillon Ridge lease in the state tidelands and process this production at the Lompoc Oil and Gas Plant ("LOGP"). Approval of this application would require the following actions:

1. Adopt findings determining that the proposed project is consistent with County Comprehensive Plan and zoning Code;
2. Adopt findings pursuant to the California Environmental Quality Act ("CEQA");
3. Certify the Environmental Impact Report (01-EIR-04); and
4. Approve modifications to Final Development Plan permit 94-DP-027 as necessary to authorize transportation of oil and gas from Tranquillon Ridge state tidelands lease to LOGP for processing.

Staff Recommendation: Staff recommends denial of the Tranquillon Ridge Project application based upon the analysis in the EIR and staff report that indicates that this project would result in significant unavoidable adverse environmental impacts.

If the Commission accepts staff's recommendation, your Commission's motion should include the following:

1. Adopt the required findings for the project denial specified in Attachment A of this staff report, including CEQA findings; and

2. Certify the Environmental Impact Report (01-EIR-04); and

3. Deny the application.

3.0 JURISDICTION

This proposed project is being considered by the Planning Commission based on *Sections 35-174.10.3.a. of Article II and Section 35-317.10.3.a of Article III* which states:

"A Revised Development Plan shall be required for changes to a Preliminary or Final Development Plan where the findings set forth in Sec 35-174.10[2] for Amendments cannot be made and substantial conformity cannot be determined".

[1] On May 25, 2001 Nuevo notified the County of substantial changes to its project description for the Tranquillon Ridge Project. The County determined that the changes required a revision to Nuevo's project application, a new completeness review cycle, and re-issuance of the Notice of Preparation.
[2] (Sec. 35-317.10 for Article III)

The project does not meet the County's Substantial Conformity Guidelines and does not qualify for a Development Plan Amendment. The development of the proposed new state lease (Tranquillon Ridge) has not been previously analyzed for potential impacts and policy consistency, nor can it be found to be exempt from CEQA.

4.0 ISSUE SUMMARY

The proposed Tranquillon Ridge Project would allow for the estimated ultimate recovery of approximately 170 to 200 million barrels of dry oil and 40 to 50 billion standard cubic feet of gas. This would occur with relatively few new environmental impacts since the project would use the existing Pt. Pedernales facilities to access these new state reserves. Use of the existing facilities and extended reach drilling would provide an efficient, cost effective, and environmentally preferred method to access and extract new reserves. While the project would involve new oil and gas development, it would not exceed permit levels established for the original Pt. Pedernales project. The project would result in beneficial impacts to the state and Santa Barbara County by increasing the amount of energy resources (natural gas and oil) available and providing additional revenues to the state and local economy.

The project would extend the life of the exiting Pt. Pedernales facilities by 10 to 25 or more years. It would therefore also extend the duration over which the original environmental impacts, including a number of significant unmitigable impacts, would occur. The most significant environmental impacts posed by the Tranquillon Ridge Project are associated with the potential for an oil spill, the physical presence of the LOGP and Platform Irene, and the continued transportation on natural gas liquids (NGLs) and liquid petroleum gases (LPGs). These impacts include: potential terrestrial and marine biologic, water quality, commercial fishing and recreational impacts from potential leaks or ruptures of the crude oil pipeline; potential public safety impacts due to the transportation of NGLs and LPGs, and the significant visual impacts of the platform and the LOGP. All these impacts exist for the current Pt. Pedernales project. However, the severity of the impacts would increase as oil and gas production levels, which have been on the decline, significantly increase over current levels.

The project's proposed use of the existing infrastructure also raises concern over the structural integrity of the Pt. Pedernales pipelines over an extended operational life of the facilities. The crude oil pipeline has had a history of internal corrosion problems, both onshore and offshore. The pipeline has also experienced problems associated with manufacturing defects in the flanges and unsupported pipeline spans offshore. Recent inspections have also raised concerns regarding internal corrosion of the produced water pipeline. Ongoing corrosion of the crude oil pipeline has been reduced through an aggressive corrosion control program, inspections to detect and respond to corrosion problems, and derating of the pipeline maximum allowable operating pressure to address reduced pipeline wall thickness. With these items in place, for the past five years the corrosion rates have been reduced. The pipeline, which has been derated on 3 prior occasions, has not been derated since 1997. The structural integrity issues associated with the offshore portion of the pipeline (defective flanges and unsupported pipeline spans) are being addressed through inspection and repair programs. These inspections have resulted in the

replacement of all but one of the original pipeline flanges[3]. These annual inspections have been required under the County's permit conditions.

While the ongoing pipeline integrity issues have been addressed through mitigation measures previously imposed as permit conditions on the Point Pedernales project, Nuevo is currently challenging the County's authority to enforce such safety measures for pipeline operations and operations at Platform Irene. Nuevo is challenging the County's authority to enforce permit conditions for the pipelines, both onshore and offshore. Nuevo contends that the County is preempted from regulating safety aspects of the pipeline and platform operations by federal law (Outer Continental Lands Shelf Act and Pipeline Safety Act). If Nuevo prevails in the appeal, key safety plans such as the Safety Inspection Maintenance and Quality Assurance Program (SIMQAP) and Emergency Response Plans (ERP) required by the County permit could be invalidated and the County could lose oversight of the pipeline operations and safety considerations. In absence of such mitigation measures, the County has determined that the environmental and safety related impacts of the Tranquillon Ridge project will be greater than those originally analyzed for the Point Pedernales project.

Also of concern is the Pt. Pedernales Project's compliance history. Torch/Nuevo's historic compliance record on the Pt. Pedernales project has not been exemplary. During Torch's tenure as operator of the Pt. Pedernales facilities and while under Nuevo's ownership, the 20-inch wet oil pipeline ruptured approximately 2.5 miles from shore. The spill was worsened when the Platform Irene operator failed to rule out a leak or rupture as the source of the low pressure condition, overrode the pipeline system's leak detection system, restarted the shipping pumps, and pumped oil into the ruptured pipeline. The County determined that these acts violated key safety provisions of Torch/Nuevo's County permit. This act of non-compliance was the subject of a settlement agreement between Torch/Nuevo and County in May 2001 and Torch/Nuevo and the U.S. Department of Justice in May 2002.

Also during Torch's tenure and Nuevo's ownership, the Energy Division issued a Notice of Violation to Torch for violations of the Transportation Risk Management and Prevention Program (TRMPP) and Board of Supervisor's Resolution 93-480 regarding transportation of NGLs and LPGs from the LOGP. Nuevo is currently in compliance with the TRMPP, but the scope of the historic violations is still under review.

Nuevo is also not currently in compliance with County conditions pertaining to its Oil Spill Contingency Plan (OSCP) for its 20-inch crude oil pipeline and with several conditions regarding biological restoration. Nuevo has recently expended effort in order to come into compliance with the permit and has taken significant steps towards complying with these outstanding items.

[3] In fall 2001, after County required inspections detected additional cracks in the pipeline flanges, Nuevo undertook a program to remove and replace all of the flanges that were a part of the pipeline construction except for one flange. Several flanges had been previously removed in 1997 and 1999. Although this flange did not show any evidence of defects, if shared many of the same manufacturing problems as the defective flanges. The County recommended removal and replacement of this remaining flange but Nuevo declined. In absence of the flange removal, the County now requires semiannual testing of the remaining flange.

Because of the project's historic pipeline integrity issues, poor compliance history, and pending litigation (which could eliminate mitigation measures for pipeline safety), this project has significant adverse environmental impacts that are even greater than those anticipated with the permitting of the Point Pedernales project. Therefore, staff cannot, at this time, recommend approval of the Tranquillon Ridge Project. However, if full mitigation measures remain in place (including County technical oversight), if Nuevo continues its efforts to improve it compliance record, and the if existing and proposed mitigation measures/conditions of approval regarding pipeline safety/integrity are fully enforceable and implemented, a recommendation for approval could be made.

5.0 PROJECT INFORMATION

A list of the acronyms and abbreviations used in this report is included in Attachment E.

5.1 Site Information

Pt. Pedernales Project Onshore Site Information	
Comprehensive Plan Designation	*The Lompoc Oil and Gas Plant itself is designated Agriculture with a Petroleum Resource Industry overlay. The majority of the onshore portion of the project ROW is located within VAFB. That portion of the ROW which lies outside of VAFB (i.e. from approximately 4,000 feet northwest of Vandenberg Village to the Lompoc Oil and Gas Plant) is designated A-II (Agriculture).*
Zoning District, Ordinance	*The Lompoc Oil and Gas Plant is zoned M-CR, Coastal Related Industry. That portion of the ROW which lies outside of VAFB is zoned U (Unlimited Agriculture) per the specifications of Santa Barbara County Zoning Ordinance No. 661.*
Site Size	*The onshore portion of the project ROW is approximately 12.4 miles in length. The LOGP covers an area of approximately 22.5 acres within a 2,283 acre parcel.*
Present Use & Development	*Between landfall and its departure from VAFB, the ROW traverses predominantly undeveloped lands. Exceptions include the federal penitentiary and limited agricultural production. The eastern-most segment of the ROW, located between its departure from VAFB and the Lompoc Oil and Gas Plant, lies entirely within the state-designated Lompoc Oil Field.*
Surrounding Uses/Zoning	*For the purposes of this description the onshore portion of the pipeline has been divided into two segments.* ***Segment A*** *refers to that portion of the ROW located between landfall and its departure from VAFB property (approximately 4,000 feet northwest of Vandenberg Village).* ***Segment B*** *refers to the remaining, and easternmost, 2.6 mile segment of the ROW. Because the pipeline generally trends in a west to east direction, the following description is presented in the context of the north and south sides of the ROW.* North Side of ROW: ***Segment A****: The majority of lands north of Segment A are undeveloped lands of VAFB, owned by the federal government. This segment includes one underground crossing of Highway 1, near Santa Lucia Canyon, and limited agricultural use, including cultivated fields near VAFB's 13th Street and Terra Road intersection and fields within Santa Lucia Canyon, east of Highway 1.* ***Segment B****: Land uses north of Segment B are limited to lands dedicated to the onshore oil production of the Lompoc Oil Field. This segment is adjacent to the Burton Mesa Ecological Reserves,*

Pt. Pedernales Project Onshore Site Information	
	and includes one underground crossing of Harris Grade Road. South Side of ROW: ***Segment A****: The majority of lands south of Segment A are undeveloped lands of VAFB. This segment of the ROW traverses the northern and western borders of the federal penitentiary within VAFB.* ***Segment B****: Uses immediately south of Segment B are limited to lands dedicated to the onshore oil and gas production of the Lompoc Oil Field. It is noted, however, that residences of Vandenberg Village lie, at their closest proximity to this segment of the ROW, approximately 1,875 feet away. In addition, this segment is adjacent to the Burton Mesa Ecological Reserves.*
Access	*Access to the onshore portion of the Pipeline ROW is primarily limited to private, unimproved access roads of VAFB and the Lompoc Oil Field. The ROW does, however, include two underground crossings of public roads, including Highway 1 near Santa Lucia Canyon, and Harris Grade Road, west of the Lompoc Oil and Gas Plant.*
Public Services	Water Supply: *Operation and maintenance of the pipeline requires no water supply; water supply for the Lompoc Oil and Gas Plant is provided by the Mission Hills Community Services District.* Sewage: *Operation and maintenance of the pipeline requires no sewage disposal; sewage disposal for the Lompoc Oil and Gas Plant is provided by the Mission Hills Community Services District.* Fire: *The closest Fire Station in proximity to the pipeline and Lompoc Oil and Gas Plant is County Fire Station 51, Battalion 2.* Other: *Cabrillo High School and the Buena Vista Elementary School, both located within Vandenberg Village, and Los Berros Elementary School, located within Mission Hills, fall under the administration of the Lompoc Unified School District. The closest Sheriff's Station to the pipeline ROW and Lompoc Oil and Gas Plant is the Lompoc Station; it is located adjacent to Fire Station 51 on Burton Mesa Boulevard.*

5.2 Setting

Platform Irene (Figure 1) produces oil and gas from OCS Lease 0441 located in federal waters approximately 4 miles west of Pt. Pedernales. The three offshore pipelines extend from the platform to the landfall north of the mouth of the Santa Ynez River.

The onshore portion of the project right of way ("ROW") traverses 12.4 miles of terrain between north Surf Beach and the Lompoc Oil and Gas Plant (Figure 2), located north of the City of Lompoc on Harris Grade Road. Between landfall and the LOGP, the pipeline predominantly traverses undeveloped lands containing coastal sage scrub, Burton Mesa chaparral, grassland, and oak woodland habitats (Attachment F). These habitats are discussed in detail in Section 5.2 of the 01-EIR-04.

Several cultural resource sites also occur within the project area and are described in Section 5.12 of the EIR. Many of these sites are in proximity to or within the flood plain of the Santa Ynez River. Geologically, the pipeline ROW traverses valley and flood plain deposits and highly erosive Orcutt sand wind deposits.

North of the LOGP the Tosco Pt. Pedernales Pipeline traverses Burton Mesa chaparral, oak woodland, grassland, and agricultural lands used for grazing and cultivated crops (see Attachment F). These habitats/land uses are also described in Section 5.2 of the EIR

5.3 Statistics

Statistics		
Item	**Proposed**	**Ordinance Standard**
Structures	Valve Site 2: • 3 miles of new transmission line and power poles, with a 350 to 400 foot average span between the poles (approx. 45 new poles). • Three new 1,250-horsepower, electric booster pumps at Valve Site #2.	N/A
Max. Height of Structure(s)	Valve Site 2: • The average height of power poles would be 60 feet. • The pumps would be 7 feet in height from the grade.	N/A (on VAFB; 50 feet in the Coastal Zone)
Building Coverage (footprint)	Valve Site 2: • 3 pumps each mounted on a 45" x 25' skid	N/A
Grading	Valve Site 2 and Power Poles: Minimal	N/A

Figure 1 – Platform Irene

Figure 2 – Lompoc Oil Gas Plant

5.4 Description

The proposed changes to the existing facilities that would occur under of the Tranquillon Ridge Project include:

- Platform Irene modifications to allow proposed Tranquillon Ridge Unit development.
- Modifications to the Valve Site #2 to allow for higher oil emulsion throughput[4], including installation of a new power line to the site.
- LOGP modifications to accommodate increased production expected with the proposed Tranquillon Ridge project.
- Modifications at Orcutt Pump Station to accommodate expected increased oil throughput from the LOGP (all proposed modifications are already covered under the existing permits).

The affected facilities are shown on Figures 3 and 4.

5.4.1 Overview of the Tranquillon Ridge Project

The proposed Tranquillon Ridge Project would involve the development of oil and gas wells in a proposed State Tidelands lease from Platform Irene. This platform is currently used to develop and produce the Point Pedernales Field, both of which are in Federal Waters. The produced oil and gas would be commingled with the Point Pedernales oil and gas and sent ashore via pipelines from Platform Irene to the LOGP. Based on the Applicant's data, the proposed project would have an expected total life of 30 years once the first well is drilled. The Applicant has estimated that the combined oil and gas production from the Tranquillon Ridge and the Point Pedernales Fields would peak at around 30,000 barrels per day (bpd) of oil and 6 million cubic standard feet per day (mmscfd) of gas. The project would not exceed the permitted production levels allowed under the current Torch Pt. Pedernales FDP (See Section 5.5.1.1). However, the proposed project would introduce oil and gas from a new source (State tidelands lease) which is not currently permitted under the FDP, nor was it evaluated in the 1985 Point Pedernales Field EIR/EIS. Therefore, a revision to the FDP is required for the development of the Tranquillon Ridge Field.

The development of the Tranquillon Ridge Field would result the following changes to the existing Point Pedernales Project:

- The drilling of 22 to 30 new wells for oil and gas production and utility use such as water injection and redrills.

[4] The pumps at Valve Site #2 would only be necessary if the 20-inch oil emulsion pipeline is derated to a MAOP below the necessary shipping pumps pressure at Platform Irene (approximately 1,000 psig). Currently the MAOP of this pipeline is 1,194 psig (see Table 2.1).

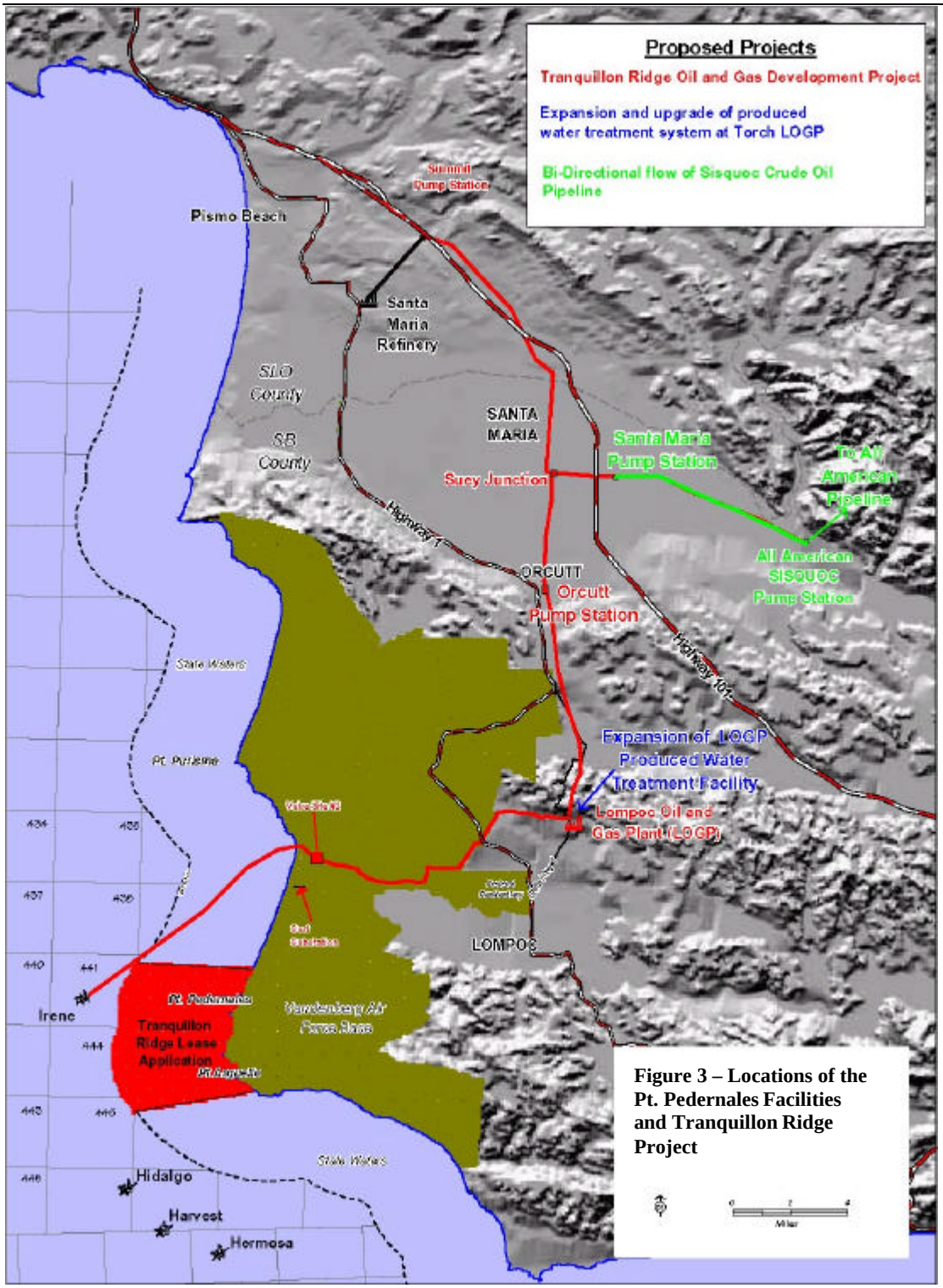
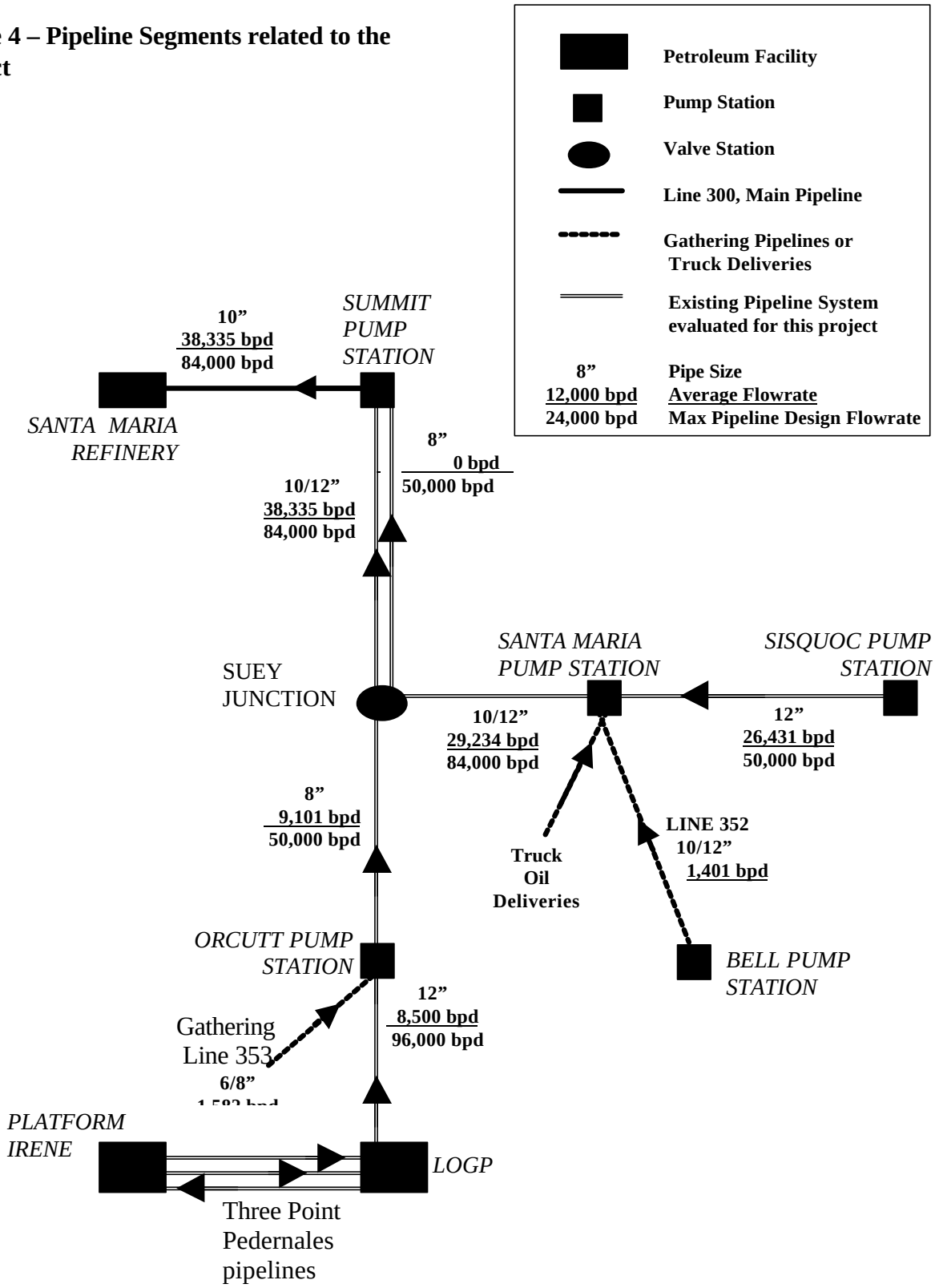


Figure 3 – Locations of the Pt. Pedernales Facilities and Tranquillon Ridge Project

Figure 4 – Pipeline Segments related to the Project



- An increase in the total oil and gas throughput at the existing Point Pedernales facilities over what is occurring today (The project would increase dry oil production from an average of 7,300 bpd in 2000 to a peak level of 30,000 bpd with an estimated ultimate recovery of approximately 170 to 200 million barrels of dry oil and 40 to 50 billion standard cubic feet of gas).
- An increase in oil throughput in portions of the existing Tosco pipelines from the LOGP to the Tosco Santa Maria Refinery. The maximum throughput through the Tosco Pipeline with the Tranquillon Ridge Project is estimated to be approximately 30,000 bpd of dry oil. The average throughput of oil in 2000 from the LOGP was 7,300 bpd of dry oil. The Tosco Point Pedernales FDP allows 36,000 bpd of dry oil (without any restriction on source other than the LOGP).
- A 10 to 25 year extension in the life of the Point Pedernales facilities from what was assumed in the 1985 Point Pedernales Field EIR/EIS.

Table 1 summarizes the changes that the Tranquillon Ridge Project will have on existing Point Pedernales facility operations as compared to the operating levels at the time of issuance of the NOP and various permitted levels.

Table 1 Summary of Point Pedernales Facility Changes due to Tranquillon Ridge Project

Project Component	Permitted Operating Level	Operating Level at Time of Issuance of NOP	Proposed Operating Level for Tranquillon Ridge	Net Increase (Current to Proposed)
Point Pedernales Field Life	20-25 years[a]	**NA**	30 years	20-25 years[b]
LOGP Project Life	30-35 years[c]	**NA**	30 years	10-25 years[b]
Dry Oil (bpd)	36,000[d]	7,300[e]	30,000	22,700
Gas (mmscfd)	15[f]	3.4[e]	6	2.6
H_2S Concentration of Gas (ppm)	4,000 [g]	Varies	8,000[g]	4,000
Gas Injected (mmscfd)	9.205	Varies	Would vary	None
LPG/NGL Truck Trips (per week)	16.1	2.9	5	2.1

a. This was the projected life assumed in the 1985 Point Pedernales EIR/EIS. Operation of the facilities began in 1987.
b. The proposed Tranquillon Ridge Project is projected to have a life expectance of 30 years. Assuming the proposed Tranquillon Ridge Project begins operations in 2002, the Point Pedernales facilities life expectancy would increase to 45 years.
c. The 1985 Point Pedernales EIR/EIS projected a life expectance of 30 to 35 years for the HS&P. In 1993 an SEIR was prepared which covered the addition of a gas plant at the HS&P. The gas plant was assumed to have a life expectancy of 10-25 years.
d. This is the limit specified in the County FDP. The SBCAPCD PTO has a limit of 25,000 bpd for Platform Irene and 36,000 bpd for the LOGP. The CCC consistency determination staff report states a level of 20,000 bpd for Platform Irene.
e. Average production for the year 2000.
f. This is the limit specified in the County FDP. The SBCAPCD PTO has a limit of 12 mmscfd.
g. The Applicant has received discretionary approval from Santa Barbara County to increase the H_2S content of the gas to 8,000 ppm.
h. Gas injection only occurs during upset conditions when the gas plant is down.

5.4.1.1 Tranquillon Ridge Field and Well Information

Present plans for development of the Tranquillon Ridge Field include directionally drilling a maximum of 30 wells, one well drilled at a time (which would include 22 new production wells and potentially eight utility and re-drilled wells) from Platform Irene into California State Lands. Each well would be directionally drilled using extended reach technology from existing unused well-slot locations (Figure 5). Total measured well lengths would exceed in some instances 25,000 feet with overall vertical depths below the ocean surface averaging between 3,000 and 5,000 feet.

The Applicant has preliminarily determined the bottom hole locations of the 22 new production wells to be drilled (see Figure 6). Bottom hole locations for additional wells, if needed, would be determined as additional information is obtained from drilling. Recompletion in a well, if needed, would likely commence eight to ten years after the initial completion date of a well. Recompletion involves the workover of a well to ensure full production levels are achievable. Wells currently proposed to be drilled are shown in Table 2.

Figure 5 – Directional Drilling from Platform Irene

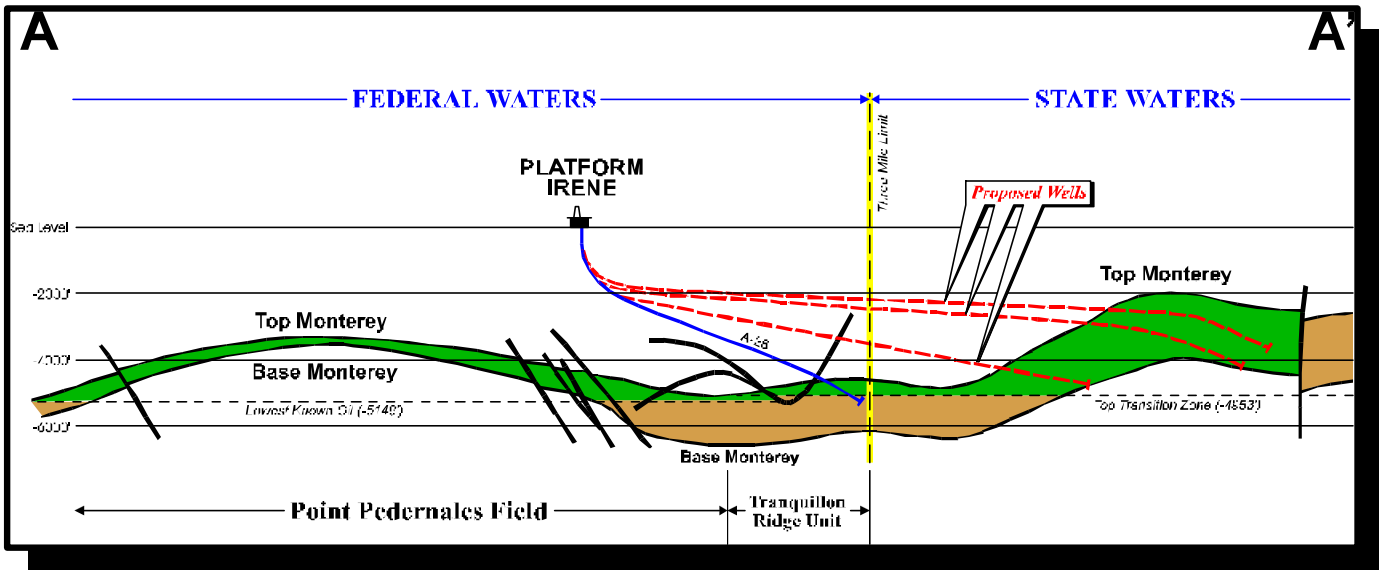


Table 2 Proposed Well Locations and Distances

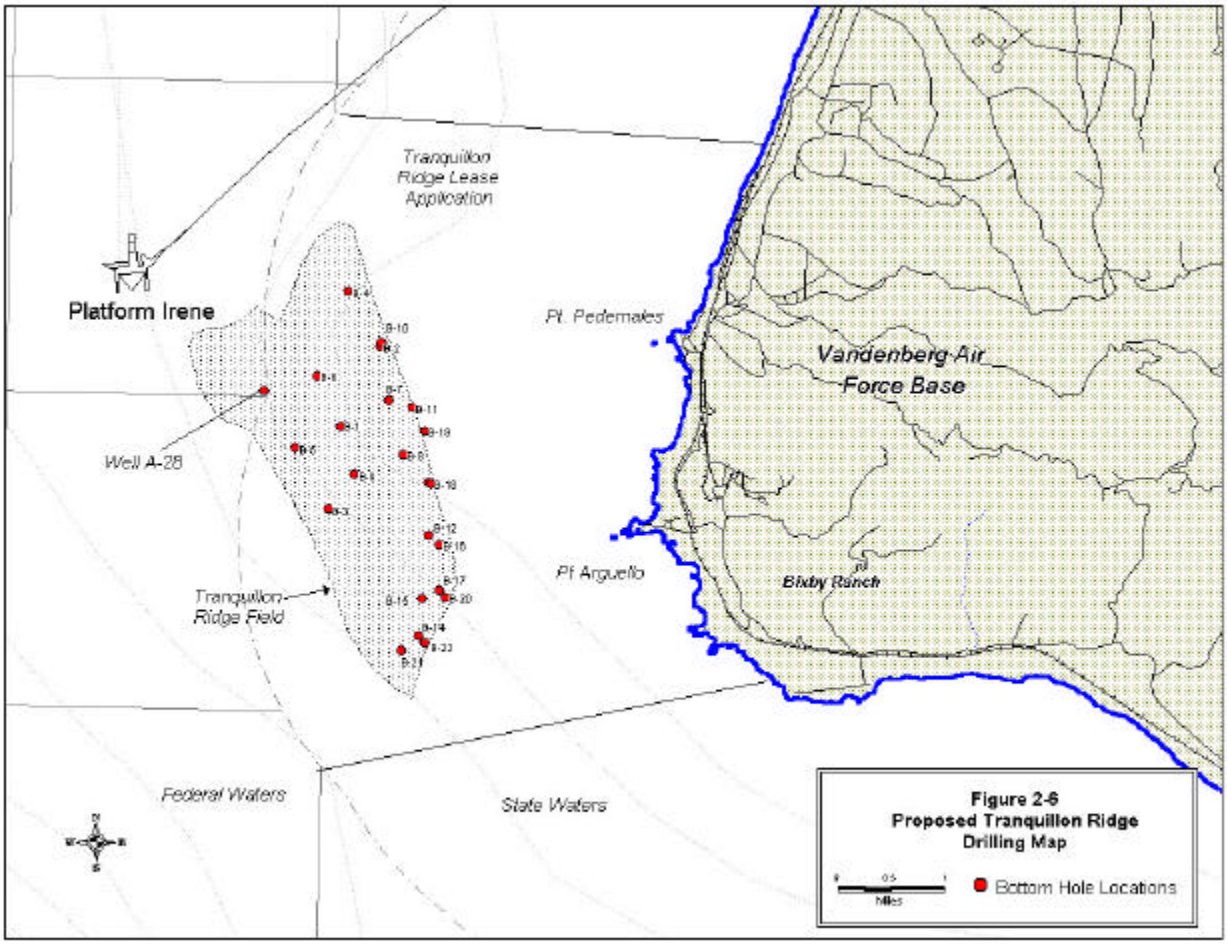
Approximate Drilling Order	Approximate Measured Length, feet	Estimated Drilling Days	Horizontal Distance from Irene, feet
B-1	15,000	60	13,250
B-2	15,000	60	13,250
B-3	17,300	90	15,600
B-4	13,090	60	11,250
B-5	14,060	60	12,250
B-6	12,850	60	10,975
B-7	16,200	90	14,600
B-8	18,100	90	16,600
B-9	16,860	90	15,300
B-10	15,000	60	13,250
B-11	17,370	90	15,800
B-12	21,540	120	20,000
B-13	19,800	120	18,400
B-14	24,700	120	23,300
B-15	23,390	120	22,050
B-16	22,225	120	20,750
B-17	23,750	120	22,300
B-18	19,900	120	18,500
B-19	18,650	90	16,900
B-20	24,070	120	22,750
B-21	24,900	120	23,400
B-22	25,150	120	23,800

Note: the wells may not be drilled in numerical order.

Total well drilling and completion times are anticipated to range between 60 and 120 days per well. The 30-well development plan proposed for the Tranquillon Ridge Field is designed to provide 80-acre well spacing (each well would be approximately centered on an 80-acre area) in all of the four commercial Monterey zones. The Applicant has developed a detailed development program only for 22 of the possible 30 Tranquillon Ridge wells. The proposed 22 production well development program would be drilled over a 15-year time period.

Figure 7 provides an estimate of the oil production for the proposed Tranquillon Ridge Project. The figure shows the estimated oil production from the Tranquillon Ridge Field as well as total estimated production from Platform Irene, which includes both the Tranquillon Ridge and Point Pedernales Fields.

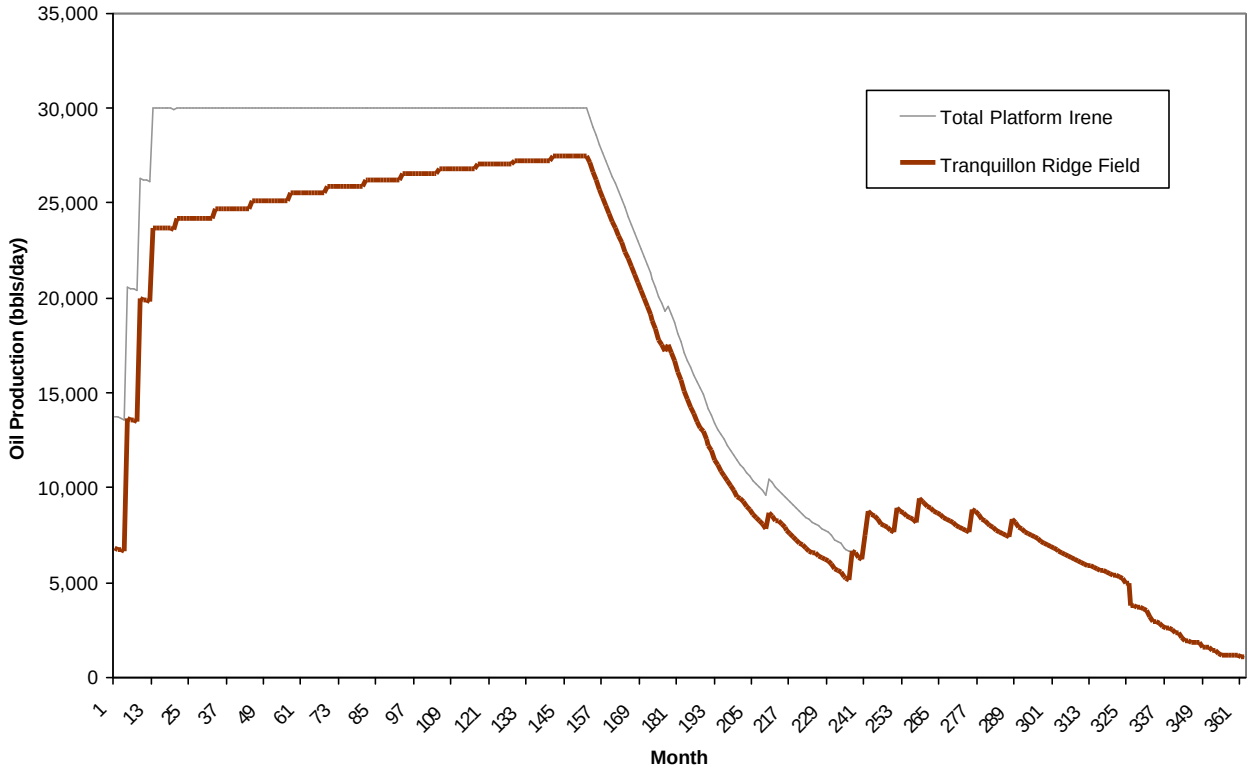
Figure 6 – Tranquillon Ridge Drilling Map



Production from the Tranquillon Ridge Field is estimated to peak at around 27,000 bbls/day of oil and 5 mmscfd of gas. With the proposed Tranquillon Ridge Project, production from Platform Irene would be at around 30,000 bbls/day of oil and 6 mmscfd of gas. Based upon the Applicant's estimates, the ultimate recovery at the economic limit for the Tranquillon Ridge Field is estimated to be approximately 170 to 200 million barrels of oil and 40 to 50 billion standard cubic feet of gas.

Gas H_2S concentrations are estimated to remain between 4,000 and 8,000 parts per million (ppm) with addition of Tranquillon Ridge gas production to the Point Pedernales produced gas. If Tranquillon Ridge production is similar to Point Pedernales production, then the H_2S concentration in the gas stream is expected to decrease during the initial period of production. The Applicant has received approval from the County of Santa Barbara to increase the maximum H_2S concentration in the gas from 4,000 to 8,000 ppm for the Point Pedernales Project. A land use permit for this increase was approved on May 30, 2002 and if no appeal is filed it will be issued on June 11, 2002.

Figure 7 - Estimated Oil Production from the Tranquillon Ridge Field



5.4.1.2 Changes to Platform Irene

The proposed Tranquillon Ridge Project would require installing new pumps on Platform Irene. The Applicant proposes to replace three 600-horsepower electrical shipping pumps with three 1,250-horsepower electrical shipping pumps. In addition, approximately 15 of the new Tranquillon Ridge wells would utilize new 500-horsepower electrical submersible pumps. The other production wells would utilize gas-lift technology.

During the Tranquillon Ridge drilling operations on the platform, the Applicant proposes to batch discharge the muds and cuttings into the ocean in accordance with the General NPDES Permit at a discharge point approximately 150 feet below mean lower low water (MLLW). Any cuttings or muds that do not meet the NPDES permit requirements (e.g. are oil based) would be stored in bins and hauled to a permitted disposal site onshore or injected, if feasible. The only additional equipment for drilling will be a new 1,600-horsepower electric pump for muds handling.

The existing 8-inch produced water return pipeline is currently used to return part of the Point Pedernales produced water from the LOGP to Platform Irene for offshore water injection (a part is injected onshore into the Lompoc Oil Field). For the proposed Tranquillon Ridge Project, a part of the produced water (approximately 40,000 bpd, which include both Pt. Pedernales and Tranquillon Ridge) would continue to be transported to the platform for disposal (ocean discharge or reinjection).

The Platform Irene operations changes with the proposed project are summarized in Table 3.

Table 3 Summary of Changes to the Platform Irene with Proposed Project

Parameter (Permitted Level[a])	Platform Irene with Addition of Tranquillon Ridge Project	
	During Normal Operations	During Drilling of New Wells
Total Employees	No additional personnel [b] (Currently there are 14-15 personnel).	No additional personnel. (Currently during drilling there are up to 70 personnel = = 15 [normal operations] + 55 [drilling]).
Total Boat Trips (1 one-way trip every 3 days)	No increase (Currently [e] – 1 one-way trip every 3 to 4 days annual average or 98 trips per year).	Increase to a total of 1 one-way trip every 3 days or 120 trips per year (at the permitted limit).[c]
Total Helicopter Trips (3 round trips per day)	Increase of 1 one-way trips per week or 26 round trips per year (Currently [e] – 11 round trips per week annual average, or 573 annual round trips)	Increase to a total of 3 round trips per day annual average.
Equipment Additions, Upgrades OR Replacements	1) Replacement of three 600 hp pumps with three 1,250 hp pumps. 2) Installation of 500 hp submersible pumps on 15 new wells. 3) Ongoing transformer and switchgear upgrades.	Installation and operation of one 1,600 hp pump.
Additional Maintenance and Service of Wells	With addition of new wells could be up to 50% increase in maintenance and service.	None
Additional Electrical Power Requirement	104%[d]	104%[d]
Muds and Cuttings Disposal	N/A	Disposal into ocean outfall as per the NPDES permit or offshore injection if feasible.
Produced Water Disposal	Addition of 20,000 bpd for discharge offshore with a total of 40,000 bpd for injection or discharge to ocean. (Currently up to 20,000 bpd is injected offshore.)	N/A

N/A – not applicable; hp – horsepower.

a. The permitted level is listed only where it is applicable.

b. Normal current operations include periodic well workover drilling, which takes 8 weeks per year and requires up to 55 personnel to operate the drilling rig and perform other work during the well workovers.

c. Assuming that drilling muds will be discharged into the ocean.

d. Data provided by Torch is annualized data and does not distinguish between normal operation and operation during drilling.

e. Currently maximum permitted helicopter trips and boat trips are occasionally utilized (e.g. during the platform shift change every Wednesday).

5.4.1.3 Changes to the LOGP

To process the Tranquillon Ridge production equipment and operational changes would also be required at the LOGP (Attachment B). These changes are summarized in Table 4.

Table 4 Summary of Changes to the LOGP with Tranquillon Ridge Project

Changes with Project	During Normal Operations
Additional Employees	None
Additional LPG/NGL Truck trips	Approximately 2 per week (to a total of 5 per week[a])
Additional Equipment Or Equipment Modifications	1) Return to service of two heat exchangers. 2) Addition of duplex feed strainer. 3) Addition of internal coalescing assemblies inside the existing free-water knockout vessel and insulation of its exterior. 4) Addition of internal coalescing assemblies and four (4) externally adjustable baffles on the three existing heater treaters.
Additional Maintenance	To be handled by the current employees.
Additional Electrical Power Requirement	30%[b]
Water Disposal Onshore	No increase

hp – horse power.
a. Based on the ratio of oil that could be generated to currently being produced.
b. Data provided by Torch. The increase is due to increased operations due to production from Tranquillon Ridge.

Currently there are 2.9 LPG/NGL truck trips per week (year 2000 annual average). It is expected that the Tranquillon Ridge project would generate up to two additional trips per week. All LOGP upgrades and modifications would occur within the existing boundaries of the facility. No new grading would be required. No new lighting would be required at the LOGP.

5.4.1.4 Changes to the Point Pedernales Pipeline Facilities

During the course of Tranquillon Ridge project, if the maximum allowable operating pressure ("MAOP") of the 20-inch pipeline needs to be lowered (i.e., the pipeline derated to less then 1,000 psig), then operation at the pressures needed to transport 90,000 bpd of emulsion would not be possible. In this case, the Applicant proposes to install three new 1,250-horsepower, electric booster pumps at Valve Site #2 in order to minimize the operating pressure of the offshore pipeline segment of the 20-inch oil pipeline (Attachment B). Two pumps would be operated with the third pump on standby. The existing electrical system would need to be upgraded at Valve Site #2 to provide power to the new pumps. This would involve installing approximately 3 miles of new transmission lines. The average height of power poles would be 60 feet and the average span between the pole would be 350 to 400 feet depending on the terrain. The Applicant's preferred transmission line alignment is shown in (Attachment F - Pt. Pedernales Detail 1).

Apart from the power lines, all equipment modifications would be accommodated within the existing footprint of Valve Site #2 and would be integrated into the existing safety systems at the LOGP.

Table 5 Summary of Changes to Valve Site #2 with Proposed Project[a]

Changes with Tranquillon Project	During Normal Operations
Additional Equipment	1) Three 1,250 hp electrical booster pumps on 20-inch oil pipeline with an additional transformer and required switchgear. 2) New power-lines with power poles[b], and possibly a new substation.
Additional Maintenance	One personnel month per year for maintenance to pump station equipment.

a. These changes would only be necessary if the 20-inch emulsion pipeline MAOP is derated.
b. The alternative to this is underground installation of a portion of the power line.

5.4.1.5 Changes to the Tosco Point Pedernales Pipeline

The Tosco Point Pedernales Pipeline Orcutt Pump Station modifications would be limited to placing a second electrically driven shipping pump, driven by 17 to 350-horsepower variable speed electric motor, back into service, or replacing it with a new pump. This would allow the system at the Orcutt Pump Station to be able to pump at the flow rate of up to 36,000 bpd. The pump is already permitted under the UNOCAP Pt. Pedernales Project permit No. 94-DP-028 and APCD permit to operate No. 7511.

The pipelines connecting the LOGP to the Summit Pump Station include the 8-inch pipeline from Orcutt to Summit through Suey Junction; and the 10/12-inch pipeline from Suey Junction to the Summit Station (Figure 4). Only the pipelines between the LOGP and Orcutt Pump Station and the 8-inch pipeline between Orcutt Pump Station and Suey Junction are expected to have increased oil throughput once Tranquillon Ridge production begins, since more oil would be shipped from the LOGP to the Tosco Santa Maria Refinery. Nonetheless, no modifications to the pipelines are expected.

5.4.1.6 Project Schedule

The addition of shipping pumps at Platform Irene and modifications at the LOGP are estimated to take approximately 9 months. The addition of booster pumps and associated equipment including the power pole installation at and to Valve Site #2 is estimated to take 14 weeks. Installing the transformer/substation is estimated to take 4 weeks.

5.4.1.7 Extension of Life of the Point Pedernales Facilities

Section 2.3.1.6 of 01-EIR-04 provides a detailed discussion of the potential for the Tranquillon Ridge Project to extend the life of the existing Pt. Pedernales project and facilities.
Original estimates of Point Pedernales project life, as well as the estimated life of the Point Pedernales facilities with Tranquillon Ridge field development, are summarized in Table 6.

Table 6 Summary of Extension of Life Estimates from Environmental Documents

Existing Point Pedernales Facilities			
Project Component	**Original Estimated Life (Years)**	**Estimated Time Frame[a]**	**Source of Estimate**
Platform Irene	20	1987-2007	1985 Pt. Pedernales EIR/EIS
LOGP (HS&P) Gas Plant	30-35[b] 10-25	1987-2022 1997-2022	1985 Pt. Pedernales EIR/EIS 1993 Supplemental EIR
Tranquillon Ridge	30	2002-2032	Project Application
Estimated Increase in Life with Tranquillon Ridge			
Project Component	**Estimated Total Life (Years)**	**Estimated Total Time Frame**	**Net Increase in Life (Years)**
Platform Irene	45	1987-2032	25
LOGP (HS&P)	45	1987-2032	10[c]

[a] *Current production forecasts (MMS 2000 and CSLC 2001) show a current estimated Point Pedernales project life extending to between 2012 to 2022. Thus, the original project life for Platform Irene may have been underestimated by approximately 5 to 15 years.*
[b] *This estimate goes beyond permitted development levels, and was predicated on the development of up to six offshore platforms located in the Central Santa Maria Basin.*
[c]. *The FDP would give a net increase in life of 25 years for the LOGP*

The 20-year life expectancy of Platform Irene, assumed in the 1985 Point Pedernales EIR/EIS was based on an estimated production curve submitted by the Applicant as part of its Development and Production Plan (DPP) submitted to the Minerals Management Service (MMS) in 1984[5]. With startup in 1987 and an estimated life of 20 years, it was anticipated that production would continue until 2007. Current production forecasts prepared by the MMS and CSLC for the Point Pedernales Field now project that the production would continue until 2012 to 2022, which would represent a 25 to 35-year life. This represents a life expectancy that is 5 to 15 years greater than what was assumed in the 1985 Point Pedernales EIR/EIS.

If the life expectancy assumed in the Point Pedernales 1985 EIR/EIS and 1993 SEIR and the life expectancy of the Tranquillon Ridge Project are used as the basis for estimating extension of life, then the Tranquillon Ridge project would be expected to extend the life of the facilities by up to 25 years.

5.5 Background Information

[5] Estimates of project life as well as ultimate recoveries are extremely difficult without extensive production data from a number of wells. This type of data is typically not available during the permitting phase of the project. As such, the production and project life estimates made during the permitting phase are rough estimates and typically change over the course of the project's development. Other factors that affect total recoverable reserves and project life are changes in technology (e.g., enhanced oil recovery techniques), new well development technologies (e.g., directional and horizontal drilling), and the price of crude oil.

5.5.1 Torch Pt. Pedernales Project

5.5.1.1 Permit History

The original Union Oil Company Point Pedernales Oil and Gas Development Project (Case No. 85-DP-71) was approved by the Santa Barbara County Board of Supervisors in April of 1986 and has been in operation since 1987. Since project construction, several physical and administrative modifications have been made. Primary changes have included, in chronological order:

Permit Action/ Decisionmaker	Description	Date Approved
Development Plan Revision/ Planning Commission	Approval to construct and operate gas plant	1994
Substantial Conformity Determination/ Planning Commission	Change in owner and operator from Unocal to Torch per condition A-18	1994
Development Plan Amendment/Director	Splitting the Pt. Pedernales project into 3 separate projects	1995
Development Plan Amendment/Director	Onshore re-injection of natural gas from Platform Irene during Battles Gas Plant abandonment and LOGP construction	1995
Development Plan Revision/Planning Commission	Approval of LOGP with modified design, increased capacity and addition of an ~7 mile ("sweet") natural gas pipeline to Southern California Gas.	1996
Development Plan Amendment/Director	Allow an increase in the hydrogen sulfide (H_2S) concentration in the off- to onshore natural gas pipeline from 4,000 part per million (ppm) to 8,000 ppm)	1999

In addition to the above, several minor facility modifications, such as the replacement of water pumps, have been approved and installed via ministerial permit approvals.

As noted above, in 1995 the Pt. Pedernales project was divided into three separate projects: Torch Pt. Pedernales (94-FDP-027), Unocap Pt. Pedernales (94_FDP-028) (now Tosco Pt. Pedernales); and Unocal Pt. Pedernales (94-DP-029) (Battles Gas Processing Plant). The Tranquillion Ridge Project involves both the Torch and Tosco Pt. Pedernales projects.

5.5.1.2 Torch Point Pedernales Project Facilities

The Pt. Pedernales project consists of the following major components:

- An oil and gas drilling and production platform, Platform Irene, located on outer continental shelf (OCS) Lease P-0441;
- An oil dehydration and gas processing facility located 3 miles north of the City of Lompoc, known as the Lompoc Oil and Gas Plant (hereafter LOGP);
- Three pipelines, in one corridor, connecting Platform Irene with the LOGP: a 20-inch wet oil line, an 8-inch gas line, and an 8-inch produced water return line for discharge at the platform.

The pipelines reach landfall just north of the Santa Ynez River and cross Vandenberg Air Force Base, State of California land and Nuevo fee property;

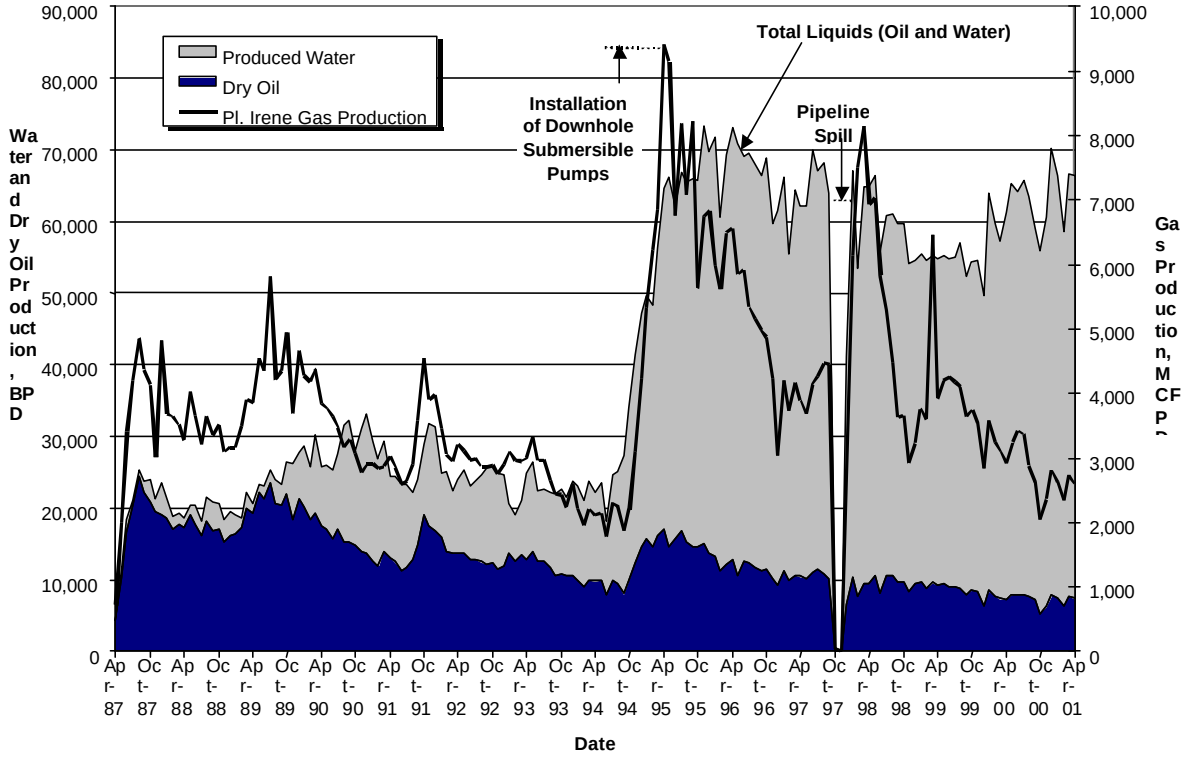
- A power supply system consisting of an electrical substation located on Southern Pacific Railroad property at Surf, a subsea power cable from the substation to Platform Irene, and an upgraded transmission line from the Pacific Gas and Electric power line north of Lompoc to the substation; and
- A 12-inch sales gas pipeline from LOGP to Righetti Valve Box and a 6-inch sales gas pipeline from Righetti Valve Box to Southern California Gas Company (SCGC) gas transmission line #1010.

Currently, the Point Pedernales Project is permitted to operate under the following FDP production/processing capacities: 36,000 barrels per day (BPD) of dry oil; 15 million standard cubic feet per day (MMSCFD) of natural gas with a maximum hydrogen sulfide (H_2S) concentration level of 4,000 parts per million (ppm)[6]; 9.205 MMSCFD of onshore gas reinjection (only during upset conditions); and a monthly average of 2.3 liquefied petroleum gas/natural gas liquids (LPG/NGL) truck trips per day. The subject oil volume is permitted to be produced from the Point Pedernales Field, leases OCS-P 0441, -P 0437, -P 0438 and -P 0440. The subject gas volume is permitted to be produced from the Point Pedernales Field leases OCS-P 0441, -P 0437, -P 0438, -P 0440, and from the Lompoc onshore fields.

Historical production levels from the Point Pedernales Project peaked at close to 25,000 bpd of dry oil in 1987 and 1989 (Figure 8), and close to 9 million standard cubic feet per day (mmscfd) of gas production in 1995. Production levels in 2001 average approximately 6,600 bpd of dry oil, 82,700 of water and a total of 2.6 mmscfd. The peak monthly production in 2001 was 7,574 bpd of oil and 2.95 mmscfd of gas production. Production levels in 2000 averaged approximately 7,300 bpd of dry oil, 54,000 bpd of water and a total of 3.4 mmscfd of gas production (2.9 mmscfd gas to sales). The peak monthly production in 2000 was approximately 8,500 bpd of dry oil and 3.6 mmscfd of gas.

[6] The land use permit for the H_2S increase to 8000 ppm was approved on May 30, 2002.

Figure 8 Point Pedernales Total Produced Fluids (1987-2001)



Up until March 16, 2002 the project was owned by Nuevo Energy Company and Mission Resources Corporation but operated by Torch Operating Company. Torch's contract to operate the facilities was terminated effective March 15 and Nuevo is now the operator. Nuevo filed an application to be approved as the operator on March 30, 2001[7]. As of the writing of this staff report, that application is pending before the Planning Commission.

Platform Irene

Platform Irene (Figures 1 and 3) is located in federal waters on Lease OCS-P 0441 approximately 4.5 miles west of Pt. Pedernales. The platform sits in 242 feet of water. Platform Irene was set in April 1986, and development drilling started in April 1987. The platform has a total of 72 well slots. Oil and gas are produced from the Point Pedernales Field. Twenty-eight wells were drilled with a maximum of 14 wells producing in a given month. As of May 2001, there were 14 production wells in service. The platform is equipped with an electric top-drive drilling rig used for well workovers and maintenance approximately 10 weeks per year. Power is supplied to the platform via a 36,000-volt subsea power cable from an electrical substation located in Union Pacific Railroad property at Surf Beach.

[7] The application was determined to be complete on April 16, 2002.

The produced liquid from Platform Irene is a combination of crude oil, gas, and water. The gas exists as free gas or is in solution in the oil, and the water exists both as free water and emulsion with the oil. The liquid stream is transferred to the LOGP through the 20-inch emulsion pipeline. Current design limit of Platform Irene is approximately 100,000 barrels of total fluids per day.

During normal operations, the platform has a workforce of 12 employees per each 12-hour day shift, and two to three employees per each 12-hour night shift: a total of 14 to 15 employees per crew. Each crew works a rotation of 7 days on and 7 days off. During drilling there can be as many as 70 personnel at the platform. Equipment and other supplies are supplied by supply boat.

LOGP

The LOGP is located approximately 3 miles northeast of Lompoc, California (Figures 2 and 3). The site address is 3602 Harris Grade Road. The LOGP comprises a 22.5 acre portion of a 2,283 acre parcel within the Lompoc Oil Field. The oil dehydration facility has been in operation since 1987 and the gas plant began operation in September 1997.

The LOGP receives oil/water emulsion and sour gas from Platform Irene and sour gas from the Lompoc Oil Field. Process operations at the LOGP include oil dehydration, produced water treatment, produced water injection offshore and onshore into the Lompoc Oil Field, oil reclamation, oil storage, oil shipment, gas compression, gas reinjection, gas sweetening, gas dehydration, LPG/NGL stabilization and storage, LPG/NGL truck loading, and NGL/crude oil blending.

The oil dehydration system dehydrates a current average of 60,000 to 65,000 bpd of oil/water emulsion. Once dehydrated, the oil is sold to Tosco and shipped by pipeline from the LOGP to the Orcutt Pump Station, and then to the Santa Maria Refinery in San Luis Obispo County.

The majority of the produced gas is separated from oil/water emulsion at Platform Irene and is shipped to LOGP via an 8-inch pipeline. The LOGP also receives produced gas from the Lompoc Field; this gas is shipped from the field via a separate 6-inch gas pipeline. At the LOGP, gas that remained dissolved in the oil/water emulsion is further separated from the emulsion.

Currently, the monthly average is 2.9 LPG/NGL truck round-trips per week (152 in the year 2000) based on the year 2000 annual average. Total LPG/NGL transported in the year 2000 was a monthly average of 118,000 gallons, with approximately 9,000 gallons per truck load. The stabilized NGL liquids flow to the NGL surge tank for blending into the dry crude oil to the maximum extent feasible. The processed sweet natural gas is sold and shipped by pipeline and/or used as fuel at the LOGP.

There are also truck trips due to sulfur removal (annual average of 14 trucks per year), amine makeup (annual average of 2 trucks per year) and miscellaneous vacuum trucks (estimated at two trucks per week).

The existing water treatment equipment at the LOGP consists of the Wemco flotation cell (currently out of service), wash tank, clean water tanks, and injection pumps. After the water is

treated to recover the hydrocarbon liquids, the treated water is either shipped via onshore produced water disposal lines (one 10-inch and two 12-inch lines) to the Lompoc Oil Field for onshore injection or shipped via the 8-inch produced water return line to Platform Irene for offshore injection. Produced water from the Lompoc Oil Field is also treated at the site and injected onshore.

Pipelines and Associated Facilities

The Point Pedernales Project currently includes three subsea and buried pipelines between Platform Irene and the LOGP. The total pipeline route is 22.2 miles long with approximately 12.1 miles located onshore. The pipelines include one 20-inch diameter wet crude oil line, one 8-inch produced water return line, and one 8-inch produced gas line. There are ten valve sites located on the oil pipeline, and four valve sites located on the water return and gas pipelines. Nine of the valve sites are located in underground vaults. Valve Site #2 is an aboveground facility located on VAFB and is approximately 100 feet by 100 feet and fenced. Valve Site #2 has two block valves on each of the three pipelines. For a detailed route map including the pipeline routes and the valve site locations see Attachment F.

Current pipeline operations include performing ongoing routine internal and external pipeline surveys. Pipeline surveys include, but are not limited to, smart pigging, corrosion checks, pressure tests, air and ground patrols, visual surveys using a video camera, and cathodic protection surveys. These periodic internal and external pipeline inspections are performed on a schedule specified by the County, MMS, and SBCAPCD permits.

Oil Emulsion Pipeline

The 20-inch crude pipeline is equipped with alarms and controls that allow operation of the equipment and protection during upset conditions. The pipeline is equipped with a shutdown valve at both the inlet and outlet. The pipeline system is also equipped with a supervisory control and data acquisition system (SCADA).

Corrosion: Past internal surveys of the oil pipeline identified a number of anomalies (defects). As part of the overall pipeline maintenance and monitoring plan, some sections of the old pipe with significant anomalies were removed and replaced with new pipe. More recent smart pig data (October, 2000) indicates that an excess of 600,000 wall anomalies, most of these minor and not a safety issue, exist in the emulsion pipeline with the deepest being 51 percent of the wall thickness. Most of these are on the bottom of the pipe and are internal to the pipe. All of the most significant anomalies (ranging in depth from 35 to 53 percent) are located in the onshore portion of the pipeline. The 2001 report indicated 1,400 anomalies[8] with none greater than 50 percent, 173 between 40-49 percent and 1,212 between 30-39 percent. The pipeline maximum allowable operating pressure has been reduced (de-rated) due to the presence of anomalies detected in 1995,

[8] The significant change in the number of anomalies reported in 2000 and 2001 (over 600,000 in 200 and ~1,400 in 2001) was due to a change in the reporting format. In 2001, only anomalies greater than or equal to 30% were reported.

1996 and 1997. No de-ratings have occurred since 1997.

Flange Defects: A defect in one of the flanges was determined to be one of the causes of the 1997 pipeline rupture. This flange was replaced following the rupture in 1997. In August and September of 1999, Nuevo conducted County-required inspections of the flanges on the offshore oil pipeline. The inspections found defects at a "J Tube" flange located on the offshore pipeline. As a result of this defect, the "J Tube" spool was removed and replaced similar to 1997 repair. During the repairs the Point Pedernales facilities were shutdown, and the pipeline was flushed with water. In September 2001, during County required flange inspections, Nuevo found cracks on a number of offshore flanges. As a result, Nuevo undertook a program to remove and replace all existing flanges on the offshore pipeline flanges with the exception of the first flange (Flange #1-1). These flanges have been removed and replaced. Nuevo applied for, and received approval from the County, California Coastal Commission (CCC), MMS, and CSLC for the repair work.

Produced Water Pipeline

A recent smart pig survey conducted by Nuevo on December 9, 2001 shows significant corrosion of the produced water line. A total of over 700,000 anomalies were detected with 3,729 anomalies greater than or equal to 40 percent metal loss and 94 anomalies greater that or equal to 50 percent metal loss. In response to this survey, the Building and Safety Division is requiring that the pipeline be derated from 1,311 pounds per square inch (psig) to 1,203 psig. Repairs were also conducted on the 8-inch water line in fall of 2001 to address corrosion discovered during a prior survey.

The produced water pipeline does not have a SCADA leak detection system, however pursuant to county requirements, the Applicant was required to provide for a low pressure alarm and shutdown process for this pipeline. The addition of the alarm and shut down procedure is underway by the applicant.

Produced Gas Pipeline

The gas separated from the oil/water emulsion and dehydrated at Platform Irene is shipped to LOGP via an 8-inch pipeline. The August 2000 high-resolution survey identified 181 anomalies on the pipeline, four of them deeper than 20 percent of the pipeline wall thickness. The 2001 report was consistent with the findings of the 2000 report and no significant increase in corrosion has occurred in the pipeline.

Co-located H_2S sensors have been installed along the gas pipeline in the following locations: (a) at the pipeline's crossing of Highway 1, (b) upwind of Cabrillo High School, and (c) upwind of the north/northeast boundaries of Vandenberg Village. County permit conditions require that when any pair of the co-located sensors detects 40 ppm of H_2S, the pipeline would be shutdown at the inlet (Platform Irene) and the situation investigated. Detection of 10 ppm H_2S activates an alarm at the LOGP.

Valve Sites

The onshore portion of the pipelines incorporates ten valve sites (Attachment F) between the shoreline and the LOGP. These valve sites consist of valves, either check or block, and Remote Terminal Unit (RTU) electronic equipment. The valves are contained in below-grade prefabricated vaults, with the exception of Valve Site #2, which is above grade.

Pipeline Catchment Basins

The pipeline route is constructed with 12 secondary containment catchment basins located at strategic locations along the route (see Attachment F – Route Detail 1). These basins are designed to catch oil if a pipeline leak or rupture were to occur. They were originally designed with a 10 percent excess capacity of a 100,000 bpd total fluids transportation rate to account for loss of volume due to erosion (Point Pedernales Facilities EIR, 1985). The basins are equipped with wiered concrete outlets that allow for water to flow out from the basin while retaining oil. The basins primarily protect the areas near the Santa Ynez River.

Surf Substation

Surf substation is located on Union Pacific Railroad property at Surf, and supplies power to Platform Irene via a subsea power cable. The substation is connected to the PG&E power line north of Lompoc, approximately 700 feet north of the Surf railroad station on the ocean side of Ocean Avenue. The substation is approximately 60 by 70 feet and is enclosed inside a chain link fence.

Torch Sales Gas Pipeline

Sales gas is shipped from the LOGP through a 6.5 mile long, 12-inch diameter, sales gas pipeline to the Righetti valve site. The Righetti valve site is located approximately 1.3 miles northeast of the intersection of Highway 1 and Highway 135. Sales gas is then shipped through a 6-inch sales gas pipeline from Righetti valve site to Southern California Gas Company transmission line # 1010.

5.5.1.3 Tosco Pt. Pedernales

Point Pedernales treated oil is shipped from the LOGP to Tosco's Santa Maria Refinery by a system of pipelines known as the UNOCAP network, also known as Line 300, which is owned by Tosco. This network of pipelines is made up of the following major facilities:

- LOGP Pump Station;
- Orcutt Pump Station;
- Suey Junction;
- Santa Maria Pump Station;

- Summit Pump Station; and
- Sisquoc Pump Station.

Figure 4 shows a system schematic including throughputs and line sizes for the Tosco pipeline system and Attachment F (TOSCO Route Detail 1-9) includes a detailed pipeline route map.

LOGP to Orcutt Pump Station Pipeline Segment

The branch of Line 300 that transports crude oil from the LOGP to the Orcutt Pump Station is 12 inches in diameter and lies in a generally northerly direction for approximately 10.3 miles.

Orcutt Pump Station

Orcutt Pump Station receives oil from two sources: the LOGP (12-inch pipeline) and Gathering Line 353 (6-inch pipeline) which collects oil from the Lompoc and Orcutt Hill oil fields. The oil at the station is blended and pumped to Suey Junction and further to the Summit Pump Station.

Orcutt Pump Station to Summit Pump Station Pipeline Segment

Orcutt Pump Station ships the oil through a segment of Line 300 in a generally northerly direction for approximately 4.5 miles to a point in the city of Santa Maria called Suey Junction. The current final destination of the crude oil is the Tosco Santa Maria Refinery.

The Santa Maria Pump Station currently collects crude oil from trucks originating in the Santa Maria area and combines the oil with oil from Cat Canyon and from the Sisquoc Pump Station. This oil is shipped to Suey Junction, and then northward to the Summit Pump Station.. At Suey Junction, this oil is commingled with oil from LOGP and the Orcutt area.

5.5.2 Background on the Applicants

5.5.2.1 Nuevo Energy Company

Nuevo was formed in March 1990 and is currently the largest independent oil and gas exploration and production company in California. Approximately 90 percent of its domestic assets are located within and offshore of California. The Company's international assets are located offshore the Republic of Congo in West Africa and offshore and onshore the Republic of Tunisia in North Africa. The Company’s headquarters are located in Texas.

California Operations

Nuevo California operations are centered in Bakersfield. In 1994, Nuevo entered California with its first acquisition of oil and gas assets offshore California. Subsequent acquisitions in California were completed in 1996 and 1999. One of Nuevo’s key strategies is to develop existing fields using secondary and tertiary recovery methods. Approximately half of Nuevo's California production is produced thermally, either by cyclic steam injection or steamflood.

In 2000, Nuevo's California assets accounted for approximately 87 percent of its production and 90 percent of its reserves. Nuevo's daily production from California in 2000 was 42,052 barrels of oil per day (bpd) and 34.3 million cubic feet of gas per day (mmcfd). Approximately 60 percent of Nuevo's California production is onshore and the remaining 40 percent is offshore. Nuevo's main California onshore properties include the company's interest in the Cymric, Midway-Sunset and Belridge oil fields in the western San Joaquin Basin in Kern County, the Buena Vista Hills field in South San Joaquin Basin in Kern County and the Coalinga gas field in the North San Joaquin Valley. Nuevo's two largest onshore fields, Cymric and Midway-Sunset, account for almost 45 percent of its California production.

Nuevo's offshore district operations encompass an estimated net proved reserve base of 79.1 million barrels of oil equivalent (as of 12/31/2000). Nuevo's offshore properties include its interests in the Point Pedernales, Dos Cuadros and East Dos Cuadras, Huntington Beach, Santa Clara, and Belmont oil fields in federal outer continental shelf leases, offshore Santa Barbara and Ventura Counties and Long Beach. The Company's two largest offshore fields, Point Pedernales and Dos Cuadras, account for approximately 15 percent of California production. In addition to Platform Irene, Nuevo operates the following platforms off of the California coast: Eva and Esther in State Waters off Huntington Beach; Edith in Federal Waters off Huntington Beach; ;Gina and Gilda in Federal Waters off Ventura County; and A, B, C, Hillhouse, Henry and Habitat in Federal Waters off Santa Barbara County. Nuevo also has an ownership interest in 34 federal leases offshore of Santa Barbara County, including 21 undeveloped leases[9] in the following units: Bonito, Gato Canyon, Sword, Purisima, Santa Maria, Pt. Sal and Lion Rock (MMS 2001).

Nuevo owns and operates gas plants and other facilities, ancillary to oil and gas production. The company owns and operates six gas plants. Three of the gas plants are plants that fractionate the raw natural gas and include the Stearns Gas Plant located in the Brea Olinda Field and the Lompoc Oil and Gas Processing Plant located north of Lompoc. The third plant is located in Alabama. The remaining 3 gas plants strip H_2S and CO_2 from the produced natural gas, but do not fractionate.

Santa Barbara Operations

Nuevo acquired an interest in the Pt. Pedernales project in 1994 and increased its ownership to 80 percent in 1996. Locally, in addition to the Pt. Pedernales project (Platform Irene, the LOGP, the sales gas pipeline and the pipelines connecting the platform to the LOGP), Nuevo owns and produces oil and gas from the Lompoc Field and the Orcutt Hills Field.

Nuevo's Santa Barbara offices are located at 201 S. Broadway Street in Orcutt.

5.5.2.2 Mission Resources Corporation

Mission Resources Corporation (Mission) formerly known as Bellwether Exploration Company is an independent energy company. The company's core areas of activity are the Texas/Louisiana

[9] Does not include undeveloped leases situated within producing units.

Gulf Coast, both on and offshore, southeastern New Mexico and west Texas. MRC currently is a non-managing partner with Nuevo and owns 19.7 percent of the Pt. Pedernales Project. The company is headquartered in Texas and does not operate any offices in California.

5.5.3 Compliance Background

The Compliance history of the proposed project is a relevant consideration with respect to the Tranquillon Ridge application since it would extend the life of all of the Pt. Pedernales facilities. Thus, the compliance history on the existing projects may be reflective of potential compliance behavior on the proposed projects.

5.5.3.1 Torch Pt. Pedernales Project

Torch assumed ownership and took over operation of the Pt. Pedernales Project in 1994. In 1996, Nuevo obtained a controlling interest in the project. The following section discusses key compliance issues associated with the Torch Pt. Pedernales project during the time in which it was operated by Torch and owned by Nuevo. Torch/Nuevo has a history of compliance issues associated with the Pt. Pedernales project. However, in the 2001 and 2002 operation years, Nuevo has taken strides to abate/correct its historic violations and to address ongoing compliance issues.

5.5.3.1.1 Condition Effectiveness Reviews (B-2)

Since the Pt. Pedernales project began operations in 1987, there have been two condition effectiveness review conducted pursuant to Condition B-2 of the permit. The project underwent its first condition effectiveness review between 1990 and 1992. The second review was conducted between 1998 and 2000 and was initiated by the Board of Supervisors following the rupture of the Pt. Pedernales project's 20-inch crude oil pipeline. Review of conditions relevant to the 1997 oil spill litigation (i.e. P-2 Safety Inspection, Maintenance, and Quality Assurance Program, P-13 Oil Spill Contingency Plan and P-16 Supervisory Control and Data Acquisition System) were deferred until after settlement of the litigation. These comprehensive reviews have also been useful in identifying outstanding compliance actions needed to satisfy the permit conditions. Several of these outstanding items are discussed below.

5.5.3.1.2 1997 Spill and Pipeline Repairs

On September 28, 1997, the Pt Pedernales project's off- to onshore wet crude oil line ruptured approximately 2.5 miles from shore. The rupture occurred at the weld of a flange during a routine internal cleaning ("pigging") of the line. The physical integrity of the flange had been compromised during the project's original construction due to a lack of preheating during pipeline welding. This caused the metal in the flange's "heat-affected zone" to become hard and brittle. Following extensive pipeline investigations, repairs, and testing, the County, California Coastal Commission, U.S. Minerals Management Service and State Lands Commission allowed production to resume on December 11, 1997. Estimates of the total crude oil spilled due to the rupture

currently range from 163 barrels to in excess of 1,242 barrels[10]. Nuevo and Black Hawk Oil Company were the owners of the Pt. Pedernales facilities at the time of the spill and Torch the operator.

After the offshore pipeline rupture, there was a low pressure alarm, followed by an automatic shutdown caused by the low pressure sensors in the pipeline. Despite the low pressure alarm and shutdown, Torch operators failed to confirm the source of the low pressure condition, overrode the pipeline system's leak detection system, and pumped crude oil into the ruptured line, significantly increasing the spill volume[11]. The legal action taken in response to the 1997 spill is discussed in Section 5.5.4.1.

Following the spill, trustee agencies conducted a Natural Resource Damage Assessment (NRDA) to identify the resource damage caused by the spill, and to identify projects capable of restoring the damaged resources. Agencies that participated in the NRDA include the Department of Defense (VAFB), U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, California Department of Fish and Game, Minerals Management Service, and California State Lands Commission. The County participated in the NRDA as a technical advisor to the California Department of Fish and Game.

Following the spill the NRDA team conducted a number of investigations and published several reports[12]. The NRDA team determined that stranded oil attributed to the spill was documented along approximately 40 miles of shoreline to the northeast, east, and southeast of the pipeline break. Some stretches of Surf Beach were more than 50 percent covered by oil. The trustee agencies found that important habitat was impacted at rocky intertidal and sandy beach habitats. The agencies also found that intertidal species such as mussels and abalone were adversely affected by the spill. The estuaries at San Antonio Creek, Honda Creek, and the Santa Ynez River were also impacted by the spill. The trustee agencies estimate that the spill impacted between 635 and 815 birds, including western snowy plovers and brown pelicans. The trustees concluded that one California sea lion died as a result of the spill, and that other pinnipeds were in the vicinity of spilled oil, and may have been injured as a result of exposure to oil. The sea otters that reside at

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[10] The California Department of Fish and Game's (CDFG) official spill volume from the Torch Point Pedernales pipeline was 163 barrels (CDFG,1989). The 1,242 bbl estimate is from Santa Barbara County and is based upon additional factors that were not taken into account with the CDFG official number. These include drainage from the landward side of the pipeline, oil between pigs 1 and 2, and oil behind pig 2.

[11] Evaluation of Irene Pipeline Oil Spill, MPC International, Inc. November 1997; Platform Irene SCADA printout 9/28/97; and Deposition of Doug Schultz, Torch Operating Company, taken by Jerry Lulejian, District Attorney, August 26, 1999.

[12] *Preliminary Injury Determination for Marine Mammals, Torch/Platform Irene Pipeline Oil Spill, September 1997*, prepared by California Department of Fish and Game et al, October 9, 1998; *Preliminary Bird Injury Assessment for the Torch/Platform Irene Pipeline Oil Spill, September 1997*, prepared by California Department of Fish and Game et al, July 1998; *Release and Pathway of Oil in the Environment, Torch/Platform Irene Pipeline Oil Spill, September 1997*, prepared by California Department of Fish and Game et al, April 16, 1999; *Resource Equivalency Analysis of Abalone Injury and Restoration, Torch/Platform Irene Pipeline Oil Spill, September 1997*, prepared by California Department of Fish and Game et al, April 26, 1999;
Habitat Equivalency Analysis of Natural Resource Damages to Sandy Beach Habitat, Torch/Platform Irene Pipeline Oil Spill, September 1997, prepared by California Department of Fish and Game et al, April 22, 1999.

Purisima Point were exposed to oil during the spill, and may have experienced sub-lethal effects of exposure. No otters were known to have experienced acute effects or death as a result of oiling.

In response to pipeline inspections required by the County[13], Torch/Nuevo completed a number of pipeline repairs to address the factors which lead to the 1997 rupture. After the 1997 spill, the flange involved in the rupture was removed and replaced. In August and September of 1999, Torch/Nuevo conducted County required inspections of the flanges on the offshore oil pipeline. The inspection found defects at the "J Tube" flange located on the offshore pipeline. The flange was removed and replaced in a manner similar to the 1997 repairs. In September 2001 during annual County-required flange inspections, Torch/Nuevo again found cracks on a number of offshore flanges. As a result, Torch/Nuevo undertook a program to remove and replace all existing flanges with the exception of the first flange (Flange #1-1). As required by the County, this remaining flange now must be tested semi-annually.

5.5.3.1.3 Transportation Risk Management and Prevention Plan (TRMPP) Violations

The transportation of natural gas liquids (NGLs) present the most significant safety hazards to the public from both the Pt. Pedernales project and Tranquillon Ridge. On September 21, 2000, the Energy Division issued a Notice of Violation to Torch for violations of its Transportation Risk Management and Prevention Plan (TRMPP) and Board of Supervisor's Resolution 93-480 regarding transportation of natural gas liquids and liquefied petroleum gases from the LOGP. Specifically, as required by its TRMPP and Board of Supervisor resolution 93-480, Torch failed to complete any motor carrier safety audits between 1997 and 1999, and after 1999 continued to use some non-audited carriers[14]. In addition, the TRMPP-required truck inspection records were not completed between 1997 and 1999. Studies conducted in support of Resolution 93-480 found that use of safe carriers contributes significantly to increasing the safety of LPG/NGL shipments. The audits that Torch/Nuevo failed to complete are the principal tool used to evaluate the safety practices of the carriers. Therefore, Torch/Nuevo's non-compliance with the condition increased the risks associated with transporting these hazardous materials on County roadways. Other violations under review include exceedances of the permit-specified truck capacity of 9,000 gallons, the absence of speed governors on some of the trucks used, and the absence of cell phones for carriers using Highway 166. Although there were no reported accidents regarding the transportation of natural gas liquids during this time period, the risk of an accident was increased due to Torch/Nuevo's failure to comply with the TRMPP.

According to Nuevo, the company (a subsidiary of Torch Energy Advisors, Inc.) that Nuevo used to manage the transportation of LPG/NGL's from the LOGP did not do so in compliance with the TRMPP and the FDP conditions of approval. Nuevo has indicated that they have hired a new company, Coral Shell Trading, to manage its LPG/NGL shipments. As of March 2002 the Energy Division determined that Torch/Nuevo had come into current compliance with its TRMPP. The full scope of the historic TRMPP violations are currently under review by the Energy Division.

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[13] As a condition of resuming operations in December 1997, the County required annual magnetic particle tests, as well as annual ultrasonic tests in two views.

[14] Several of the audits (motor carrier safety reviews) performed after 1999 were not complete and were not ranked according to the requirements set forth in the TRMPP.

The Energy Division is in consultation with County Counsel and the District Attorney's Office regarding these violations.

5.5.3.1.4 Oil Spill Contingency Plan (OSCP)

Condition P-13 of the Pt. Pedernales FDP requires submittal and implementation of an Oil Spill Contingency Plan for the Pt. Pedernales facilities. To satisfy this condition, Torch/Nuevo submitted two plans to the County in 1995 for review and approval, an Oil Spill Contingency Plan for the 20-inch oil pipeline and a plan for the LOGP. In 2001, the County advised Nuevo that updates to the OSCPs were required to address changes in the project area environmental setting and to update critical contact information. Nuevo is in the process of updating the OSCP for the LOGP but has not provided the required updates to the pipeline OSCP[15].

During compliance meetings with the County in the Fall of 2001, Nuevo advised the County that a revision to the pipeline OSCP had been submitted for review and approval to MMS and CDFG Office of Oil Spill Prevention and Response (OSPR) in 2000 (the plans were approved by those agencies in 2002). The U.S. Coast Guard, California Coastal Commission, State Lands Commission also reviewed these plans, but they were not submitted for County review and approval. While the County's 1995 approved OSCP for the 20-inch pipeline remains in full force and effect, the Plan is outdated. In addition, the County would like to ensure that there is not a conflict between the revised MMS/OSPR plan and the requirements in the County's permit.

After numerous requests beginning in October 2001, Nuevo submitted a copy of its federal and state OSCPs to the County on April 18, 2002. However, Nuevo has indicated that they will only respond to County comments on this document if and when the MMS and OSPR approve the changes the County requests.

5.5.3.1.5 Restoration and Revegetation Conditions

Several conditions required as a part of the original 1986 project approval (such as restoration of Old Terra Road and removal of pavement at the Surf Substation which were required in 1987) have not yet been satisfied. These permit conditions and requirements existed at the time of Torch's and Nuevo's acquisition of the Pt. Pedernales project (1994). Torch/Nuevo was specifically made aware of these requirements in November 2000 (per the 1998-2000 B-2 analysis). Nuevo has recently taken steps necessary to comply with the restoration conditions. The condition compliance has been somewhat complicated by the fact that this project is located on Vandenberg Air Force Base and requires federal approvals to fully implement. Nuevo has committed to a schedule to fully comply with the permit conditions, but that timetable is dependent on certain clearances being obtained from federal officials.

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[15] Nuevo contends that the emphasis of the County OSCPs is on restoration activities following a spill. However, Conditions P-13 and Condition H-9 (Restoration, Revegetation and Implementation Section of OSCP) both clearly specify that the OSCP is required to address oil spill prevention, response and restoration.

5.5.3.1.6 Harris Grade Fire

A separate compliance item not related the Pt. Pedernales project is Torch/Nuevo's alleged acts of non-compliance that resulted in the 2000 Harris Grade fire. This fire burned 9,700 acres and was caused by a spark from a Torch/Nuevo power pole line in the Lompoc Field, which ignited brush under the pole. A complaint filed by the District Attorney alleges that Torch/Nuevo failed to clear brush under poles in the Lompoc Oil Field in violation of Sections 4391 and 4292 of Public Resource Code and Chapter 15 section 15-1 (Appendix 2A) of the County Code. The District Attorney has indicated that based on a Fire Department inspection, Nuevo was determined to currently be in compliance with Public Resource Code requirements regarding brush clearing around the poles[16]. There is a continuing legal dispute over the 30 foot clearing requirements set forth in the County Code.

The response by Torch/Nuevo to the fire was considered satisfactory. In particular, Torch/Nuevo provided fire response activities and resources considered to be appropriate given the nature of the fire. The fire proved extremely hard to fight, however, but this difficulty was not attributed to a lack of dedicated resources from Torch/Nuevo.

5.5.4 Litigation

5.5.4.1 Oil Spill Litigation and Court Injunction

As discussed in Section 5.5.3.1.2, during Torch's tenure as operator of the Pt. Pedernales facilities and while under Nuevo's ownership, the 20-inch wet oil pipeline ruptured approximately 2.5 miles from shore. Although there was a low pressure alarm and automatic shutdown of the platform, Torch operators failed to rule out a leak or rupture as the source of the low pressure condition and overrode the pipeline system's leak detection system significantly increasing the spill volume[17]. The Energy Division found that the operators actions were in direct violation of the Final Development conditions, specifically condition P-2 (Safety Inspection, Maintenance and Quality Assurance Program (SIMQAP), P-13 (Oil Spill Contingency Plan) and P-16 which requires the installation and use of a supervisory control and data acquisition (SCADA) system for components of the project.

Based on a joint investigation by the District Attorney's office and the Energy Division, a civil case was filed regarding the acts which violated key safety conditions of the Torch's County permit. The case was settled on May 24, 2001 for $1,000,000. Not withstanding the settlement, Nuevo maintained that its operator acted appropriately at the time of the spill [18]. In addition to the cash settlement, the companies were enjoined from failing to adequately train their Platform Irene control room operators to not restart delivery of crude oil the wet oil pipeline after an unintended

[16] Personal communication with Jerry Lulejian, Senior Deputy District Attorney May 7, 2002.
[17] In terms of cleaning up the spill once it had occurred, several agencies gave Torch high marks for its response efforts.
[18] Nuevo Press Release dated May 24, 2001.

shut down before verifying that the cause of the such shutdown is other than a leak or pipeline rupture. The injunction has a two-year duration.

To satisfy the requirements of the injunction, Nuevo has issued a management directive, conducted trainings, and updated its pipeline operating manual to address appropriate steps to take in the event of a low pressure shutdown.

As discussed below, Nuevo is currently appealing the authority of the County to enforce such conditions on permits.

5.5.4.2 Appeal of the Court Injunction

On February 14, 2002 Nuevo filed an appeal seeking reversal of the injunctive portion of the final settlement of the 1997 oil spill litigation. Nuevo contends that under the Federal Pipeline Safety Act and the Outer Continental Shelf Lands Act, the County is preempted from enforcing permit conditions imposed via a land use permit for the Pt. Pedernales pipelines, and activities at Platform Irene. This includes the County's requirements for safety-related compliance plans such as the Safety, Inspection, Maintenance and Quality Assurance Program (SIMQAP) as it applies to the Platform and pipelines.

This case is currently pending before the Court of Appeals. Briefing will be completed in mid June and oral argument should occur sometime in the fall or shortly thereafter. Although it is difficult to predict, a decision will probably be issued early next year. Further appeals beyond that point are possible.

5.5.4.3 Natural Resources Damage Assessment Settlement

A Consent Decree was issued by the United States District court, Central District of California,Western Division on May 17, 2002. This decree sets forth a $3,000,000 settlement consisting of $2,397,000 in natural resource damage claims, $299,000 in penalties to State Agencies (including the Department of Fish and Game, State Lands Commission, and Coastal Commission), and $304,300 in penalties to federal agencies. The decree also includes a compliance program that consists of a 2-year injunction (similar to the County's) which enjoins Nuevo from failing to positively determine the cause of a low pressure shutdown and consulting with the platform Foreman and Production Superintendent prior to reintroducing fluids into the pipeline following a low pressure shutdown. The injunction also requires development of a computer operating system training program designed to train all personnel actively involved with the computer system to fully understand its functions, with special emphasis on the leak detection features of the system. Pursuant to the decree, Nuevo is also required to update its Oil Spill Response Plan to include the provisions of the consent decree compliance program. The penalties were sought pursuant to the following statutes and regulations: the Endangered Species Act, the Oil Pollution Act, the Outer Continental Shelf Lands Act, the Clean Water Act, the California Government Code, the California Fish and Game Code, and the California Public resources Code.

6.0 PROJECT ANALYSIS

6.1 CEQA Baseline and Extension of Life

According to CEQA Guidelines Section 15125, the baseline should normally be the physical environmental conditions in the vicinity of the project, as they exist at the time the NOP is published. Where a proposed project will modify an existing project, it is important that the baseline also consider historic operations of the existing project based upon "normal fluctuations" as determined by need, capacity and other relevant factors.

All of the existing facilities have permits that specify maximum operating levels. However, a number of these facilities are not currently operating or could not be expected to feasibly operate at the maximum levels allowed by the permits. Since permitted operating levels differ from actual operating levels, this section describes the baseline that was used in the EIR analysis to determine impacts associated with the proposed project.

6.1.2 Tranquillon Ridge Project

The existing Point Pedernales facilities are currently used to handle the production from the Point Pedernales Field. Thus, the baseline for Tranquillon Ridge in the EIR reflects the existing Point Pedernales facilities operating at the oil and gas production levels experienced at the time of issuance of the original NOP (July 2000) and not the permitted levels contained in the FDP permit, which were never achieved with the Point Pedernales Project and not applicable to an new, and as yet unapproved state lease. This baseline was used for the following reasons.

- Oil and gas reserves in this field are diminishing (Figure 8) ;
- The 1985 Point Pedernales EIR/EIS did not consider the environmental impacts of processing future projects at the LOGP to a permit level of detail; and
- The FPD permit conditions limit throughput at the LOGP to oil and gas from the Point Pedernales Unit only.

The baseline for the expected life of the Point Pedernales facilities is the same as assumed in the 1985 Point Pedernales EIR/EIS and the 1993 Point Pedernales SEIR. As discussed in the EIR and in Section 5.4.1.7 of this staff report. The Tranquillon Ridge Project, would extended the life of the Point Pedernales Facilities by 10 to 25 years beyond what was assumed in the previous environmental documents.

Table 6 (see Section 5.4.1) summarizes the changes that the Tranquillon Ridge Project will have on existing Point Pedernales facility operations as compared to the operating levels at the time of issuance of the NOP and various permitted levels.

Implementation of the Tranquillon Ridge Project would also result in an increased throughput of crude oil through the Tosco Point Pedernales Pipeline, which moves the dry oil from the LOGP to the Tosco Santa Maria Refinery. This pipeline has a permitted capacity of 36,000 bpd. The average throughput through the pipeline in 2000 was 7,300 bpd. Since this pipeline primarily ships oil only from the LOGP, the throughput has been diminishing along with the production from the Point Pedernales Field. As such the baseline for this pipeline was assumed to be the throughput at the time the NOP was issued (7,300 bpd).

6.2 Environmental Review

With respect to the Pt. Pedernales Project, to date, six environmental documents have been prepared pursuant to the CEQA. They include reviews for:

(1) the originally proposed project (an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) finalized in 1985);
(2) construction and operation of a gas plant at the Lompoc facility to replace the Battles Gas Plant (a Supplemental EIR finalized in 1993);
(3) transportation of natural gas liquids (NGLs) from the Lompoc facility (an EIR Addendum finalized in 1993);
(4) temporary onshore re-injection of the natural gas produced offshore during the period between closure of the Battles Gas Plant and commissioning and operation of the Lompoc Gas Plant (an EIR Addendum finalized in 1995);
(5) process design and capacity modifications to the originally proposed Lompoc Gas Plant (an EIR Addendum finalized in 1996); and
(6) an increase in the H_2S concentration of the off- to onshore natural gas pipeline from 4,000 ppm to 8,000 ppm (an EIR Addendum finalized in February 1999).

Because the Tranquillon Ridge project involves a new state lease, and has not be analyzed in these prior documents, a new EIR (01-EIR-04, SCH # 2000071130) has been prepared to address the project. The document was prepared to meet state and county CEQA guidelines. Since a federal permit action may also be required, the EIR was also prepared to meet National Environmental Policy Act Requirements. The EIR was prepared under the supervision of a Joint Review Panel (JRP)[19]. The County is the CEQA lead agency and will act first on the Tranquillon Ridge application.

The EIR also addresses impacts associated with the LOGP Produced Water Treatment Project and the Sisquoc Pipeline Bi-directional Flow Project. These projects are separate from but related to the Tranquillon Ridge Project.

A public draft EIR was issued on February 7, 2002 for a 45-day public comment period. Three public hearings were held to take comments on the public draft. Two of the public hearings were held in Lompoc (February 21, 2002, and March 14, 2002). The third public hearing was held in

[19] The JRP is comprised of the following agencies, California State Lands Commission, California Coastal Commission, Santa Barbara County Planning Department, and the Santa Barbara County Air Pollution Control District. The US Minerals Management Service (MMS) is an advisory member of the JRP.

Santa Barbara (April 29, 2002). This third public hearing was held by the CSLC to comply with Public Resources Code Section 6873.5, which requires that the CSLC hold at least one hearing on the draft EIR prepared for the proposed lease in a jurisdiction of a local governmental agency within the coastal zone.

6.2.1 Project Alternatives

The projects and alternatives analyzed in the Final EIR are discussed below and shown on Figure 9. The EIR used an alternative screening analysis to limit the number of alternatives evaluated in detail throughout the EIR. The following are alternatives selected as part of the EIR screening analysis

No Project Alternative

No Project Alternative for the Tranquillon Ridge Project would involve development of the Federal portion of the Tranquillon Ridge Field. The Federal portion is estimated to be about 11 percent of the entire Tranquillon Ridge Field. It has been estimated that three new wells would be drilled from Platform Irene into locations in Federal Waters. Nuevo has already drilled one well into the Federal portion of the Tranquillon Ridge Field as part of the Point Pedernales development.

Based upon MMS data for Point Pedernales wells, it is estimated that oil production from the Federal portion of the Tranquillon Ridge Field would peak at around 4,100 bpd, 27 months after drilling began. The peak production from Platform Irene would be about 9,000 bpd, which is close to the average production in 2000 (7,300 bpd) and the peak monthly production in 2000 of 8,500 bpd. Gas production from Platform Irene was estimated to peak at around 3.5 mmscfd, with the estimated recoverable reserves being about 5 percent of the proposed Tranquillon Ridge Project.

Under the No Project Alternative, the life of the Tranquillon Ridge Field has been estimated to be approximately 10 years, which is within the current projected life of the Point Pedernales Field operations. . The wells necessary to develop the federal reserve involve directional drilling, which has high costs. Therefore, the limited production that may be possible may or may not be justified based on the costs of production and other economic factors, including the sale price of oil.

Casmalia Processing Site

The County's North County Siting Study (October 2000) identified several onshore processing locations that could serve as possible consolidated oil and gas processing facilities in the North County. Specifically, potential sites in the Casmalia oil field and Casmalia Canyon are more rural and would potentially result in lower impacts than the LOGP facility. Oil and gas processing at the Casmalia East site would require the construction of completely new processing facilities and additional pipelines. New wet oil and sour gas pipelines would need to be constructed from the LOGP to the Casmalia site. In addition, a new gas compressor station and wet oil/produced water

pump station would need to be built at the LOGP site to move the wet oil and sour gas to the Casmalia site and the produced water back to Platform Irene for disposal.

New Emulsion Pipeline from Platform Irene to the LOGP (Tranquillon Ridge Only)

Under this alternative, the emulsion pipeline between Platform Irene and the LOGP would be replaced with a new pipeline of the same diameter. The primary objective of this alternative would be to address potential impacts associated with the integrity (cracking and corrosion) of the existing pipeline as a result of the increased throughput and extended project life associated with the proposed project. This newer pipeline would allow for the operation of the pipeline at higher pressures and therefore may eliminate the need for the Valve Site #2 pumps and associated power lines.

Alternative Power Line Routes to Valve Site #2

The proposed Tranquillon Ridge Project may require the construction of new power lines to Valve Site #2 to power three 1,250 horse-power (hp) electrical booster pumps that are proposed to be installed on the 20-inch oil pipeline between Platform Irene and the LOGP. These pumps and associated power line would only be needed if the oil pipeline's working pressure has to be derated below 1,000 pounds per square inch (psig) sometime in the future. The main power line route that was proposed by the Applicant would deliver power from an existing power line located on Ocean Avenue, using new power poles that would run from Ocean Avenue to Valve Site #2. Three different alternative power line routes have been evaluated in this EIR. Two of the alternative routes involve alternate locations/methods of crossing the Santa Ynez River. One of the alternatives involves undergrounding the power lines underground along a portion of the route to Valve Site #2.

Alternative Muds and Cuttings Disposal Options

The Applicant has proposed to discharge the drill muds and cutting to the ocean in accordance with the existing NPDES permit. One of the alternatives would involve collecting and injecting the muds and cuttings into an appropriate underground reservoir for disposal.[20] Equipment required to inject the drill muds and cuttings would include a holding tank, pulverizing pump, injection pump, and piping connections to an injection well head on a dedicated disposal well. The feasibility of this approach is dependent on the availability of suitable underground formations.

The other alternative would be to move the muds and cuttings via boat to shore for disposal at an approved site. Once ashore, trucks would transport the used drill muds and cuttings to an approved disposal site or, if feasible, to a facility for recycling.

6.2.2 Tranquillon Ridge Impacts and Mitigation Measures

[20] Reinjection is currently occurring on the SYU platforms in the Santa Barbara Channel.

A summary of the impacts and mitigation measures is included in Attachment C. The EIR identifies 13 significant and unavoidable impacts. The impacts occur in the following issue areas: Aesthetics and Visual Resources, Hazardous Materials/Risk of Upset, Terrestrial and Freshwater Biological Resources, and Onshore Water Resources. All of the significant and unavoidable impacts (Class I impacts) and most of the significant but mitigable impacts (Class II) of the Tranquillon Ridge Project are associated with the increased throughput and the extension of life of the Pt. Pedernales facilities.

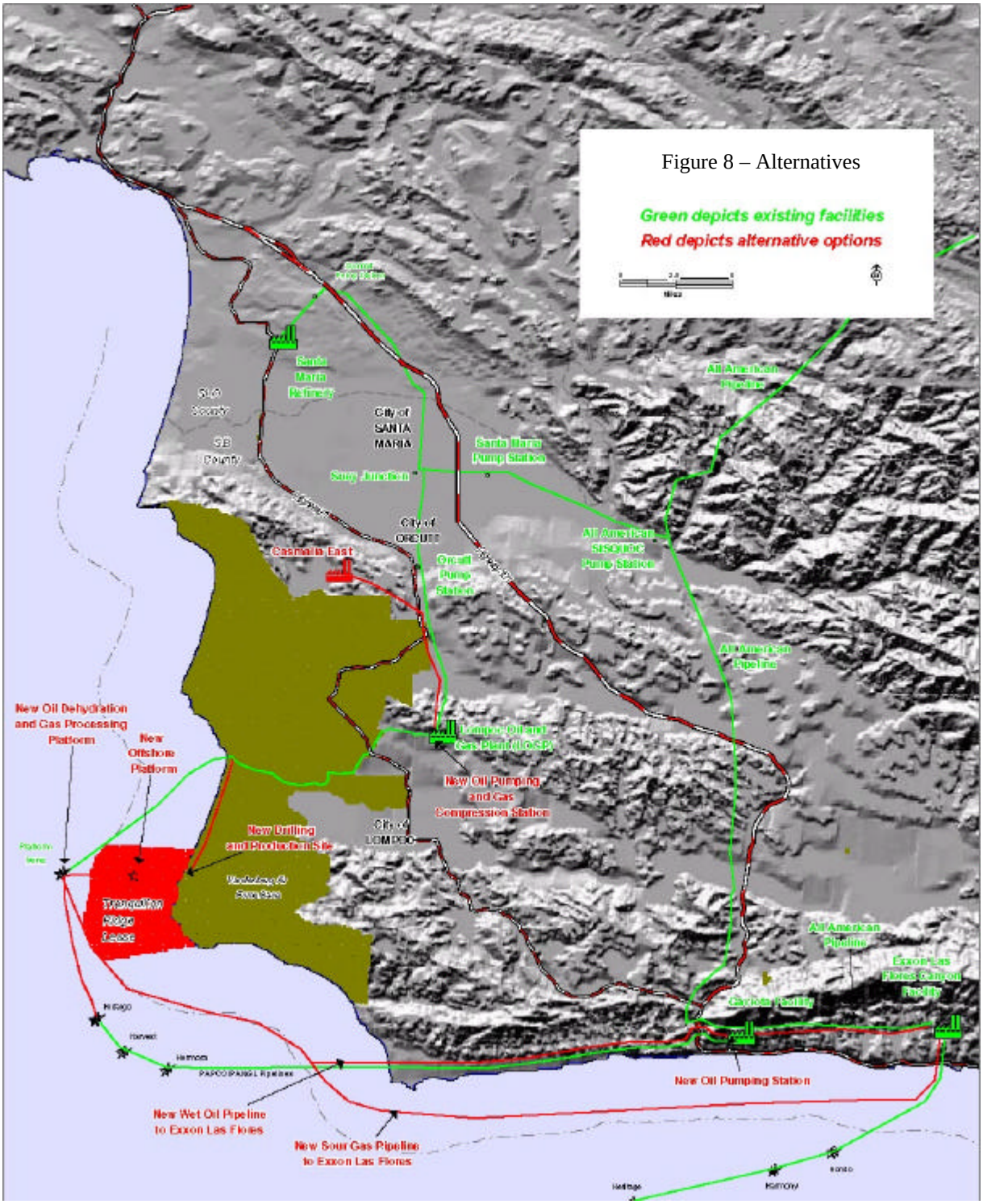


Figure 8 – Alternatives
Green depicts existing facilities
Red depicts alternative options
Santa Maria Refinery
City of SANTA MARIA
Santa Maria Pump Station
Sisquoc Junction
All American Pipeline
All American SISQUOC Pump Station
Orcutt Pump Station
Casmalia East
Lompoc Oil and Gas Plant (LOGP)
New Oil Pumping and Gas Compression Station
New Oil Dehydration and Gas Processing Platform
New Offshore Platform
New Drilling and Production Site
Tranquillon Ridge Lease
Exxon Las Flores Canyon Facility
New Oil Pumping Station
New Wet Oil Pipeline to Exxon Las Flores
New Sour Gas Pipeline to Exxon Las Flores

6.2.2.1 Risk of Upset

Impact Summary: The Tranquillon Ridge Project poses a number of potential safety impacts (injuries and deaths) due to variety of potential upset conditions. These upset conditions include leaks or ruptures of the crude oil pipeline on or offshore; leaks or ruptures of the off to onshore sour gas pipeline; and transportation of natural gas liquids from the LOGP. These impacts are currently associated with the Pt. Pedernales project but the duration of the potential impact to the public and the severity of the impact would increase due to the increased oil and gas production levels and the extension of life of the facilities. Of these potential impacts, only the transportation of natural gas liquids represents a significant unavoidable impact. The remaining impacts are classified as adverse but less than significant, assuming that existing permit conditions regarding safety remain in full force and effect.

Mitigation Measures: To minimize potential safety impacts the transportation of NGLs must be consistent with Board of Supervisor's Resolution 93-480. All other system safety measures that apply to the Pt. Pedernales project would also apply to the Tranquillion Ridge Project's use of the Pt. Pedernales facilities. Even with implementation of these measures the residual impact of transporting of NGLs/LPGs would be significant and unavoidable.

In addition to the above measures, to ensure that public safety impacts of operating the sour gas pipeline remain less than significant, the Applicant would be required to ensure that pipeline operation does not exceed an operating pressure of 600 psig and a hydrogen sulfide concentration of 8,000 ppm.

6.2.2.2 Terrestrial and Freshwater Biology

Impact Summary: Modification of Valve Site #2 and installation of power poles and transformer station would result in disturbance or loss of less than one acre of native vegetation and wildlife habitat and possible injury to wildlife. These impacts are potentially significant but mitigable. Construction activities at the LOGP would be within previously disturbed areas creating no new biological impacts. Construction activities at both these site could however result in an adverse increase in erosion and sedimentation in adjacent aquatic habitats.

Pipeline maintenance and repair, if needed, would result in potential removal of native vegetation and wildlife habitat and erosion and sedimentation as a result of ground disturbance. Pipeline repair may injure or eliminate individuals or colonies and habitat of state or federally listed plant species and may cause injury or mortality to individuals and affect habitat of common and federally and state-listed fish and other sensitive wildlife species. These impacts are potentially significant but mitigable.

A pipeline leak or rupture could result in an oil spill and subsequent significant and unavoidable degradation of upland, riparian and aquatic habitats and injury to plants and terrestrial and aquatic wildlife through direct toxicity, smothering, and entrapment as well as through resultant cleanup efforts. Under the worst case, onshore spill volumes would increase by approximately 625 barrels (from 1,354 to 1,979 barrels) with a 0.6 percent increase in the probability of a rupture and 2

percent increase in the probability of a leak. A spill and/or subsequent cleanup efforts may directly or indirectly cause the loss of habitat and individuals or colonies of state-or federally-listed plant species including seaside bird's beak, Surf thistle, beach spectacle pod, La Graciosa thistle and possibly Pismo clarkia or degrade designated critical habitat for the Lompoc yerba santa and the La Graciosa thistle. An oil spill and/or subsequent cleanup effort may directly or indirectly cause the loss of individual state or federally-listed wildlife species or cause the loss or degradation of sensitive species habitat. An oil spill and/or subsequent cleanup effort may impact designated critical habitat for steelhead, western snowy plover, and California red-legged frog.

Mitigation Measures: To minimize the biological impacts associated with modifications to Valve Site 2, mitigation measures identified in the EIR include mounting the new lines on existing project area infrastructure (such as existing VAFB poles or the 13th Street Bridge) or if this is not feasible locating the poles and adjusting the height of the poles to minimize impacts to vegetation and to avoid conflicts with wildlife using the riparian corridor of the Santa Ynez River. Erosion and sedimentation impacts would be mitigated by timing construction to occur during the rainy season and the installation of erosion control measures.

To mitigate impacts to biological resources (including impacts to sensitive species) during pipeline repair and maintenance activities, the EIR idenitifies the need to develop and implement a standard maintenance and repair plan and to prepare and implement restoration, revegetation and erosion control plan. The EIR identifies specific updates to the Oil Spill Contingency Plan(s) to reduce spill related impacts. Updates include revised spill volume calculations, identification of site specific response and restoration measures, identification and use of low impact cleaning methods, and adequate training and spill response resources.

6.2.2.3 Geological Resources

Impact Summary: Repair activities and potential oil spill remediation activities could increase slope failures, erosion, sedimentation, and gullying. Scouring along drainage areas could cause impacts to the pipeline and increase pipeline failure probabilities. Impacts to geological resources are generally significant but mitigable.

Mitigation Measures: To reduce geologic impacts erosion and sediment control best management practices (BMPs) would need to be implemented during construction and during remediation activities. The BMPs would be included in the Oil Spill Contingency Plan. A creek and drainage maintenance program would also be required to monitor and respond to scour in the drainage crossed by the pipeline.

6.2.2.4 Onshore Water Resources

Impact Summary: Project related construction, repair and maintenance activities, and/or oil spill remediation could cause erosion or siltation resulting in substantial degradation of surface water quality. In addition, a rupture or leak from the emulsion, produced water or dry oil pipelines could

substantially degrade surface and groundwater quality. In addition to the water quality impacts discussed above, the LOGP's contribution to overdraft of the Lompoc groundwater basin would also be extended in duration.

Mitigation Measures: Measures identified in the EIR to address the aforementioned water resource impacts include: implementation of erosion and sediment control measures on any land disturbing activities; installation of a new oil containment berm around Valve Station 2; upgrades to the SCADA leak detection systems; updates to the OSCP; maintenance of the existing oil catch basins; and restoration of any disturbed creek beds to pre-spill contours.

6.2.2.5 Marine Biology

Impact Summary: Oil spills from the project may impact benthic and intertidal organisms, fish, marine mammals, marine birds, and marine turtles. These impacts could be potentially significant and unavoidable depending on the volume of oil released and the location of the spill[21]. However, the potential worst case spill would increase with the proposed Tranquillon Ridge Project and the potential for a spill would occur over a longing duration (up to additional 25 years). Offhore, the potential worst-case spill volume would increase by approximately 3,800 barrels (from 2,868 barrels to 6,718 barrels) with an 8.5 percent increase in the probability of a rupture and a 4.4 percent increased probability of a spill.

Plankton would be expected to be adversely but not significantly affected by a project-related oil spill. A number of other adverse but less than significant impact to marine resources would also occur including effects due to the discharge of drilling mud and produced water at Platform Irene, impacts to marine mammals and birds from drilling noise, and the potential for increased collisions between vessels serving the platform and marine mammals and marine turtles.

Mitigation Measures: Mitigation measures to reduce the oil spill impacts include: updating the oil spill response plans to address the change in operations and to incorporate lessons learned during the 1997 spill; discharging produced water at the existing 180 foot shunt depth; conducting a baseline oiling study; providing for wildlife car; and providing marine mammal observers on boats serving the platform. Even with implementation of the measures identified in the EIR, potential impacts to marine resources from a spill would remain significant.

6.2.2.6 Oceanography and Marine Water Quality

Impact Summary: Accidental discharge of petroleum hydrocarbons into marine waters would significantly affect marine water quality. The increased risk of an ocean oil spill arises because of an increase in the facility lifetime, an increase in crude-oil throughput, and an increase in the blowout potential if the new wells encounter a pressurized reservoir. The combined probability of

[21] Impacts from spilled oil have occurred in an association with the existing Pt. Pedernales project refer to Section 5.5.3.1.2(

oil leaks, ruptures, blowouts, and spills from Platform Irene and the offshore portion of the wet-oil transmission line would approximately double under the proposed project.

Ocean impact areas were found to be similar for spills from Platform Irene and from the oil-emulsion pipeline. Spills could potentially extend substantial distances and impact the Channel Islands Marine Sanctuary and ocean areas south of the Channel Islands (Figure 10). Uncertainty concerning the influence of wind drift on spilled oil, limitations in the model, and the prevailing northward surface current flow suggest that oil spilled within the project area could also impact coastlines to the north, as well as open-ocean areas south of Point Sal.

Adverse but less than significant marine water quality impacts that would result from implementation of the project include: reduced marine water and sediment quality from increased oceanic discharge of drilling fluids and from discharge of produced water, and additional discharges of sanitary wastes, desalinization brine, and other materials from Platform Irene.

Mitigation Measures: The significant marine water quality impacts of the project can be reduced (but not to a less than significant level) by revisions to the OSCP/OSRP and through regular inspections of the subsea pipelines. Other pipeline safety and water quality measures identified in the Pt. Pedernales FDP would continue to apply to the Pt. Pedernales facilities

No additional measures have been identified to reduce the other non-spill related adverse but less than significant marine water quality impacts.

6.2.2.7 Commercial and Recreational Fishing/Kelp Harvesting

Impact Summary: Oil spills may potentially impact commercial and recreational fishing in the proposed project area. This impact could be significant and unavoidable particularly to resources located in the intertidal zone. Oil spills and drilling muds and cuttings discharge may potentially impact commercial and recreational kelp harvests in the proposed project area. Impacts to kelp harvesting would be adverse but less than significant. The deposition of shells, or shell mounds, could prevent commercial trawling activities beneath Platform Irene, this would also be an adverse but less than significant impact due to the small area precluded.

Mitigation Measures: Mitigation for oil spill related impacts are centered on the revisions to the Oil Spill Response Plan. Because there are limitations to thorough containment and cleanup of an offshore oil spill, significant impacts (Class I) remain for commercial and recreational fisheries in the intertidal zone. To minimize, trawling impacts the EIR identifies that the shell mounds shall be removed or modified using the best available technology.

6.2.2.8 Air Quality

Impact Summary: Construction activities at Valve Site 2 and the LOGP will result in new short-term emissions. These emissions would be less than significant and would be reduced by implementation of dust control measures. Increased oil processing and drilling of the new Tranquillon Ridge Unit wells at Platform Irene would result in an increase in operational air emissions including emissions of particulate matter, NO_X and ROCs. Emissions from processing and drilling would be significant but mitigable. The project would also result in adverse but less

than significant increased health risks from the increased emission of hazard air pollutants at the LOGP.

The primary source of greenhouse gases (GHG) in the United States is energy-use related activities, which include fuel combustion, as well as energy production, transmission, storage and distribution. The proposed Tranquillon Ridge Project would result in the production of crude oil and natural gas. These products would be used to help meet the energy needs of California and the U.S.. Fossil fuel combustion represents the vast majority of the energy related GHG emissions, with CO_2 being the primary GHG. The use of the fossil fuel produced from the proposed Tranquillon Ridge Project would generate GHGs, but would not result in any overall change to the U.S. GHG inventory.

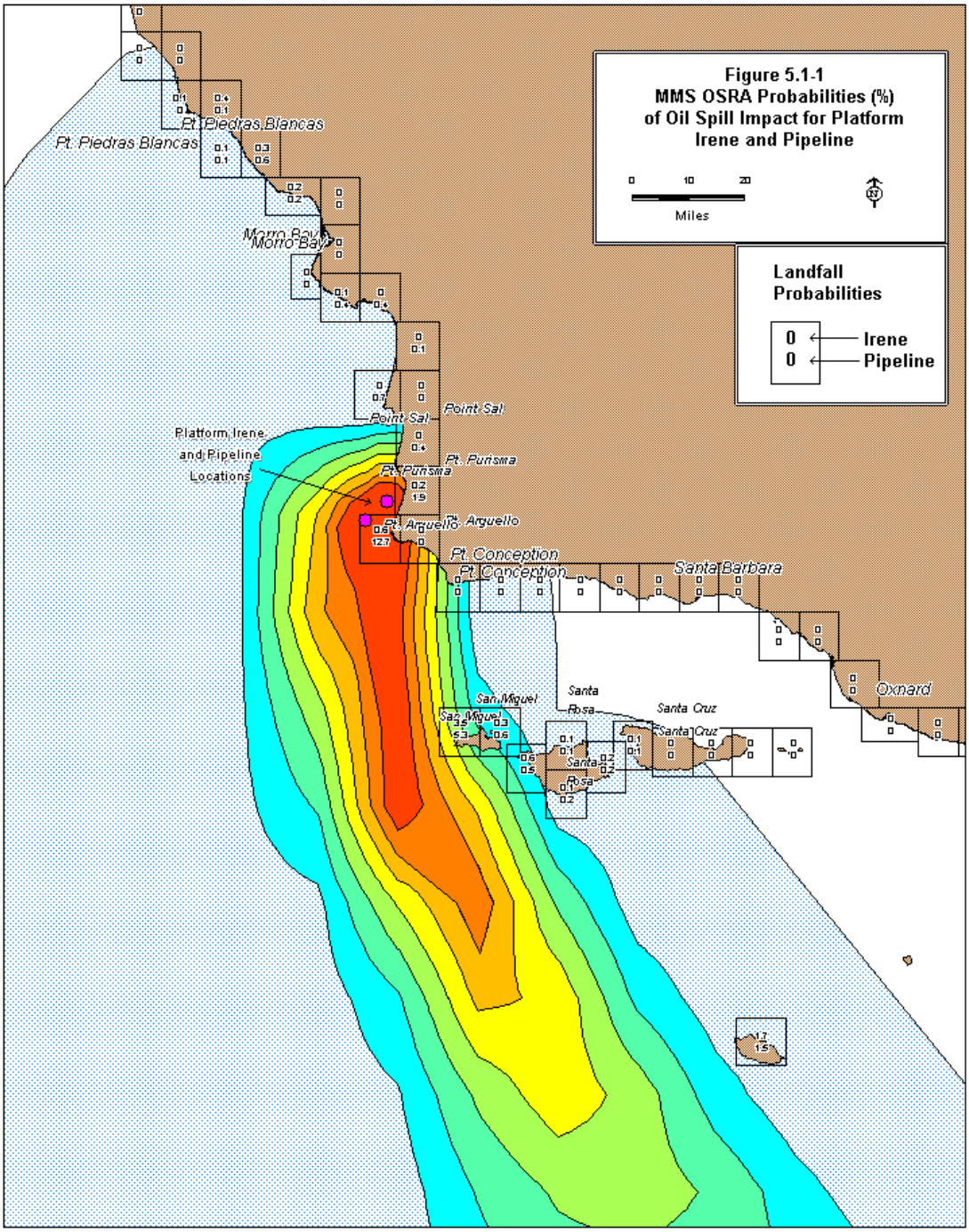
Mitigation Measures: To reduce the operational emissions to a less than significant level emission reductions must be provided to fully mitigate the increases in consistent with SBCAPCD Rules and Regulations. Dust control measures would also be required.

6.2.2.9 Traffic

Impact Summary: Onshore construction associated with the project would temporarily add to local road traffic predominantly on Highway 246 and Harris Grade Road. The increased pipeline throughput would result in increased production of NGLs/ LPGs and possibly sulfur products. These truck trips would increase from 2.9 per week to 5 per week. This impact to traffic represents an increase of 0.07 percent in daily vehicle trips on Harris Grade Road, which would not change the LOS. Construction traffic and new operational traffic would be adverse but not significant.

The proposed Tranquillon Ridge Project would increase supply boat traffic servicing Platform Irene only during the drilling phase of the project. The impact during drilling would represent a one percent increase over existing levels and would not be considered significant.

Figure 10 – MMS OSRA Oil Spill Probabilities (%)



Based on MMS OSRA analysis, year 2000, annual average 30-day timeframe.
Conditional probabilities demote a point travel (trajectory) in 30 days and do not indicate spill areas or spill volumes.

An oil spill could result in the closure of the Coast Guard's recommended marine traffic corridors through the Santa Barbara Channel and restrict boating along up to 70 miles of coastline and San Miguel, Santa Rosa, and western Santa Cruz Islands, a regionally significant impact.

Mitigation Measures: Mitigation measures to reduce construction and operational traffic on project area roadways includes requiring that project related construction and operational trip occur outside of the peak transportation periods. Increases in vessel traffic would be mitigated by requiring supply boats from Port Hueneme to use the Coast Guard's recommended marine traffic corridors to the maximum extent feasible.

6.2.2.10 Noise

Impact Summary: Drilling associated with the proposed project would increase ambient noise levels due to drilling rig operation and additional helicopter and supply boat trips. Increased noise from drilling and production would be audible to sensitive receptors but would not exceed the county's significance thresholds. Potential operational noise impacts from helicopter use would be considered insignificant as long as the increased helicopter flights maintain the current 1,000 foot minimum flight levels.

Construction and operational noise at Valve Site 2 would be audible to sensitive receptors but would not exceed applicable county noise thresholds.

Modifications at the LOGP are projected to last 9 months and to increase ambient noise levels at sensitive receptors in Vandenberg Village. Residences along Calle Lindero and Rucker Road in Mission Hills could experience increases of 14 dBA. Because these noise increases would not cause noise levels to exceed the construction significance criterion of 65 dBA, these temporary construction impacts would be considered adverse but not significant.

Pump operation at the LOGP is projected to increase ambient noise levels at sensitive receptors in Vandenberg Village. Residences on Firestone Road, which are in the line of sight of the LOGP, could experience respective day, evening, and nighttime ambient noise level increases of 1, 5, and 3 dBA from the current background levels. These increases in ambient noise level in Vandenberg Village would be minimally perceptible and do not exceed the significance criterion for long-term impacts; therefore, the impact is considered adverse but not significant.

Mitigation Measures: To mitigate these adverse but less than significant impacts the EIR identifies the need to a minimum helicopter flying height of 1000 feet and to limit construction hours to day time (7:00 am to 4:00 pm) and weekdays. No additional measures are identified to reduce the adverse but less than significant operational noise.

6.2.2.11 Fire Protection and Emergency Services

Impact Summary: Operation of the new pumps at Valve Site #2 would increase the probability of an oil spill at this location. This increase in the probability of an oil spill would represent an increase in the demands on emergency response services. However, since there are sufficient resources to respond to an upset condition, these resources are located within 15 minutes response time from the valve site, and the likelihood of a fire is low; the impacts to fire protection and emergency response from the installation of the new pumps at Valve Site #2 are considered adverse but not significant.

The installation of new powerlines to serve Valve Site 2 would also have a potentially adverse impact to emergency response resources. Overhead power lines have a risk of fire, if a line breaks because of high wind, if the poles are hit by vehicles, or if brush in the vicinity of any transformers are not properly cleared. Because of the low likelihood of fire, adequate response capabilities, and adequate response time, the impacts to fire protection and emergency response resources are considered to be adverse but not significant.

In the worst-case scenario, onshore spill rates would increase by 625 barrels, if the SCADA system is not operational over current operations, which could result in a larger area being impacted as a result of a spill. However, the change in spill volumes is relatively small (3.3 to 9.8 percent), and response capabilities are currently available for spill volumes that could occur with the proposed projects. Given the nature of the crude oil (high water content), it is highly unlikely that a fire would result in the event of a spill.

Increased likelihood of upset conditions due to equipment modifications at the LOGP and potential increase of wet oil and sour gas quantities processed at the facility could create impacts to fire protection and emergency response. Because of adequate facility design, sufficient response capabilities and response time the impacts on the fire protection and emergency response resources for the LOGP facility are considered adverse, but not significant.

Mitigation Measures: The primary measure to minimize impacts to emergency response resources would be implementation of the existing Pt. Pedernales conditions of approval and updates to the project's Fire Protection Plan to address the new equipment and production.

6.2.2.12 Cultural Resources

Impact Summary: There are 22 recorded archaeological sites located within 200 feet of the existing oil pipeline between landfall and the LOGP. Although these sites were previously disturbed by the construction of the existing pipeline, most are determined to be a potentially significant historic resource. Pipeline maintenance and repair, if needed, would result in ground disturbance and potentially significant impacts on any cultural resource in the affected areas.

Approximately three to five proposed power poles would be installed to support the proposed power line crossing of the Santa Ynez River. The new power poles would cause ground disturbance up to 10 to 12 feet deep. Approximately 300 feet of backhoe trenching would also be needed for undergrounding the power line under the VAFB power line immediately after the river. Although there are no recorded cultural resources within the proposed power pole locations or within the small trenching area, there is a potential for unrecorded sites because these areas have

never been surveyed for cultural resources. Areas adjacent to the Santa Ynez River are considered highly sensitive for cultural resources. The proposed pole line across Santa Ynez River and trenching in the area immediately adjacent to the river would be in the areas that have not been previously surveyed. Therefore, there is a potential for significant impact to cultural resources.

Containment and cleanup activities associated with an accidental oil spill would result in ground disturbance and potential significant and unavoidable impacts on cultural resources. Containment activities that would potentially affect cultural resources include the use of heavy earth moving equipment (e.g., graders, scrapers, front-end loaders) or manual excavation to remove oil-contaminated material. If

Mitigation Measures: Impacts due to pipeline maintenance activities would be minimized by providing monitors wherever pipeline construction would be within 200 feet of a recorded site or by requiring surveys on previously unsurveyed sections of pipeline. If resources are discovered work would need to be stopped and Phase II and III (data collection) studies would be required. Potential impacts to cultural resources resulting from installation of the new transmission lines would be reduced by requiring surveys of all unsurveyed portions of the alignment and by relocating the poles, if needed, to avoid observed resources.

If spill occurred within areas of cultural sensitivity impacts would likely be significant and unavoidable. However to minimize impacts to these areas the OSRP would be updated to include procedures for minimizing impacts on cultural resources during oil spill containment and cleanup activities.

6.2.2.13 Aesthetics/Visual Resources

Impact Summary: The presence of the offshore platform and the Surf Substation, which are visible from the public beach by marine and coastal recreational users and from the Union Pacific Railroad, creates a negative aesthetic impact. This impact was classified as significant in the 1985 Point Pedernales EIR/EIS. The proposed Tranquillon Ridge Project would continue but not worsen this impact due to the extended life of Platform Irene.

Three additional pumps to be installed at Valve Site #2 would be placed within the same fenceline as the valve site equipment. The pumps would be 7 feet in height from the grade. Given the low profile of the facility and its remote location, the visual impacts of the pump installation at the Valve Site #2 are considered adverse but not significant.

The portion of the proposed power line along Terra Road would be in the area where currently there are no other poles or man-made structures. Because the area along Terra Road and in the vicinity of Valve Site #2 is highly scenic and is close to visually sensitive resources of the coastal zone, visual impact from presence of the new power lines on poles in the area would be significant.

The LOGP creates a significant nighttime glare from the light of the facility that can be seen through most of the Lompoc area, (including public viewsheds), and as far away as Highway 101 north of Los Alamos. This glare reduces the darkness of the night sky and could obscure the stars

and other astronomical phenomena. The proposed Tranquillon Ridge Project could prolong the life of the LOGP facilities beyond the projected lifetime of the approved Point Pedernales Project.

Mitigation Measures: Key mitigation measures to reduce the visual impacts include a revised landscaping plan for the Surf Substation, painting all new equipment in the colors that are compatible with the surroundings, undergrounding a portion of the new transmission line, and mounting the new transmission line on existing poles or the 13th Street Bridge, if feasible. The Pt. Pedernales project's contribution to the Coastal Resource Enhancement Fund would also be required over the extended life of the Tranquillon Ridge Project. Even with implementation of these measures the visual impacts of the Platform , Surf Substation, and the nighttime visual impacts of the LOGP would be significant and unavoidable.

6.2.2.14 Recreation/Land Use/Policy Consistency Analysis

Impact Summary: An offshore spill caused by an accident or failure at Platform Irene or in the offshore pipeline could lead to beach closures and boating restrictions during spill response and cleanup and a lingering public perception that recreation resource are polluted, even after the cleanup period. A worst-case scenario oil spill could reach recreational resources as far north as Montana de Oro State Park near Morro Bay and as far south as the Santa Barbara Channel Islands. The area from Point Sal to Point Arguello is at greatest risk from a spill due to its proximity to the Point Pedernales facilities; therefore Ocean Beach County Park, Point Sal Beach State Park, and Jalama Beach County Park would be impacted more than other recreation areas, with as much as 4,000 barrels of oil reaching the beaches.

An onshore spill further inland could adversely affect recreational resources such as the Burton Mesa Ecological Reserve, the Santa Ynez River, and Ocean Beach Park (via a spill into the river).

Mitigation Measures: Recreational impacts due to a spill would be reduced, but not to a less significant level by implementation of the existing system safety related conditions contained in the existing FDP and by the additional measures (e.g., OSRP/OSCP updates, SCADA system updates, etc.) proposed to address biological resources, water quality, risk of upset, and commercial and recreational fishing impacts. Continued CREF payments to address the extended recreational impacts would also be required.

6.2.2.15 Agricultural Resources

Impact Summary: Modifications to Valve Site #2 would include installing new electrical pumps, a transformer station and a power line to provide electricity for the pumps. Several of these facilities would be located on or traverse agricultural lands. Because of the very small areas of agricultural land that would be converted to non-agricultural use relative to the existing operation, the impacts on agriculture resources would be adverse but not significant. The additional truck trips to the LOGP are not expected to hinder the movement of farm equipment or generate dust that could impair the existing agricultural productivity of project area agricultural uses.

Oil spills can directly affect agricultural operations by reducing the availability or quality of soil, water, nutrients, and oxygen to plant root systems, hindering growth and possibly causing mortality in crops exposed to oil. Further, recovery of affected soils would be slow due to lingering toxicity and altered soil characteristics. Indirect effects from oil spill cleanup could include clearing and grading for access and removal of oiled crops and soil. Impacts to agricultural land could also occur during pipeline maintenance and repair operations as the existing Pt. Pedernales pipeline alignment traverses a number of agricultural lands.

Mitigation Measures: Measures to reduce agricultural impacts include revising the Oil Spill Contingency Plan (OSCP) to incorporate specific cleanup techniques on agricultural land (focusing on minimizing removal of top soil), conducting repairs when fields are fallow and using dust control measures, compensating for lost productivity and restoring disturbed crops or grazing land on a 1:1 basis. With implementation of these measures agricultural impacts would be reduced to a less than significant level.

6.2.2.16 Energy and Mineral Resources

Impact Summary: Construction of the Tranquillon Ridge Project would be short term and is not expected to require unusually high amounts of energy resources, or result in the use of energy in a wasteful or inefficient manner.

The Pt. Pedernales facilities are entirely dependent on the grid. The proposed Tranquillon Ridge and the LOGP Produced Water Facility Projects would increase demand for electricity. The maximum electricity usage increase due to the proposed project (174.1 MWh/day or 63.5 GWh/year) is approximately 0.02 percent of the electricity consumption within the State of California and does not represent a substantial increase in demand for electricity.

Over the project's life it has been estimated that it would produce around 170 to 200 million barrels of oil. In 2000, the State of California consumed 2 million bpd of crude oil. 77 percent to 90 percent of the oil production will be used to produce fuels such as gasoline, diesel and jet fuels. This means that the Tranquillon Ridge Project would generate between 5.9 and 7.5 billion gallons of fuel per year. Therefore, the fuels produced from the Tranquillon Ridge Project would provide approximately 77 to 100 days of fuel supply for California based upon year 2000 consumption data. During the peak year of production, the project would provide approximately 2.2 billion standard cubic feet of natural gas, which is about 0.01 percent of the total annual demand for natural gas within the State of California. The natural gas produced from the Tranquillon Ridge would be used to supply the local gas distribution system in Santa Barbara County. During the peak years of gas production, the Tranquillon Ridge Project would provide approximately 25 percent of the natural gas demand in Santa Barbara County.

The Tranquillion Ridge project would be a net producer of oil and gas, which would represent a beneficial impact to energy resources. The project would also use the existing Pt. Pedernales infrastructure, which minimizes energy demand from fabricating and installing new facilities. However, no audit has been conducted on the existing Point Pedernales facilities to determine if petroleum-based fuels are currently used in the most energy efficient manner.

Mitigation Measures: No mitigation measures were identified to address the adverse but less than significant energy impacts resulting from construction and operation of the project.

6.2.2.17 Environmentally Superior Alternative – Tranquillon Ridge Project

The No Project Alternative was found to be the environmentally superior alternative. This alternative would eliminate all of the Class I impacts associated with increased throughput and extension of life of the Point Pedernales facilities. There would still be a number of Class II and Class III impacts associated with the drilling of the wells into the Federal portion of the Tranquillon Ridge Field.

The No Project Alternative would fully meet the Applicant's objectives of the project, which is the full development of the Tranquillon Ridge Field. The No Project Alternative would result in the development of only 5 percent of the recoverable reserves when compared to the proposed project. Therefore, pursuant to CEQA Guidelines Section 15126.6(e)(2) a second environmentally superior alternative was identified. The Proposed Project with mitigation would be the next environmentally superior alternative.

The Proposed Project was chosen over the Casmalia processing site alternative because it would eliminate a number of Class I and Class II impacts due to construction (biological, cultural, agricultural, geologic, and onshore water resources)[22]. In addition, the Casmalia alternative would increase the severity of the Class I impacts due to increased oil and gas throughput and extension of life of the Point Pedernales facilities over the Proposed Project. The increase in severity is due to the additional length of pipelines needed to get the oil, gas and produced water between the LOGP to the Casmalia site

The replacement of the oil pipeline from Platform Irene to the LOGP was not chosen as an environmentally superior alternative because it would result in new Class II and Class III construction impacts to biological, cultural, agricultural, geologic, and onshore water resources. In addition, the replacement of the pipeline would not reduce the severity of the Class I oil spill impacts associated with increased throughput and extension of life of the Point Pedernales facilities. While the new pipeline would have a lower spill frequency (~10 percent lower) than the existing pipeline, the alternative would not reduce the potential oil spill volumes.

With regard to the handling of muds and cuttings, injection at the platform was selected as the environmentally superior alternative. This would eliminate the ocean discharge of the muds and cuttings (Class III for marine biology and marine water quality), and would eliminate the traffic and air emissions associated with onshore disposal (Class III). However, in order for this alternative to be implemented, a suitable underground formation would need to be found that could handle all of the muds and cuttings and would require MMS approval. In addition, the CSLC currently prohibits the release of ocean disposal of drill muds and cuttings to the ocean within in State Waters (where well completions would be located). However, disposal would take place in Federal waters at Platform Irene (where the muds and cuttings are collected), a currently approved

[22]This finding is based on the facility for processing of Tranquillon Ridge production only and does not consider the appropriateness of the site for other production from the Santa Maria Basin.

practice. If a suitable formation can not be found, or MMS does not approve the injection of muds and cuttings, then the onshore disposal of muds and cuttings would be considered the second environmentally superior option.

For the most part, all of the power line alternatives have similar impacts. The proposed project, with mitigation, was found to be the environmentally superior alternative. The propose project, with mitigation, would eliminate the need to install poles or bore under the Santa Ynez River since the power line would be placed on existing VAFB poles, and the portion from the intersection of Terra Road and Beach Road would be placed underground . If and when this power line is built, the Applicant and the County would need to work with VAFB to gain permission to use their existing poles. By using existing poles, a number of Class III impacts would be avoided.

6.2.2.18 Reductions in Environmental Impacts from County Oversight

Table 7 provides a comparison between the County's permit requirements and the requirements of other agencies that have jurisdiction over the Pt. Pedernales project. The effects the County's requirements have had on reducing environmental impacts and potential safety issues are also identified. In absence of these mitigation measures and conditions of approval, and the enforcement of these conditions, the severity of the impacts of the existing Pt. Pedernales project and the proposed Tranquillon Ridge would exceed the levels analyzed in the original 1985 Pt. Pedernales EIR and 01-EIR-04.

Table 7 - County Permit Requirements vs. Regulations of Other Agencies

Requirement	Comparison	Comments
1. Internal inspection of the crude oil and gas pipelines (i.e. smart pigging)	County requires annual internal inspections. MMS normally requires an internal inspection every 2 years.	The crude oil pipeline has experienced significant corrosion problems. The Smart Pig Survey conducted in October 2000 identified 616,108 measurable anomalies. Of these anomalies, or metal loss features, 477,452 were measured at = 20% metal loss. An additional 138,430 anomalies were measured at 20-40% metal loss. Finally, 226 anomalies were measured at 40-60% metal loss. The amount of corrosion in the Torch/Nuevo crude oil emulsion pipeline is orders of magnitude greater than that observed on other lines serving the Outer Continental Shelf off of Santa Barbara County. The wall losses in this pipeline are predominately due to internal corrosion.
2. Post 1997 oil	County required review of flange	County review found that the proposed flange

Requirement	Comparison	Comments
spill review of proposed flange replacement materials	material prior to installation. MMS stated that review of material after installation would be sufficient	replacement materials did not meet National Association of Corrosion Engineers (NACE) specifications for pipelines in sour service. (County notified J. Deacon of Torch on October 23,1997 for noncompliance with NACE; subsequent workover report (log) showed the flanges were cut and replaced with NACE compliant flanges – RBE letter #187-23-107, 20" Oil Line MTR's, dated December 1, 1997.) This determination required Torch to replace two newly installed substandard flanges with proper NACE compliant material during the pipeline repair process.
3. Inspection of flanges on crude oil pipeline (ultrasonic and magnetic particle testing)	After 1997 oil spill, County recommended replacing the remaining flanges. Alternatively, County required annual ultrasonic and magnetic particle tests. Between 1997 and 2001, DOT and MMS did not require flange inspections. Since 2001, MMS has required annual flange inspections.	These annual tests led to the discovery of four additional flange cracks, one in 1999 and three in 2001. In both instances, after discovery of the cracks, Torch/Nuevo voluntarily shut down the offshore operations and replaced the flanges.
4. Pipeline Operating Manual; required by County and DOT	The County-approved Pipeline Operating Manual (Unocal 1986) provided that, in the event of a low pressure shutdown, the operator must inspect the shutdown valve (to confirm that it has in fact closed) to avoid feeding a rupture or fire in the offshore or beach areas. DOT did not require manual to specify inspection prior to restart.	After the 1997 rupture and spill, the County determined that, without the County's approval, Torch/Nuevo had made changes to the Pipeline Operating Manual that reduced its level of environmental protection. In the County's litigation of oil spill issues, Torch indicated that its DOT-approved procedure (Torch Operating Company, Operating Manual for Platform Irene to Lompoc HS&P Pipeline System, February 1996) inferred that in a low pressure situation, flow could be restarted into the pipeline to allow a comparison of flow into and out of the pipeline. The County required Nuevo's Pipeline Operating Manual to be changed from requiring a flow balance comparison back to requiring an inspection of the pipeline prior to restart, in order to restore this key provision for environmental protection.
5. Prohibition on blocking safety devices out of service (bypassing) following a low pressure condition that may indicate a leak or rupture of the crude oil pipeline	Required in SIMQAP. Originally proposed in Unocal's application for Point Pedernales project. Operator must visually determine that no leak or rupture has occurred after a low-pressure shutdown. For the 1997 incident, MMS determined that the immediate restart of pipeline did not violate this	Following the procedures of the County-approved SIMQAP would have significantly reduced the amount of oil spilled into the ocean during the 1997 oil spill.

Requirement	Comparison	Comments
	prohibition, which is part of its regulations (Outer Continental Shelf Lands Act).	
6. Welding procedures.	County requires review to determine compliance with NACE requirements for hardness. MMS and DOT require no review.	During its review of Nuevo's proposed welding procedures for offshore repairs in 1999 and 2001, County determined that the proposed procedures were improper. Specifically, the qualifying procedure did not comply with the NACE requirements for hardness. The County notified Nuevo and required that the procedure be re-qualified. (RBE letter # 187-23-148; "J Tube" Repair Plan, dated October 14, 1999; and RBE letter # 187-23-190, 20" Oil Pipeline Flange Replacements, dated September 25, 2001. Torch concurred and the procedure was requalified. Use of the improper procedure could have caused residual hardness in the weld. Higher hardness was a primary contributor to the pipeline rupture in 1997.
7. Hydrogen sulfide monitoring near gas pipelines.	County requires onshore H_2S detectors. MMS and DOT do not require onshore H_2S detectors.	County required the installation of H_2S detectors along the sour gas pipeline at key locations upwind of inhabited areas. County also requires that the detection of H_2S by the sensors activate alarms and shutdowns of the pipeline (at 10 and 40 ppm, respectively). (Supplemental EIR mitigation measure; requirement incorporated into Torch's Emergency Response Plan dated September 2000)
8. Supervisory Control and Data Acquisition ("SCADA") monitoring; shutdown.	County requires shutdown of the project if the SCADA system fails. Condition is part of the SIMQAP. MMS and DOT regulations do not require the pipeline to be shutdown when the SCADA system is non-operational.	The County requires that, in the event of a pipeline SCADA system failure, operator must immediately initiate shutdowns of both the LOGP and Platform Irene. The County required the incorporation of these measures into Nuevo's SIMQAP after Nuevo left the pipeline system in operation after it had severed the SCADA cable with a backhoe. (County letter dated September 14, 2001 from Leipner to Foster: If SCADA fails, initiate shutdown of the affected pipelines. Requirement incorporated into Torch/Nuevo's February 2002 SIMQAP.) Failure to have a SCADA operational would mean that a rupture or leak could cause much more environmental damage before the situation is corrected.
9. Flange inspection frequency	After inspections required by the County revealed three flange cracks in 2001, the County increased the flange inspection frequency from annual to every six months.	In 2001, three cracks had developed within the previous one-year inspection cycle, and the rate of propagation of such cracks was not known. The flange that caused the pipeline rupture in 1997 was analyzed and tested with extensive lab work. No such analysis was performed on the 1999 and

Requirement	Comparison	Comments
	Between 1997 and 2001, DOT and MMS did not require flange inspections. Since 2001, MMS has required annual flange inspections	2001 flange cracks. However, based on the same type of flange metallurgy (A-105) with high carbon content, the same welding procedures, same rods used for welding as well as exposure to an identical environment (external and internal), it is reasonable to assume that the newer cracks would exhibit similar characteristics. Therefore, it can reasonably be assumed that these cracks could have propagated to pipe failure if they had gone undetected. The cracks discovered in 2001 were not observed when Torch/Nuevo inspected the flanges during the 1997 repair, nor were they observed in subsequent annual inspections prior to 2001. When Nuevo discovered the flange cracks, it immediately shut down the pipeline, and decided to replace the faulty flanges to prevent any further environmental damage.
10. Maximum allowable operating pressure ("MAOP") for the pipelines	The County (via Nuevo's SIMQAP) specifies MAOP's for the crude oil, gas, and produced water return pipelines. MMS and DOT do not specify an MAOP for the produced water return pipeline.	County has established MAOP's for all of the Point Pedernales pipelines (Nuevo SIMQAP, 2002). County calculated the MAOP for the crude oil pipeline as per the procedures specified by the American National Standard Institute (ANSI B31G; Manual for Determining the Remaining Strength of Corroding Pipelines)(conference calls on December 5, 1997 between Torch, MMS, SLC, SBC, and Tuboscope).
11. Produced water return pipeline	County requires a low-pressure shutdown device on the produced water return pipeline. MMS and DOT have not required low-pressure shutdown capability for this pipeline.	Activation of a low-pressure shutdown device would significantly reduce potential spill volumes if a leak or rupture of the pipeline occurs. (RBE letter # 187-23-169, SAFE Charts Oil Plant, dated August 24, 2000; RBE letter # 187-23-195, P&ID's SAFE Charts, dated November 19, 2001; and subsequent SAFE Charts comments/responses reviews with Nuevo. March 20, 2002 Nuevo letter acknowledging requirement to install shutdown of the pipeline on low pressure.) The produced water return pipeline currently has 721,665 metal loss anomalies. Of the total, 692,075 were measured at = 30%of total pipe thickness; 29,550 were measured at 30-50%; and 40 anomalies were measured at 50-60% wall loss.

6.2.3 Cumulative Impacts

There are several potential oil and gas developments in the vicinity of Platform Irene. In the city of Lompoc and in Vandenberg Village there are several residential developments proposed that

would be in the vicinity of the LOGP. Also, there are two residential developments and one industrial in the City of Santa Maria and Orcutt, that are close to the crude oil pipeline that connects the LOGP to Suey Junction and is a part of the project. There are no known developments that are reasonably foreseeable in the area close to Valve Site #2. The projects identified have the potential to effect the same resources as the Tranquillon Ridge Project. Cumulative impacts of the proposed and pending projects are summarized in Attachment F.

6.2.4 Growth Inducing Impacts

According to the EIR analysis the proposed projects would not have any growth inducing impacts. The Tranquillon Ridge Project, which involves the development of State oil and gas reserves using extended reach drilling from Federal Waters may be viewed as a precedent setting action. However, other offshore oil and gas development projects in the Santa Barbara Channel have been using directional drilling to develop Federal leases. Therefore, the proposed projects are not considered a precedent setting action that would result in significant growth inducing impacts.

6.2.5 Significant and Irreversible Environmental Changes

The proposed projects could result in environmental accidents (e.g., oil spills/toxic gas releases) that have the potential to create irreversible impacts to biological resources. Potential impacts can be reduced through use of adequate design and operating procedures and effective emergency response plans specifying staffing and equipment needs. However, the potential remains for irreversible damage as a result of an unlikely upset associated with the operation of the proposed projects

6.3 Economic Benefits

6.3.1 Royalties

During the first 20 years of the proposed project, Santa Barbara County would receive 20 percent of the royalties paid to the State of California for oil, dry gas, gasoline, and liquefied petroleum gas extracted from the portion of the Tranquillon Ridge field situated in state waters. This proportion of royalties stems from legislation adopted in 1996 (SB 1187, Maddy), which amended the California Public Resources Code (PRC), Section 6817. According to this legislation, the sharing of state royalty receipts with the County is restricted to a 20-year period of time, even if the field yields oil and gas for a longer period of time (PRC § 6817(b)). The legislation also caps total payment to Santa Barbara County at $200 million (in 1997 dollars) for all state tideland leases subject to this royalty-sharing provision. Authorized uses of such royalties paid to a city or county consist of the following activities (PRC § 6817(d)):

- the promotion and accommodation of commerce, navigation, and fisheries;
- the protection of the lands within the boundaries of the cities and counties;

- the promotion accommodation, establishment, improvement, operation, and maintenance of public recreational beaches and coastline for the benefit of all the people of the state; and
- the mitigation of any adverse environmental impact caused by exploration for hydrocarbons on state tide and submerged lands with city or county boundaries or caused by production or transportation of hydrocarbons produced on these tide and submerged lands.

State Lands Commission staff has not yet determined the rate of royalties or ventured any estimates of how much new royalties the project might bring to the State of California or County of Santa Barbara. Many uncertainties affect the calculation. In particular, the total royalty earned by the state depends upon the annual volume of production, the sales value of that production, and the rate of royalty assessed on the sales value. Staff understands that the royalty rate will be calculated on a sliding scale, based on the price of the oil, so that Nuevo will pay a higher rate when oil prices a relatively higher and vice versa. As recent experience demonstrates, the sales value of a barrel of oil has been very unstable and unpredictable since 1986, which lends considerable degree of uncertainty to projecting both the value of Tranquillon Ridge production and the sliding-scale royalty rate in any given year.

Nonetheless, the anticipated revenue to the County, should this project go forward, will likely be substantially larger than what the County has received from any previous offshore oil and gas project. It would be the first time the County would receive a share of revenues pursuant to the 1996 legislation discussed above. Absent a set royalty rate from the State Lands Commission, Nuevo Energy ventured a preliminary estimate based on the following assumptions:[23]

- Mean size of the Tranquillon Ridge field, based on experience with the Point Pedernales field, would most likely range between 170-200 million barrels of oil over the life of the project, with a statistical mean of 178 million barrels.
- Pursuant to Nuevo's drilling plan, it will take 5 years to bring the field up to peak daily production, after which daily peak production would be sustained at 23,000 barrels from the Tranquillon Ridge field for a 15-year period. (Another 7,000 barrels would be extracted daily from the Point Pedernales field.)
- Mean value of Tranquillon Ridge oil, based on Point Arguello posting, would be $10 per barrel.
- The minimum royalty rate of 16.7 percent required by California law, provides a conservative assumption until the State Lands Commission determines the actual rate.

These assumptions produce the following projection of royalties to the State of California and to the County of Santa Barbara:

23,000 b/d · $10/b · 0.167 = $38,410 in daily royalty during the 15 years of peak production

$38,410 · 365 days = $14 million (rounded) in annual royalty to the State of California

[23] Arthur R. Boehm, Business Development Manager, Nuevo Energy Company, phone conversation of May 28, 2002.

$14 million · 15 years = $210 million in royalties during years of peak production

Another $40 million in royalties is roughly estimated during the first five years of production

Based on these assumptions, Santa Barbara County would earn:

an average of $1.6 million during the first five years of drilling/production

$2.8 million annually during 15 years of peak production

approximately $50 million

Again, to emphasize the uncertainties with such calculations, royalty paid to the County will be less than ventured above, should the field yield less product than projected, or the sales value of that product averages less than $10 per barrel, and vice versa. Additionally, the County would receive more royalty should the State Lands Commission decide on a higher royalty rate than the statutorily required minimum. However, staff agrees that the $50-million estimate likely provides a suitable preliminary estimate, perhaps with a 25 percent margin of error, because the assumptions use relatively low figures for the value of oil production and the royalty rate. Moreover, the assumptions do not include royalty earnings from other products that would be produced from the Tranquillon Ridge field, if approved, including natural gas and gas liquids.

This economic benefit to the County surpasses other revenue-sharing schemes at the federal or state levels. Federal revenue sharing via the Outer Continental Shelf Lands Act (§ 8 (g)), has brought $669 million to the State of California; however, only 2.4 percent of that amount, or $16 million, has been directly filtered down to Santa Barbara County. The recent Coastal Impact Assistance Program of 2001, enacted in late 2000 as a one-time oil/gas revenue-sharing program to allocate federal revenues other than those affected by the foregoing § 8 (g), is bringing $10.1 million to the State of California and $5.4 to its coastal counties, of which $1.2 million is allocated to Santa Barbara County.

6.3.2 Property Taxes

Nuevo's current property tax obligation for the period of July 1, 2001 to June 30, 2002 equals $386,406, or 0.1 percent of the County's net property-tax receipts for that year, which totaled $355 million.[24] This obligation is assessed on its Point Pedernales pipelines (onshore and in State waters) and its Lompoc Oil and Gas Processing Facility. As in previous years, Nuevo has appealed this assessment.[25] Such annual property-tax appeals inhibit full use of the receipts from these facilities because the County typically reserves a portion or all of those receipts in case the

[24] Keith Taylor, Supervisor, Business Mineral Division of the Santa Barbara County Assessor's Office, phone conservation of May 22, 2002.

[25] Since 1995, Torch or Nuevo has appealed six of the last seven property tax assessments of its Point Pedernales project. In response to the 1995 appeal, the County stipulated to a lower property for the property to the 1995 assessment, all subsequent appeals have been unsuccessful.)[25] The same stipulation on the 1997 and 1998 assessments. Nuevo's 1999 appeal went to a hearing before the Assessment Appeal Board, which upheld the County's assessment. Nuevo withdrew its 2000 appeal, and its 2001 appeal has not been heard yet.

appeals result in a lower property-tax obligation, thereby requiring a refund to the taxpayer. These appeals also pose an economic burden to the County for staff and attorney time spent on the cases appealed.

The County will realize increased property taxes from the Tranquillon Ridge project in both the immediate and long term as follows

1. An immediate increase will result from an assessment on mineral rights, which is based on the volume of proven, economically recoverable reserves in State waters. This assessment will decline over time as economically recoverable reserves diminish.
2. In the long term, an increase in property taxes will be realized, based on the number of years that the Tranquillon Ridge project increases the economic life of the assessed pipelines and processing facilities, which is estimated to be 10-25 years. However, the annual property-tax assessment will ultimately decline over time as production declines, because the operator is not maximizing the full capacity of the assessed pipelines and processing facility.

According to the County Tax Assessor's office, it remains too speculative at this point to estimate overall property-tax receipts that might be attributable to the Tranquillon Ridge project, particularly given the number of uncertainties and the frequency and complexity of tax appeals by oil and gas operators. Any such attempts to project property tax receipts from the project should be considered with caution. Nuevo Energy ventures a rough estimate by using its current property-tax obligation for the Lompoc Oil and Gas Processing facility only, which is approximately $250,000 annually ($250,000 · 30 years = $7,500,000). As with attempts to calculate potential royalties, several uncertainties, including total yield of the Tranquillon Ridge field should it be developed and the frequency/complexities of oil/gas property assessment and appeals, prohibit accurate estimates of additional property taxes. However, staff agrees that the $7 million figure ventured by Nuevo provides a suitable preliminary estimate to have a general idea of the potential economic benefit of the project.

6.3.3 Employment

The proposed project does not increase the number of employees directly used to produce the Point Pedernales field; however, it would sustain those jobs for an estimated 10-25 additional years. Normal operations on Platform Irene directly employ 20 people, about half of which reside in the County. The Platform employs an additional 45-55 people when drilling new wells. The Lompoc Oil and Gas Processing facility directly employs 21 people. These jobs form a small component of the County's economy that exports intermediate or final products to other regions and, in turn, brings income into the County from other regions. Total export-based businesses and the employment they generate in the County form a core economic base with a multiplier affect that stimulates additional economic activities and employment, some of which occur within the region as discussed below.

The proposed project would also help to sustain indirect employment in service industries that support offshore oil and gas development. Examples of these industries include transportation (crew and supply boats, and helicopters), maintenance and parts, diving services and professional consultants (e.g., geologists, surveyors). The number of indirect employment attributable to the

project is unknown, since such supportive industries serve other oil and gas operations in and outside the region, or have diversified their operations into non-oil activities as well.[26]

Lastly, the proposed project would contribute to the overall employment in the County. Essentially, those direct and indirect employees that reside locally also expend some of their earnings locally, which helps to sustain jobs in other sectors of the County economy.

6.4 Comprehensive Plan Consistency

Attachment D contains a detailed policy consistency analysis for the Tranquillon Ridge Project. Because project components are located in both the coastal zone and inland areas of the County, a discussion is provided regarding Coastal Act consistency, Local Coastal Plan consistency, and consistency with the County's Comprehensive Plan. A summary of the key policy findings is provided below.

Because of the limited amount of new construction and use of the existing infrastructure, the project can be found to be consistent with County policies that require availability of adequate services, minimization of grading, preservation of existing biological and cultural resources, and development within or in proximity to existing developed areas (i.e., LCP policy 2-6 and LUDP 4, Coastal Act Policy 30250, LCP policies 3-13, 3-14, 6-6B. 6-14A, 9-35, 9-36, LUDP policies 10, 11, 12, Hillside and Watershed policies 1 and 2, and Stream and Creeks Policy).

Consistency with visual resource policies (Coastal Act Policy 30251, LCP policies 4-2, 4-3, and 4-7, Visual Resource Policy 1, 2, and 5, and Lompoc Area Land Use goals) can be found with full implementation of existing Pt. Pedernales conditions and implementation of the additional mitigation measures identified in the EIR (e.g., use of existing infrastructure to mount the transmission lines on and undergrounding the power line in areas of visual sensitivity).

The most difficult consistency findings regarding the Tranquillon Ridge Project pertain to protection of resources (biology, cultural, water quality, public safety, agricultural resources) from upset related damage (primarily a leak or rupture of the crude oil pipeline). Key policies include Coastal Act policy 30231, LCP policy 3-19, LCP policy 9-4, 9-14, 10-2, 10-3, 10-5, Hillside and Watershed Policy 7, Historical and Archaeology Sites Policies 3, 3 and 5, Lompoc Area land use goals regarding the protection of the natural environment, and Conservation Element recommendations regarding project area ecological systems.

The crude oil pipeline has had a history of internal corrosion on the landward side and defects in the subsea sea flanges on the seaward portion of the pipeline. Recent smart pig data (October, 2000) indicates that an excess of 600,000 wall anomalies, most of these minor and not a safety issue, exist in the emulsion pipeline with the deepest being 51 percent of the wall thickness. Most of these are on the bottom of the pipe and are internal to the pipe. All of the most significant anomalies (ranging in depth from 35 to 53 percent) are located in the onshore portion of the

[26] See Molotch, Harvey, and John Woolley, *Evaluation of Current Programs to Identify and Mitigate Socioeconomic Impacts in the Santa Barbara Channel: An Analysis of SEMP,* University of California at Santa Barbara, May, 1994, pp. 45-58.

pipeline with the deepest anomaly being located immediately before Valve Site #6. Seven of the 15 most serious anomalies are located between Valve Sites #6 and 7. The pipeline maximum allowable operating pressure has been reduced (de-rated) due to the presence of anomalies detected in 1995, 1996 and 1997. No de-ratings have occurred since 1997. The 2001 report indicated 1,400 anomalies[27] with none greater than 50 percent, 173 between 40-49 percent and 1,212 between 30-39 percent.

Problems with the pipeline integrity have been detected during County required inspections and repaired pursuant to County and other agency requirements. As noted in Section 6.2.2.18 of this staff report, the existing County permit conditions (which were accepted by Nuevo when it took over ownership of the Pt. Pedernales project), have been critical to ensuring the safety of the pipeline operations. The proposed project would significantly increase the volume of oil in the pipeline (from a year 2000 average of 7,300 bpd to 30,000 bpd) and extend the life of the facilities by up to 25 years. According to the EIR, the worst case (SCADA not operational) increase in the probability of an onshore leak increases by 2 percent and a rupture by 0.6 percent. The probability of leak an offshore leak increases by 4.4 percent and a rupture by 8.5 percent. Worst case spill volumes onshore would increase by 625 barrels over current levels (from 1,354 barrels to 1,979 barrels) and offshore by 3,850 barrels (from 2,868 barrels to 6,718 barrels).

With implementation of the existing FDP conditions (such as development and implementation of a Safety Inspection Maintenance and Quality Assurance Program (SIMQAP), use of a SCADA system and System Safety Reliability Review Committee review of pipeline and facility operations) and the implementation of the new EIR proposed safety related conditions, impacts would be minimized and a finding of consistency with these policies could be made. However, Nuevo through its appeal of the injunctive portion of the final settlement of the 1997 oil spill litigation contends that the County has no regulatory authority to require implementation of the aforementioned conditions. Nuevo contends that under the Federal Pipeline Safety Act and the Outer Continental Shelf Lands Act, the County is preempted from regulating the Pt. Pedernales pipelines and activities at Platform Irene. Because the enforceability (and thus the feasibility) of the County's key safety related conditions of approval and mitigation measures is currently in question, a finding of consistency can not be made with regard to the aforementioned policies.

6.5 Ordinance Compliance

The LOGP site is zoned Coastal Related Industry (M-CR). The modifications to the LOGP required to implement the Tranquillon Ridge Project conform to the development standards set forth in the zoning regulations.

7.0 APPEALS PROCEDURE

The action of the Planning Commission may be appealed to the Board of Supervisors within ten (10) calendar days of said action.

[27] The significant change in the number of anomalies reported in 2000 and 2001 (over 600,000 in 200 and ~1,400 in 2001) was due to a change in the reporting format. In 2001, only anomalies greater than or equal to 30% were reported.

ATTACHMENTS

A. Findings
B. Tranquillon Ridge – LOGP and Valve Site 2 Site Plan Maps
C. EIR Impact Summary Table
D. Policy Consistency Analysis
E. List of Acronyms and Abbreviations
F. Aerial Photos of the Project Pipelines

ATTACHMENT A: TRANQUILLON RIDGE FINDINGS

1.0 CEQA FINDINGS

FINDINGS PURSUANT TO PUBLIC RESOURCES CODE SECTION 21081 AND THE CALIFORNIA ENVIRONMENTAL QUALITY ACT GUIDELINES SECTIONS 15090 AND 15091:

1.1 CONSIDERATION OF THE EIR

The Final Environmental Impact Report (EIR), 01-EIR-04 was presented to the Planning Commission and all voting members of the Commission have reviewed and considered the EIR, 01-EIR-04, its appendices prior to approving this proposal. In addition, all voting Commissioners have reviewed and considered testimony and additional information presented at or prior to public hearing on June 20, 2001. The EIR reflects the independent judgement of the Planning Commission and is are adequate for the LOGP Produced Water Treatment Facility.

1.2 FULL DISCLOSURE

The Planning Commission finds and certifies that the Final EIR constitutes a complete, accurate, adequate and good faith effort at full disclosure under CEQA. The Commission further finds and certifies that the Final EIR has been completed in compliance with CEQA.

1.3 LOCATION OF RECORD OF PROCEEDINGS

The documents and other materials which constitute the record of proceedings upon which this decision is based are in the custody of: Mr. Steve Case, Deputy Director, Planning and Development Energy Division located at 30 E. Figueroa St., Santa Barbara, CA 93101.

1.4 FINDINGS THAT CERTAIN UNAVOIDABLE IMPACTS ARE MITIGATED TO THE MAXIMUM EXTENT FEASIBLE

The proposed Tranquillon Ridge Project has Class I Impacts, as identified in the Final EIR (01-EIR-04). Findings of overriding consideration cannot, however, be made for the Tranquillon Ridge Project. In particular, the risks associated with the increase of production and extension of life of the processing plant and oil and gas pipelines are unacceptable for the proposed location and surrounding environment. Findings of overriding consideration are also impossible to fully weigh and determine because the applicant current contests the enforceability of basic safety conditions in section "P" of the permit. County takes official notice of Nuevo's lawsuit against County in declining to make this finding.

1.7 STATEMENT OF OVERRIDING CONSIDERATIONS

The proposed Tranquillon Ridge Project has Class I Impacts, as identified in the Final EIR (01-EIR-04). Findings of overriding consideration cannot, however, be made for the Tranquillon Ridge Project. In particular, the risks associated with the increase of production and extension of life of the processing plant and oil and gas pipelines are unacceptable for the proposed location and surrounding environment. Findings of overriding consideration are also impossible to fully weigh and determine because the applicant current contests the enforceability of basic safety conditions in section "P" of the permit. County takes official notice of Nuevo's lawsuit against County in declining to make this finding.

2.0 DEVELOPMENT PLAN FINDINGS

2.1 Article II – Coastal Zoning Ordinance

Pursuant to Article II Section 35-174.7, a Preliminary or Final Development Plan shall be approved only if all of the required findings can be made. The following findings cannot be made for the proposed project:

2.1.1 That adverse impacts are mitigated to the maximum extent feasible.

As evidenced by the EIR analysis, the greatest environmental impacts posed by the Tranquillon Ridge Project are almost entirely associated with a potential spill of rupture of the wet oil pipeline, continued transportation of NGLs/LPGs, and the visual presence of the LOGP and Platform Irene. A spill or rupture has the potential to result in significant unavoidable impacts to marine and terrestrial environments. The existing Pt. Pedernales Project contains 180 conditions of approval. The EIR identifies a number of mitigation measures that would further reduce but not eliminate the significant risk of upset/safety related environmental impacts of the project. These measures include use of a Supervisory Control and Data Acquisition System (SCADA), implementation of a Safety, Inspection, Maintenance and Quality Assurance Program (SIMQAP), review of project operations by the County's System Safety Review and Reliability Committee (SSRRC) including approval of the pipeline operating manual, Emergency Response Plan and implementation, and preparation of an Oil Spill Contingency Plan for the on- and offshore crude oil pipelines. While these measures have all been required as conditions of the existing Pt. Pedernales projects and would be applicable to the Tranquillon Ridge Project, their enforceability and therefore their feasibility are in question due the Applicant's current litigation regarding the County's jurisdiction over pipeline and platform operations. The County's conditions and inspections required pursuant to these conditions have been critical to ensuring safe operation of the pipeline.

However, Nuevo contends that the County is preempted by federal law from regulating pipeline operations. Without the continued implementation of the existing Pt. Pedernales safety-related

conditions and the additional mitigation measures identified in the Tranquillon Ridge EIR, the finding that adverse impacts are mitigated to the maximum extent feasible cannot be made[28].

2.1.2 That the project will not be detrimental to the health, safety, comfort, convenience, and general welfare of the neighborhood and will not be incompatible with the surrounding area.

The project poses a significant risk to public safety due to the continued and increased transportation of NGL/LPG from the LOGP. The risk to public health and safety is reduced but not eliminated by the implementation of a Transportation Risk Reduction and Management Plan. Based on the analysis in the EIR, the continued health and safety risk due to the presence of H_2S in the Platform Irene to LOGP 8-inch gas line and the potential fire or explosion hazard associated with the oil emulsion pipeline would represent an adverse but less than significant public safety impact.

The proposed Tranquillon Ridge Project would extend the life of the Pt. Pedernales facilities including the pipelines that connect Platform Irene to the LOGP. The crude oil pipeline has had historic integrity problems that have included defective flanges on the subsea portion of the pipeline and corrosion problems on the onshore portion of the pipeline. Potential leaks or ruptures of this pipeline (as has occurred in the past) could be detrimental to the comfort, convenience and general welfare of Lompoc area residents and the public in general. Pipeline spills could significantly damage biological, agricultural, cultural, and recreational resources in the project area and adversely effect the public use and enjoyment of these resources.

Potential impacts to these resources could be reduced through existing permit conditions and additional mitigation measures identified in the EIR. These measure include continued pipeline inspections and repairs (as required by the SIMQAP), use of, and updates to, the pipeline SCADA system, SSRRC review of pipeline operations including approval of the Pipeline Operating Manual, and implementation and updates to the Oil Spill Contingency Plans. While these mitigation measures exist, their enforceability and hence their feasibility is in question due to the Applicant's pending litigation regarding the County's jurisdiction over the pipeline. Therefore, this finding cannot be made.

Further, the proposed project presents environmental and safety risks and impacts beyond those considered for the original Point Pedernales Project. The original EIS/EIR for the Point Pedernales project was specifically based on a project description in the original application that included mitigation measures for state of the art leak detection systems. The measures proposed for the leak detection system went beyond the requirements of the MMS and DOT but were still assumed in the original EIS/EIR based on the application submitted. These measures ultimately were incorporated into the "P" conditions of the permit and incorporated into the SIMQAP and Oil Spill Contingency Plan.

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[28] Because these conditions have also not been required by the other regulatory agencies, the County cannot make the CEQA finding that the mitigation measures are the responsibility of another agency.

If Nuevo's objections to the permit ultimately prevail in court, County is unable to identify any other feasible mitigation measures within its jurisdiction that can mitigate the impacts of the proposed project to acceptable levels. The mitigation measure considered by County for the existing project have frequently been considered and not required by the MMS. (See Table 7) County concludes based on the evidence in the record that the impacts from the proposed project will be significantly greater without such mitigation measures. In particular, the evidence presented in and documented by Table 7 demonstrates this point.

Further, County is concerned that Nuevo may well contend that other mitigation measures contained in the current permit and proposed in the new project are beyond the subject matter jurisdiction of County to impose on this project. Under Nuevo's legal position as expressed in its lawsuit against County, Nuevo can attack the enforcement of permit conditions where federal preemption denies County subject matter jurisdiction even where the applicant specifically agrees to the conditions, never objects during the permitting process, and then accepts the permit and all of its benefits. Most troubling is that Nuevo, under its legal argument, need not even object to mitigation measures during the public hearing process if such measures are later found to be beyond the subject matter jurisdiction of the County. The approach denies County, other permitting agencies, and the public the opportunity to consider the proposed project and its impacts, as finally mitigated though conditions on the project, before a decision is made to approve or deny the project. It also potentially denies County the opportunity to consider if findings of overriding consideration are appropriate because the final impacts of the project cannot be known.

Nuevo's position, if successful, represents an approach that is the antithesis of the informed public process that is envisioned under CEQA, where decision makers are required to fully consider the benefits and environmental impacts of a project, before approving the project.

County also finds that while Nuevo questions County's authority to enforce permit conditions concerning the pipelines, there is no question that County has discretionary authority to determine, through its general plan and zoning ordinance, the appropriate location for industrial facilities within the County, including oil and gas processing plants. In 1985, County approved Unocal's request for the comprehensive plan amendment and rezone to allow for the building of the oil processing plant near Lompoc. This legislative action also made it possible for Torch and Nuevo to expand the plant and add gas processing in 1996. These approvals were all predicated or specifically conditioned on compliance with County requirements for the safety, including the SIMQAP (found in Condition P-2) and Oil Spill Contingency Plan (found in Conditions P-13 and P-16.)

2.1.3 That the project is in conformance with the applicable provisions of Article II and the Coastal Land Use Plan.

The project as proposed would be inconsistent with a number of Coastal Land Use Plan policies as discussed in section 6.4.1 and Attachment D of the staff report.

2.2 Article III – Inland Zoning Ordinance

Pursuant to Article III Section 35-317.7, a Preliminary or Final Development Plan shall be approved only if all of the required findings can be made. The following findings cannot be made for the proposed project:

2.2.1 That adverse impacts are mitigated to the maximum extent feasible.

Refer to the discussion provided under Section 2.1.1 above.

2.1.2 That the project will not be detrimental to the health, safety, comfort, convenience, and general welfare of the neighborhood and will not be incompatible with the surrounding area.

Refer to the discussion provided under Section 2.1.2 above.

2.1.3 That the project is in conformance with the applicable provisions of Article III and the Comprehensive Plan.

The project as proposed would be inconsistent with a number of Comprehensive Plan policies as discussed in section 6.4.1 and Attachment D of the staff report.

ATTACHMENT B:
TRANQUILLON RIDGE PROJECT SITE PLANS
(LOGP AND VALVE SITE 2)

Impact Summary Tables

Table of Contents

CLASS I Impacts of the Proposed Projects[a]

Impacts That May Not Be Fully Mitigated To Less Than Significant Levels

(Impacts that must be addressed in a "statement of overriding consideration" if the project is approved in accordance with Sections 15091 and 15093 of the State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
AESTHETICS/VISUAL RESOURCES (Section 5.13)					
Visual.1	Tranquillon Ridge *Extension of Life*	Visual impacts due to long-term continued presence of the project facilities visible from coastal zone (Platform Irene and Surf substation).	Long-term Regional	No mitigation measures have been identified.	Significant
Visual.4	Tranquillon Ridge *Extension of Life*	Visual impacts due to long-term continued presence of the LOGP.	Long-term Local	No mitigation measures have been identified.	Significant
Accidental Releases (e.g. Oil Spills and Gas Releases)					
HAZARDOUS MATERIALS/RISK OF UPSET (Section 5.1)					
Risk.3	Tranquillon Ridge *Increased Throughput Extension of Life*	The proposed project could generate risks to public safety by exposing the public to transportation hazards.	Long-term Regional	Risk-2 The Applicant shall implement all of the measures identified in the SBC's policies regarding the transportation of gas liquids that were developed as part of the LPG/NGL Transportation Risk Assessment including the blending of gas liquids into the crude oil to the maximum extent feasible. (The policies are included in the Point Pedernales FDP permit conditions P-2 and P-23).	Significant
TERRESTRIAL AND FRESHWATER BIOLOGICAL RESOURCES (Section 5.2)					
TB.6	Tranquillon Ridge *Increased Throughput Extension of Life* Tosco Point Pedernales *Increased Throughput Extension of Life*	A pipeline leak or rupture could result in an oil spill and subsequent degradation of upland, riparian and aquatic habitats and injury to plants and terrestrial and aquatic wildlife through direct toxicity, smother-ing, and entrapment as well as through resultant cleanup efforts.	Long-term Regional	TB–6a The Oil Spill Contingency Plan (OSCP) shall be revised and updated to address increased potential spill volumes and updated procedures for oil and produced water spill clean up beneath ground surface and in sensitive habitats including rivers and streams. This plan should include site-specific measures for spill containment along watercourses and at other sensitive habitats. It shall specify that sensitive habitats shall be avoided to the maximum extent feasible during oil spill clean up activities. It shall include specific measures to avoid impacts on listed endangered and threatened species during response and repair operations and minimize impacts on riparian and other native habitats. The plan shall include identification of specific access points at locations where containment and clean up efforts can be initiated under different scenarios. The access points need to be identified immediately adjacent to pipeline river crossings and points where spilled oil could enter the Santa Ynez River, San Antonio Creek, Santa Maria River, Nipomo Creek, and Los Berros Creek. The OSCP would include the staging of spill response and containment equipment at	Significant

a. The Proposed Projects include the Tranquillon Ridge Project, the LOGP Produced Water Facility Project, and the Sisquoc Bi-Directional Flow Project. In addition, the Tosco Point Pedernales Pipeline is include since it is affected by the Tranquillon Ridge Project and is covered under a separate FDP permit.

CLASS I Impacts of the Proposed Projects[a]

Impacts That May Not Be Fully Mitigated To Less Than Significant Levels

(Impacts that must be addressed in a "statement of overriding consideration" if the project is approved in accordance with Sections 15091 and 15093 of the State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Accidental Releases (e.g. Oil Spills and Gas Releases)					
				suitable locations. This plan shall be reviewed by the Santa Barbara County Planning and Development Department and San Luis Obispo County, Department of Planning and Building, California State Lands Commission and California Coastal Commission as well as resource agencies including the USFWS, NOAA Fisheries, and CDFG. The committee shall provide recommendations to the Lead Agencies (Santa Barbara County, Planning and Development Department and San Luis Obispo County, Department of Planning and Building) for implementation of the plan. This plan shall be finalized and approved by the Lead Agencies. TB-6b Where habitat disturbance cannot be avoided as determined by a P&D or a P&D approved biologist, the OSCP shall also provide stipulations for development and implementation of site-specific habitat restoration plans and other site-specific and species-specific measures appropriate for mitigating impacts on local populations of sensitive wildlife species and to restore native plant and animal communities to prespill conditions. Access and egress points, staging areas, and material stockpile areas that avoid sensitive habitats shall be identified. The OSCP shall include species- and site-specific procedures for collection, transportation, and treatment of oiled wildlife, particularly sensitive species. The plan shall be reviewed by the federal, state, and local agencies identified in Measure TB-6a (above) prior to approval by the lead agencies. TB-6d Spill response personnel shall be adequately trained for response in terrestrial environments and spill containment and recovery equipment shall be inspected at least annually and maintained at full readiness. Periodic drills shall be conducted at least annually and the results evaluated so that spill response personnel are familiar with the equipment and with the project area, including sensitive terrestrial biological resources. Rehabilitation centers, within the project area, for birds and other wildlife species affected by spilled material shall be involved in the drills. If a rehabilitation center is not available in the project area, the Applicant shall contribute a pro-rata share of funds necessary to cover the costs of establishing and operating a bird and wildlife rehabilitation center.	

a. The Proposed Projects include the Tranquillon Ridge Project, the LOGP Produced Water Facility Project, and the Sisquoc Bi-Directional Flow Project. In addition, the Tosco Point Pedernales Pipeline is include since it is affected by the Tranquillon Ridge Project and is covered under a separate FDP permit.

CLASS I Impacts of the Proposed Projects[a]

Impacts That May Not Be Fully Mitigated To Less Than Significant Levels

(Impacts that must be addressed in a "statement of overriding consideration" if the project is approved in accordance with Sections 15091 and 15093 of the State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Accidental Releases (e.g. Oil Spills and Gas Releases)					
TB.7	Tranquillon Ridge *Increased Throughput Extension of Life* Tosco Point Pedernales *Increased Throughput Extension of Life*	A spill and/or subsequent cleanup efforts may directly or indirectly cause the loss of habitat and individuals or colonies of state-or federally-listed plant species including seaside bird's beak, Surf thistle, beach spectacle pod, La Graciosa thistle and possibly Pismo clarkia or degrade designated critical habitat for the Lompoc yerba santa and the La Graciosa thistle.	Long-term Regional	Impacts to listed species would be reduced through implementation of Mitigation Measures TB-6a through TB-6d, which include, but are not limited to, minimization of habitat disturbance during clean up, the use of low-impact clean up techniques, and restoration of the site to prespill conditions. Mitigation Measure TB-2b would reduce the effects of sedimentation in the event clean up activities disturb soil and increase erosion. Implementation of Mitigation Measures TB-3a and TB-3b, which address, in part, the restoration of native plant species would also reduce impacts in areas where spills or cleanup results in the loss of native vegetation. These measures described above would also apply to a produced water spill.	Significant
TB.8	Tranquillon Ridge *Increased Throughput Extension of Life* Tosco Point Pedernales *Increased Throughput Extension of Life*	An oil spill and/or subsequent cleanup effort may directly or indirectly cause the loss of individual state or federally-listed wildlife species or cause the loss or degradation of sensitive species habitat. An oil spill and/or subsequent cleanup effort may impact designated critical habitat for steelhead, western snowy plover, and California red-legged frog.	Long-term Regional	Impacts to listed wildlife species would be reduced through implementation of Mitigation Measures TB-6a through TB-6d, which include, but are not limited to, updating the OSCP, minimizing habitat disturbance during clean up, using low-impact clean up techniques, and restoring of the site to prespill conditions. Implementation of Mitigation Measures TB-3a and TB-3b, which address, in part, the restoration of native plant species would also reduce loss of foraging and breeding habitat in areas where spills or cleanup results in the loss of native vegetation. TB-2b would reduce the effects of sedimentation in the event clean up activities disturb soil and increase erosion. Mitigation measures identified under Marine Water Quality and Water Resources (Section 5.4) would also reduce the impacts of oil spill on state and federally listed species in the project area. These mitigation measures would also apply to a produced water spill.	Significant

a. The Proposed Projects include the Tranquillon Ridge Project, the LOGP Produced Water Facility Project, and the Sisquoc Bi-Directional Flow Project. In addition, the Tosco Point Pedernales Pipeline is include since it is affected by the Tranquillon Ridge Project and is covered under a separate FDP permit.

CLASS I Impacts of the Proposed Projects[a]

Impacts That May Not Be Fully Mitigated To Less Than Significant Levels

(Impacts that must be addressed in a "statement of overriding consideration" if the project is approved in accordance with Sections 15091 and 15093 of the State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Accidental Releases (e.g. Oil Spills and Gas Releases)					
ONSHORE WATER RESOURCES (Section 5.4)					
OWR.2	Tranquillon Ridge *Increased Throughput Extension of Life* Tosco Point Pedernales *Increased Throughput Extension of Life*	A rupture or leak from the emulsion, produced water or dry oil pipelines could substantially degrade surface and groundwater quality		OWR-1 Construct a berm around Valve Site #2 with sufficient capacity to retain 150% of the maximum spill volume associated with this portion of the onshore pipeline (see Section 5.1, Risk of Upset). OWR-2 The Applicant shall maintain a computerized SCADA system that shall continuously monitor the transfer of oil. SCADA will be used to remotely monitor the pipeline system for leaks and other abnormal operations. SCADA system shall be monitored at a facility that is manned 24 hours per day. SCADA Control System operators shall be specifically trained on how to respond and what procedures to follow in the event of system alarms and abnormal operations. For the Tosco Point Pedernales Pipeline, the applicant shall provide alarms and automatic shutdown of the pipeline in case of loss of pressure (10% and 15%, respectively) below the prescribed minimum operating pressure to minimize the spill volume in case of a rupture. The SCADA system shall be set so that a 10% deviation from normal operating range (pressure and flow) will trigger an alarm, and a 15% deviation sustained over a period of 5 seconds will trigger an automatic shutdown. Should the SCADA system fail, the pipeline shall shutdown. For the Point Pedernales oil Pipeline, the Applicant shall provide alarms if one of the following variances occurs: (1) the flow volume varies by 6% or more over a 15-minure period; or (2) the flow volume varies by 4.5% or more over a two-hour period. The SCADA system shall be set so that 10% and 15% deviations from the normal operating range (pressure and flow) sustained over a period of 5 seconds will trigger an alarm or an automatic shutdown respectively. Any automatic shut-down of the pipeline by the SCADA system shall require an immediate visual inspection of the pipeline. Should the SCADA system fail, the pipeline shall shutdown. OWR-3 Update the Oil Spill Contingency Plan and the Oil Spill Response Plan to address the SCADA system and GR.1 related requirements and conduct annual readiness exercises and audits to ensure that containment and cleanup equipment is readily available close to	Significant

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CLASS I Impacts of the Proposed Projects[a]

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Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Accidental Releases (e.g. Oil Spills and Gas Releases)					
				areas with greatest vulnerability to spills (e.g., along the lower sections of the Santa Ynez River and Nipomo Creek). OWR-4 Ensure that catchment basins located along the Santa Ynez River section of the pipeline are cleaned and surveyed periodically to ensure that they are capable of holding at least 110% of the associated release volume from nearby pipeline segments. Include in the volume calculations 30 minutes of pumping time and the total pipeline emulsion fluids plus produced water fluids. OWR-5 Implement a pipeline monitoring program for the water return pipeline to monitor for pipeline corrosion. The plan shall include annual smart-pig testing, corrosion inhibitor injection as appropriate and additional coupon and water testing similar to those conducted on the emulsion pipeline. OWR-6 Continue the monitoring program for the oil emulsion pipeline to monitor for pipeline corrosion and erosion. The plan shall include annual smart-pig testing, corrosion inhibitor injection as appropriate and additional coupon and emulsion testing**.**	

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CLASS I Impacts of the Proposed Projects[a]

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Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Accidental Releases (e.g. Oil Spills and Gas Releases)					
MARINE BIOLOGICAL RESOURCES (Section 5.5)					
MB.1	Tranquillon Ridge *Increase Throughput Extension of Life*	Oil spills from the project may impact benthic and intertidal organisms, fish, marine mammals, marine birds, and marine turtles.	Long-term Regional	MB-1a The OSRPs (Torch, October 23, 2000 and Nuevo March 2002) shall be updated to incorporate changes in platform and pipeline activities that result from the proposed project. For example, the plan shall incorporate detailed response procedures for marine oil spills resulting from a blowout if wells producing the Tranquillon-Ridge field are expected to be free flowing. Worst-case discharge scenarios shall be updated accordingly. In addition, lessons learned from the cleanup of the 1997 oil spill shall be incorporated into the Response Plan. The efficacy of various containment and cleanup techniques applied during the 1997 spill shall be evaluated with regard to potential future spills. Hindcasts of the observed oil-spill trajectory shall be used to improve site-specific trajectory models. Potential ecological damage resulting from cleanup techniques applied in 1997 shall be discussed. The personnel and training sections of the OSRP shall be updated and identify training requirements for all personnel that would be utilized to respond to oil spills. At a minimum, new personnel shall be trained immediately in the overall operational aspects of oil spill response including the proper use of all equipment that would be utilized in oil spill response. Annual training for all personnel shall also be included in the OSRP. The annual training shall include training in the operation of new equipment that may be utilized in oil spill response, retraining in the operation of existing equipment, and review of the oil spill response requirements that are identified in the OSRP. MB-1b In order to provide a baseline for shoreline clean-up efforts in the event of a spill, the applicant shall contribute to the funding of a program to document the amount, variability, and chemical fingerprint of the tar normally present in the intertidal zone within the potential oil spill zone. The program shall include both visual observations and chemical sampling of tar along five segments (less than or equal to one-mile each) of shoreline located within the area of the coast located between Point Sal and Point Conception. The program shall continue for as long as Tranquillon Ridge Field development is occurring or until analysis of the collected data indicates that extension of sampling will not significantly increase understanding of the pattern of tar deposition and improve documentation of the baseline.	Significant

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CLASS I Impacts of the Proposed Projects[a]

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Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Accidental Releases (e.g. Oil Spills and Gas Releases)					
				The amount of tar shall be estimated and its chemical fingerprint determined, based on the shoreline tar sampling protocol used by the U.S. Geological Survey (USGS) in its MMS-funded study "Submarine Oil and Gas Seeps of the Southern Offshore Santa Maria Basin, California" (2001-2004). The program shall document visual observations and chemical sampling. The samples shall be analyzed for chemical fingerprint in the USGS laboratory. If analysis by the USGS is not available, another comparable fingerprinting method may be substituted. Annual cost of the applicant's contribution to this program shall not exceed $100,000. The program shall be developed in cooperation with Santa Barbara County's Department of Planning and Development, and shall be coordinated by the Energy Division. The Energy Division shall evaluate the program on an annual basis in coordination with staffs of the California State Lands Commission, California Coastal Commission, Department of Fish and Game Office of Spill Prevention and Response, and Minerals Management Service. If new information indicates that changes to the methodology or protocol would improve the efficiency or accuracy of determining baseline oiling conditions, the County shall revise the program. Any revisions to the program shall not cause the annual cost to the applicant to exceed the $100,000 limitation.	
OCEANOGRAPHY AND MARINE WATER QUALITY (Section 5.6)					
MWQ.1	Tranquillon Ridge *Increased Throughput Extension of Life*	Accidental discharge of petroleum hydrocarbons into marine waters would adversely affect marine water quality.	Short-term Local	MWQ-1 Offshore inspections of the wet-oil pipeline shall continue to be conducted on a regular basis as determined by the County and/or other regulatory agency throughout the extended life of the project. Inspections shall use the best available technology to identify unsupported spans and deteriorating or inadequate welds. When structural anomalies or unsupported spans are identified that compromise the integrity of the pipeline as determined by the County and/or other regulatory agency, flow through the pipeline flow shall cease until repairs can be effected, spans can be supported, or problematic pipeline components can be replaced.	Significant
COMMERCIAL AND RECREATIONAL FISHING/KELP HARVESTING (Section 5.7)					
CRF/ KH.2	Tranquillon Ridge *Increased Throughput Extension of Life*	Oil spills may potentially impact commercial and recreational fishing in the proposed project area.	Long-term Regional	CRF/KH-2 Same as Mitigation Measure MB-1 in Section 5.5, Marine Biology.	Significant

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Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Accidental Releases (e.g. Oil Spills and Gas Releases)					
TRAFFIC (Section 5.9)					
T.4	Tranquillon Ridge *Increased Throughput Extension of Life*	An oil spill from the proposed Tranquillon Ridge project could result in the disruption of commercial shipping, fishing, and recreational marine traffic.	Short-term Regional	Refer to Marine Biology and Oceanography and Marine Water Quality MB-2 (contingency planning), MWQ-1 (updated Oil Spill Response Plan), and MWQ-3 (increased inspection frequency).	Significant
CULTURAL RESOURCES (Section 5.12)					
CR.3	Tranquillon Ridge *Increased Throughput Extension of Life* Tosco Point Pedernales *Increased Throughput Extension of Life*	Containment and cleanup activities associated with an accidental oil spill would result in ground disturbance and potential impacts on cultural resources.	Long-term Local	CR-5 The OSRP shall be revised to include procedures for minimizing impacts on cultural resources during oil spill containment and cleanup activities. These procedures shall include contacting a county-qualified archaeologist and Native American monitor in the event of a spill. To the extent possible, heavy earth moving equipment or manual excavation shall be minimized at archaeological sites. If unanticipated cultural resources are discovered during containment and cleanup activities, then a county-qualified archaeologist shall document the discovery at the earliest time it is deemed safe to do so. It is possible that post-cleanup archaeological excavations (with Native American monitoring, if applicable) shall be necessary to help mitigate impacts from the containment/cleanup ground disturbances.	Significant
RECREATION/LAND USE (Section 5.14)					
Rec.1	Tranquillon Ridge *Increased Throughput Extension of Life,*	The proposed projects would increase the likeli-hood and volume of an oil spill, which could result in public access restrictions to coastal and inland recreational resources.	Long-term Regional	See Marine Biology Mitigation Measure MB-2, Marine Water Quality Mitigation Measures MWQ-1, MWQ-2, MWQ-3 and Commercial and Recreational Fishing Mitigation Measures CRF/KH-1.	Significant

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CLASS II Impacts of the Proposed Projects[a]

Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
GEOLOGIC RESOURCES (Section 5.3)					
GR.2	Tranquillon Ridge *Construction* Produced Water Facility *Construction*	Ground-disturbing construction activities could result in geologic disturbances such as slope failure, gullying, erosion, and sedimentation.	Short-term Local	See Mitigation Measure GR-1 above.	Insignificant
GR.4	Tranquillon Ridge *Extension of Life* Tosco Point Pedernales *Extension of Life*	Scouring along drainage areas could cause impacts to the pipeline and increase pipeline failure probabilities.	Short-term Local	GR-2 The Applicant shall implement a creek and drainage maintenance program to monitor and repair potential scour areas that could affect the pipeline integrity. The plan shall include annual surveys of the pipeline route and any adjacent drainages within 500 feet that are up slope of the pipeline ROW. Any areas that exhibit scouring or erosion shall be documented. Areas that exhibit increased scour should be addressed through stabilization or other appropriate permanent erosion control measures.	Insignificant
ONSHORE WATER RESOURCES (Section 5.4)					
OWR.1	Tranquillon Ridge *Construction*	Project related construction could cause erosion or siltation resulting in substantial degradation of surface water quality.	Short-term Local	Mitigation Measure GR-1 would reduce the magnitude of potential impacts to onshore water quality associated with disturbances to soils and vegetation. The currently proposed construction footprint does not exceed one acre, and would not require acquisition of a construction storm water General Permit from the RWQCB.	Insignificant

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Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
MARINE BIOLOGICAL RESOURCES (Section 5.5)					
MB.5	Tranquillon Ridge *Drilling*	Increased vessel traffic resulting from the proposed project may impact marine mammals and marine turtles.	Long-term Regional	MB-4 .A marine mammal observer shall be on each vessels servicing Platform Irene. The observer shall be provided training, which focus on the identification of marine mammal species, the specific behavior of species common to the project area, and awareness of seasonal concentrations of marine mammals. A marine mammal observer shall be placed on all support vessels during the spring and fall gray whale migration periods and during periods/seasons having high concentrations of marine mammals in the project area. The observers shall have no other responsibilities during periods when the vessels are in transit. Gray whales can occur from December to May, with the greatest numbers in January during the southward migration. A secondary peak occurs in March during the northward migration. The observer shall have unobstructed views onboard each vessel and serve as lookouts so that collisions with marine mammals can be avoided. Additionally, vessel operators or the Applicant shall develop and implement a contingency plan that focuses on avoidance procedures when marine mammals are encountered at sea. Minimum components of the plan include: a) Vessel operators will make every effort to maintain a distance of 1,000 feet from sighted whales and other threatened or endangered marine mammals or marine turtles. b) Support vessels will not cross directly in front of migrating whales or any other threatened or endangered marine mammals or marine turtles. c) When paralleling whales, support vessels will operate at a constant speed that is not faster than the whales. d) Female whales will not be separated from their calves. e) Vessel operators will not herd or drive whales. f) If a whale engages in evasive or defensive action, support vessels will drop back until the animal moves out of the area. g) Any collisions with marine wildlife will be reported promptly to the Federal and State agencies listed below pursuant to each agency's reporting procedures.	Insignificant

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Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
AIR QUALITY (Section 5.8)					
Air.2	Tranquillon Ridge *Drilling Increased Throughput Extension of Life*	Increased oil processing and drilling of the new Tranquillon Ridge Unit wells at Platform Irene would result in an increase in operational air emissions.	Long-term Regional	Air-2 Ensure that emissions reductions are provided to fully mitigate increases in operational emissions associated with the proposed project.	Insignificant
CULTURAL RESOURCES (Section 5.12)					
CR.2	Tranquillon Ridge *Construction*	Modifications to Valve Site #2 and installation of power poles would result in ground disturbance and potential impacts on cultural resources.	Short-term Local	Mitigation Measure CR-2 (described above) would be applicable. CR-4 An intensive archaeological surface survey shall be conducted at unsurveyed areas of ground disturbance associated with installation of the power pole line across the Santa Ynez River and proposed trenching areas prior to any ground disturbances to identify any cultural resources that may be affected during construction. If a cultural resource is encountered during the survey, it shall be shall be avoided by power pole and/or trench relocation. If archaeological site avoidance is technologically infeasible due to topographic or engineering constraints, the site's potential significance shall be evaluated pursuant to Santa Barbara County Cultural Resource Guidelines and CEQA Section 15064.5 criteria. Resources considered significant and unavoidable shall be subject to a Phase 3 data recovery program (with Native American monitoring, if prehistoric), consistent with Santa Barbara County Cultural Resource Guidelines, and if located on VAFB, shall incorporate the investigation methodology reviewed and approved by VAFB environmental management staff. To comply with VAFB requirements, any trenching or excavation in a floodplain on VAFB shall require archaeological monitoring.	Insignificant
AESTHETICS/VISUAL RESOURCES (Section 5.13)					
Visual.3	Tranquillon Ridge *New Operations*	Visual impacts due to the new transformer station and power lines to Valve	Long-term Local	Visual-2 Underground the portion of the power line (e.g. along Terra Road) which would be visible from western part of Ocean Avenue and the coastal zone areas.	Insignificant

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Impacts That Can Be Mitigated To Less Than Significant Levels

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Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
		Site #2.			
Accidental Releases (e.g. Oil Spills and Gas Releases)					
GEOLOGIC RESOURCES (Section 5.3)					
GR.1	Tranquillon Ridge *Increased throughput Extension of Life* Tosco Point Pedernales *Increased throughput Extension of Life*	Remediation activities associated with a pipeline spill could increase slope failures, erosion, sedimentation, and gullying.	Short-term Local	GR-1 Best Management Practices (BMPs) such as, temporary berms and sedimentation traps, such as silt fencing, straw bales, and sand bags, shall be installed to minimize erosion of soils and sedimentation in nearby drainage's shall be established and included in the oil spill response plan (OSRP). The BMPs shall include maintenance and inspection of the berms and sedimentation traps during rainy and non-rain periods as well as revegetation of impacted areas. Revegetation shall address plant type as well as monitoring to ensure appropriate covering of exposed areas.	Insignificant
ONSHORE WATER RESOURCES (Section 5.4)					
OWR.4	Tranquillon Ridge *Increased throughput Extension of Life* Tosco Point Pedernales *Increased Throughput Extension of Life*	Remediation activities associated with a pipeline spill could increase erosion, and siltation and substantially degrade surface water quality.	Short-term Local	Implementation of Mitigation Measures GR-1 and OWR-7 would reduce the potential for causing significant erosion or siltation associated with spill remediation activities along the pipeline ROW.	Insignificant
AGRICULTURAL RESOURCES (Section 5.15)					
AG.3	Tranquillon Ridge *Increased*	Potential degradation and reduced productivity of agricultural land from a	Short-term Local	AG-1 Revise the Oil Spill Contingency Plan (OSCP) to incorporate specific cleanup techniques on agricultural lands. These techniques shall focus on minimizing removal of top soil. In the event it is necessary to remove top soil, the Applicant shall fund the	Insignificant

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Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Accidental Releases (e.g. Oil Spills and Gas Releases)					
	Throughput Extension of Life Tosco Point Pedernales *Increased Throughput Extension of Life*	pipeline leak or rupture resulting in an oil or produced water spill.		purchase and replacement of removed top soil with equivalent imported soils.	
Maintenance and Repairs					
TERRESTRIAL AND FRESHWATER BIOLOGICAL RESOURCES (Section 5.2)					
TB.3	Tranquillon Ridge *Extension of life* Tosco Point Pedernales *Extension of Life*	Pipeline maintenance and repair, if needed, would result in potential removal of native vegetation and wildlife habitat and erosion and sedimentation as a result of ground disturbance.	Short-term Local	TB-3a Minimize disturbance to native habitats by the development of a Standard Maintenance and Repair Plan. Where ground disturbances are required, the Plan would include: • Restrict construction activities, equipment and personnel to existing disturbed areas (such as roads, pads, or otherwise disturbed areas) to the maximum extent feasible. • Clearly mark and delineate in the field the limits of the construction zone. Personnel or equipment in native habitats outside the construction limits shall be prohibited. • Biologically sensitive resources, such as occurrences of sensitive plant species including sand mesa manzanita, la Purisima manzanita, and black-flowered figwort as well as individual oak trees, shall be identified through surveys conducted by a qualified biologist acceptable to the resource agencies prior to ground disturbance and shall be clearly marked on work or construction plans so they may be avoided. • Where avoidance of biologically sensitive features is infeasible the plan shall specify means by which impacts on the features would be minimized and their survival and recovery facilitated (such as preserving the root system and root crown of resprouting species such as sand mesa manzanita). TB-3b Prior to the issuance of the Land Use Permit for repair and maintenance, a Restoration, Erosion Control, and Revegetation Plan shall be submitted to Planning and	Insignificant

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Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Maintenance and Repairs					
				Development for approval. Once approved, the plan shall be implemented by Torch and monitored by Planning and Development through advanced written updates of construction status and plans. Success of the restoration and revegetation plans should be monitored by a qualified independent biologist. The plan shall contain, but not be limited to, the following: • Procedures for stockpiling and replacing topsoil, replacing and stabilizing backfill, such as at stream crossings, steep or highly erodible slopes and in dune areas. Additionally, provisions should be made for recontouring to approximate the original topography. Excess fill shall be disposed of off-site unless suitable arrangements are made with the property owner. Excess fill shall not be deposited in any drainage, or on any unstable slope. Topsoil shall be salvaged, protected, and replaced. This shall include at a minimum the upper 6-12 inches of topsoil in all areas of open land, other than road shoulders. Final construction plans shall designate areas of topsoil storage and protection, and procedures for handling excess trench spoils. Within wetland areas, topsoil salvage shall be as described above except that wetland topsoil shall be stored separately from all other spoil piles. It shall be labeled with signs as "wetland topsoil." The plan shall contain specific provisions for protection of topsoil stockpiles (such as covering them or using a tackifier or temporary hydromulch) if the soil is to be left for an extended period of time to prevent loss of topsoil due to erosion. • Specific plans for control of erosion, gully formation, and sedimentation, including, but not limited to, sediment traps, check dams, diversion dikes, culverts and slope drains. Plan would also include, where applicable, dikes and catch basins proposed along the pipeline route, to ensure protection and maintenance of the height of berms and containment capacity of the basins, for the life of project. A soil conservation program, to be applied in areas of 20 percent (or greater) slopes along the pipeline corridor, detailing site specific techniques, such as use of jute or excelsior netting, to stabilize soil and sand and encourage revegetation of steeper slopes. Plan shall identify areas with high erosion potential and the specific control measures for these sites. • Procedures for containing sediment and allowing continued downstream flow at stream or biologically significant drainage crossings (identified in the EIS/EIR (84-EIR-7)), including scheduling construction activities during periods of historical low-flow and having erosion control structures or sediment retention devices in place prior	

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Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Maintenance and Repairs					
				to start of construction. Existing water levels in all streams shall be maintained at all times during construction. • Procedures for timely re-establishment of vegetation that replicates indigenous and naturalized communities disturbed. These should include: measures preventing invasion and/or spread of undesired plant species; restoration of wildlife habitat; restoration of native communities and native plant species propagated from locally-acquired existing plant species, including any sensitive species (such as sand mesa manzanita, la Purisima manzanita, and black-flowered figwort); and replacement of trees at the appropriate rate. • Procedures for minimizing tree removal, tree root and branch damage and removal of or damage to other significant plant species including confining disturbance to the approved right-of-way; providing for onsite monitoring of construction by a qualified independent local biologist; and flagging significant species and areas that should be avoided. • Procedures for restoration of riparian corridor stream banks and streambed substrates and elevation, emphasizing natural and existing materials, shall be included as well as methods for minimizing exposure of riparian habitats to disturbance during construction. • Monitoring procedures and minimum performance criteria to be satisfied for revegetation and erosion control. The performance criteria should consider the level of disturbance and the condition of adjacent habitats. Monitoring should continue for 3-5 years, depending on habitat, or until performance criteria are met. Appropriate remedial measures, such as replanting, erosion control or weed (including invasive exotic species) control, shall be identified and implemented if it is determined that performance criteria are not being met.	
TB.4	Tranquillon Ridge *Extension of Life* Tosco Point Pedernales *Extension of Life*	Pipeline repair may injure or eliminate individuals or colonies and habitat of state or federally listed plant species including seaside bird's beak, Surf thistle, beach spectacle	Short-term Local	TB–4a Prior to ground disturbance or other activities, a qualified botanist shall survey all proposed construction, staging and access areas for presence of state or federally-listed plant species. Colonies shall be mapped and clearly marked and numbers of individuals in each colony and their condition determined and recorded. To the maximum extent feasible, construction areas and access roads shall avoid loss of individual plant and or damage to habitats supporting federal or state-listed plants.	Insignificant

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CLASS II Impacts of the Proposed Projects[a]

Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Maintenance and Repairs					
		pod, La Graciosa thistle and possibly Pismo clarkia.		TB-4b Where impacts to these species are unavoidable, the project proponent shall develop and implement a salvage, propagation, replanting, and monitoring program that would utilize both seed and salvaged (excavated) plants constituting an ample and representative sample of each colony of the species that would be impacted. The program plan shall include measures to perpetuate to the maximum extent feasible the genetic lines represented on the impacted sites by obtaining an adequate sample prior to construction, propagating them and using them in the restoration of that site. The program plan shall be approved by the USFWS and CDFG prior to its implementation. Activities involving handling of federal and/or state-listed plant species may require permits including a memorandum of understanding from USFWS and/or CDFG. TB-4c The plan shall incorporate provisions for recreating suitable habitat and measures for re-establishing self-sustaining colonies of seaside bird's beak, beach spectacle-pod and Surf thistle should they be impacted on the site. The plan shall include provisions for monitoring and performance assessment including standards that would allow annual assessment of progress, and provisions for remedial action, should the species fail to re-establish successfully.	
TB.5	Tranquillon Ridge *Extension of Life* Tosco Point Pedernales *Extension of Life*	Pipeline repair or maintenance may cause injury or mortality to individuals and affect habitat of common and federally and state-listed fish and other sensitive wildlife species including western snowy plover, California least tern, California red-legged frog, southwestern pond turtle, tidewater goby, and steelhead.	Short-term Local	Implementation of Mitigation Measures OWR-1, GR-2 through GR-4, and TB-2a, scheduling the work during the dry season, TB-2b, controlling erosion, TB-3a, minimizing disturbance to native habitats, and TB-3b, preparing and implementing of an approved Habitat, Revegetation, Restoration and Monitoring Plan would reduce impacts to native wildlife including sensitive wildlife species. Pre-project surveys by a qualified biologist to determine presence/absence of sensitive species, and monitoring to ensure that sensitive species do not enter the construction area are additional species protection measures. These and other applicable measures are described more fully under the pipeline replacement alternative (see Mitigation Measures under Impacts TB.12 to TB.16). Scheduled maintenance and repair activities would normally be conducted after specific environmental review by the Counties of Santa Barbara and San Luis Obispo, as applicable. Implementation of the following measure would further reduce impacts to wildlife	Insignificant

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CLASS II Impacts of the Proposed Projects[a]

Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Maintenance and Repairs					
				species: TB-5 All routine pipeline repair and maintenance activities occurring within the beach and foredune habitats at Wall Beach need to be scheduled to avoid the breeding season (March 1 to September 30) of the western snowy plover and California least tern. A contingency plan for emergency repairs in this area during the nesting season needs to be developed in coordination with 30 CES/CEVPN at VAFB and with the USFWS. This may require Section 7 consultation.	
GEOLOGIC RESOURCES (Section 5.3)					
GR.3	Tranquillon Ridge *Extension of Life* Tosco Point Pedernales *Extension of Life*	Ground-disturbing maintenance activities could result in geologic disturbances such as slope failure, gullying, erosion, and sedimentation.	Long-term Local	See Mitigation Measure GR-1 above.	Insignificant
ONSHORE WATER RESOURCES (Section 5.4)					
OWR.3	Tranquillon Ridge *Extension of Life* Tosco Point Pedernales *Extension of Life*	Continued monitoring and pipeline maintenance and replacement activities associated with the onshore pipeline system could cause disturbances to soils that could cause erosion and subsequent siltation resulting in degradation of surface water quality.	Long-term Local	See Mitigation Measure GR-1 above. OWR-7 If soil excavation is needed to expose buried pipeline or cleanup a spill within a stream bed, the area should be regraded to the maximum extent feasible to pre-spill conditions after excavation is completed.	Insignificant
CULTURAL RESOURCES (Section 5.12)					
CR.1	Tranquillon	Pipeline maintenance and	Short-	CR-1 All ground disturbance within 200 feet of a recorded archaeological site shall be	Insignificant

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CLASS II Impacts of the Proposed Projects[a]

Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Maintenance and Repairs					
	Ridge *Extension of Life* Tosco Point Pedernales *Extension of Life*	repair would result in ground disturbance and potential impacts on cultural resources.	term Local	monitored by a county-qualified archaeologist and, if prehistoric, by a Native American observer, unless the resource has been previously determined to have no potential for significance because it is re-deposited, an isolated occurrence, modern, or otherwise lacks data potential. CR-2 In the event of an unanticipated cultural resource discovery during construction, all ground disturbances within 200 feet of the discovery shall be halted or re-directed to other areas until the discovery has been documented by a county-qualified archaeologist, and its potential significance evaluated consistent with Santa Barbara County Cultural Resource Guidelines. Resources considered significant shall be avoided by project redesign. If avoidance is not feasible, the cultural resource shall be subject to a Phase 3 data recovery mitigation program (with Native American monitoring, if applicable), consistent with Santa Barbara County Cultural Resource Guidelines. CR-3 If pipeline maintenance and repair are planned on a segment of the unsurveyed pipeline route, then an intensive archaeological surface survey shall be conducted prior to any ground disturbances to identify any cultural resources that may be affected. If a cultural resource is encountered during the survey, it shall be documented by a county-qualified archaeologist and its potential significance evaluated in terms of applicable criteria prior to maintenance and repair work. Resources considered significant shall be avoided or subject to a Phase 3 data recovery program (with Native American monitoring, if applicable), consistent with Santa Barbara County Cultural Resource Guidelines.	
CR.4	Tranquillon Ridge *Extension of Life*	Pipeline repair associated with an accidental produced water spill from the pipeline would result in ground disturbance and potential impacts on cultural resources.	Short-term Local	Mitigation Measures CR-1 and CR-2 would be applicable.	Insignificant
AGRICULTURAL RESOURCES (Section 5.15)					
AG.4	Tranquillon	Potential loss of	Short-	AG-2 Construction Timing. Whenever possible time repairs when fields are fallow and	Insignificant

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CLASS II Impacts of the Proposed Projects[a]

Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Maintenance and Repairs					
	Ridge *Extension of Life*	agricultural productivity during pipeline repair and maintenance.	term Local	utilize dust control measures to limit effects to nearby crops. AG-3 Monetary Payment for Lost Agricultural Productivity. Landowners shall receive compensation for the loss of any crops directly relating to pipeline replacement activities. Compensation will take into account the duration of lost agricultural productivity. AG-4 Soil Replacement and Replanting. All soils within agricultural lands disturbed by pipeline replacement activities shall be replaced and if necessary enriched to support their former crops (or cattle grazing areas). All disturbed areas shall be replanted at a 1:1 ratio.	

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CLASS III Impacts of the Proposed Projects[a]

Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
TERRESTRIAL AND FRESHWATER BIOLOGICAL RESOURCES (Section 5.2)					
TB.1	Tranquillon Ridge *Construction New Operations*	Modification of Valve Site #2 and installation of power poles and transformer station would result in disturbance or loss of less than one acre of native vegetation and wildlife habitat and possible injury to wildlife.	Short-term Local	TB-1a Near Valve Site #3, power poles shall be sited to avoid La Purisima manzanita and sand mesa manzanita. TB-1b Prior to constructing the power line to Valve Site #2, the Applicant shall enter into discussions with VAFB to determine the feasibility of placing the power line on the 13th Street bridge or using the existing VAFB power poles for crossing the Santa Ynez River. If placing the power line on the bridge or the existing poles is determined to be not feasible, the Applicant shall site the power poles outside the limits of the Santa Ynez River riparian vegetation, use "raptor-safe pole designs with the conductors spaced as far apart as possible to minimize the potential for bird wings to span them, install poles and lines outside the breeding season of birds (March 1 through August 15), cover the augered holes if the poles are not installed immediately, and elevate the power line above the level of the tree canopy, taking into consideration future growth of the canopy, and fit wires with some type of device to make them more visible, such as bright-colored plastic balls. If the pole lines are of a type that raptors might nest on, investigate the feasibility of fitting the poles with 3 ft. by 3 ft. nesting platforms a minimum of 4 feet above the tops of the poles as recommended by CDFG. TB-1c Surveys within the disturbance area shall be conducted by a SBC-approved wildlife biologist to document and remove individuals of wildlife species encountered, including reptiles, amphibians, and badgers and other burrowing animals, as appropriate to suitable habitat outside the area of impact. The project area should be regularly monitored to ensure that wildlife species do not enter areas where they would be exposed to hazards.	Insignificant
TB.2	Tranquillon Ridge *Construction*	Modification of Valve Site #2, modifications at LOGP, and installation of power poles and the transformer station have the potential to increase erosion and sedimentation in aquatic habitats.	Short-term Local	TB-2a All ground disturbance activities shall occur, if feasible, during the dry season (generally April 1 through November 1). Work can continue during the rainy season if a county-approved erosion and sediment control plan is in place. TB-2b Erosion and sediment control measures (e.g., silt fencing, dust control, and other appropriate measures) shall be implemented at any drainages; along portions of the affected project area that intersect slopes greater than a 2-to-1 incline; and within 200 feet of downslope water bodies. Appropriate erosion and sediment	Insignificant

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CLASS III Impacts of the Proposed Projects[a]

Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
				control measures shall be installed and maintained until after the rainy season or until vegetation has become re-established in the disturbed areas.	
ONSHORE WATER RESOURCES (Section 5.4)					
OWR.5	Tranquillon Ridge *Extension of Life*	Increased water injection rates could potentially infiltrate fresh water aquifers.	Long-term Regional	No mitigation measures have been identified.	
OWR.6	Tranquillon Ridge *Extension of Life*	LOGP's contribution to the overdraft of the Lompoc groundwater basin would occur over a longer period.	Long-term Regional	No mitigation measures have been identified.	Insignificant
MARINE BIOLOGICAL RESOURCES (Section 5.5)					
MB.2	Tranquillon Ridge *Drilling*	The discharge of drilling muds and cuttings from Platform Irene may potentially impact marine organisms in the project area.	Long-term Local	MB-2 The shunt depth (150 feet below the sea surface) for the discharge of drilling muds and cuttings shall be continued for the proposed project.	Insignificant
MB.3	Tranquillon Ridge *New Operations*	Discharge of produced water from Platform Irene may potentially impact marine organisms in the project area.	Long-term Local	MB-3 The shunt depth (180 feet [55m] below the sea surface) for the discharge of produced water shall be continued for the proposed project.	Insignificant
MB.4	Tranquillon Ridge *Drilling*	Noise caused by drilling activities may potentially disturb marine mammals and marine birds in the project area.	Short-term Local	No mitigation measures have been identified.	Insignificant
OCEANOGRAPHY AND MARINE WATER QUALITY (Section 5.6)					
MWQ.2	Tranquillon Ridge *Drilling*	Reduced marine water and sediment quality would result from increased oceanic discharge of drilling fluids.	Long-term Local	No additional mitigation is required beyond the requirements imposed by the NPDES discharge permit.	Insignificant
MWQ.3	Tranquillon Ridge *New Operations*	Reduced marine water quality would result from the oceanic discharge of produced water.	Long-term Local	No mitigation is proposed beyond the NPDES discharge requirements.	Insignificant
MWQ.4	Tranquillon Ridge *Drilling*	Reduced marine water quality would result from additional discharges of sanitary wastes,	Long-term Local	No mitigation measures beyond the restrictions currently imposed on the offshore facility are required.	Insignificant

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CLASS III Impacts of the Proposed Projects[a]

Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
	Extension of Life	desalinization brine, and other materials from Platform Irene.			
COMMERCIAL AND RECREATIONAL FISHING/KELP HARVESTING (Section 5.7)					
CRF/ KH.3	Tranquillon Ridge *Drilling*	The discharge of drilling muds and drill cuttings from Platform Irene may potentially impact kelp communities in the project area.	Long-term Local	No mitigation measures have been identified.	Insignificant
CRF/ KH.4	Tranquillon Ridge *Drilling* *Extension of Life*	Marine Vessel traffic to and from Platform Irene could cause loss or damage to commercial fishing gear in the project area.	Long-term Local	CRF/KH-3 Disputes over damage to commercial fishing gear resulting from support vessel traffic to and from Platform Irene shall be submitted to the Joint Oil/Fisheries Committee for resolution.	Insignificant
CRF/ KH.5	Tranquillon Ridge *Drilling* *Extension of Life*	The deposition of shells, or shell mounds, could prevent commercial trawling activities beneath Platform Irene.	Long-term Local	CRF/KH-4 At the time of platform abandonment, the Applicant shall ensure that the environmental review of the abandonment activities pursuant to the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA), as appropriate, includes an analysis as to whether or not the shell mounds should be removed or modified so they do not interfere with commercial trawling activities. This subsequent NEPA/CEQA review shall evaluate the best available technologies for removal or modification of the shell mounds. The best available technology shall be determined by the Applicant and the permitting agencies, in consultation with the Joint Oil/Fisheries Liaison Office..	Insignificant

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CLASS III Impacts of the Proposed Projects[a]

Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
AIR QUALITY (Section 5.8)					
Air.1	Tranquillon Ridge *Construction* Produced Water Facilities *Construction*	Construction activities would generate air emissions.	Short-term Regional	Air-1 The Applicants shall implement dust reduction measures during construction. Coordination with the SBCAPCD on dust control measures shall be implemented. The following APCD Standard Dust Mitigation Measures shall be implemented: 1. Dust generated by the development activities shall be retained onsite and kept to a minimum by following the dust control measures listed below. Reclaimed water shall be used whenever possible. a. During clearing, grading, earth moving or excavation, water trucks or sprinkler systems are to be used in sufficient quantities to prevent dust from leaving the site and to create a crust, after each day's activities cease. b. After clearing, grading, earth moving or excavation is completed, the disturbed area must be treated by watering, or revegetating; or by spreading soil binders until the area is paved or otherwise developed so that dust generation would not occur. c. During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency will be required whenever the wind speed exceeds 15 mph. 2. Importation, exportation and stockpiling of fill material: a. Soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. b. Trucks transporting fill material to and from the site shall be tarped from the point of origin. c. If the construction site is greater than five acres, gravel pads must be installed at all access points to minimize tracking of mud on to public roads. 3. Activation of increased dust control measures: a. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD.	Insignificant
Air.3	Tranquillon Ridge	Increased health risks from the increased air emissions due to	Long-term	No mitigation measures have been identified.	Insignificant

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CLASS III Impacts of the Proposed Projects[a]

Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
	Increased Throughput Extension of Life	the expected increase in equipment operation and oil volumes processed.	Regional		
TRAFFIC (Section 5.9)					
T.1	Tranquillon Ridge *Construction* Produced Water Facilities *Construction*	Onshore construction associated with the project would temporarily add to local road traffic.	Short-term Regional	T-1 Limit the delivery of equipment and supplies for the construction activities to non-rush hour periods (rush hour periods are considered to be 7a.m. to 9a.m. and 4p.m. to 6p.m.).	Insignificant
T.2	Tranquillon Ridge *Increased Throughput Extension of Life*	Increased production would increase facility truck traffic on local roads.	Long-term Regional	T-2 Limit the LPG and sulfur truck servicing the facility to non-rush hour periods (rush hour periods are considered to be 7a.m. to 9a.m. and 4p.m. to 6p.m.).	Insignificant
T.3	Tranquillon Ridge *Drilling*	Increased offshore drilling activity would increase offshore traffic.	Long-term Regional	T-3 Require supply boats from Port Hueneme to use the Coast Guard's recommended marine traffic corridors to the maximum extent feasible.	Insignificant
NOISE (Section 5.10)					
N.1	Tranquillon Ridge *Drilling*	Drilling associated with the proposed project would increase ambient noise levels due to drilling rig operation and additional helicopter and supply boat trips.	Long-term Local	N-1 The Applicant shall establish overland flight height minimums of 1,000 feet when feasible with the approval of the FAA, and shall not fly over Oso Flaco Lake.	Insignificant
N.2	Tranquillon Ridge *Construction* Produced Water Facility *Construction*	Construction noise would temporarily increase ambient daytime noise levels.	Short-term Local	N-2 Construction activity for site preparation shall be limited to 7:00 a.m. and 4:00 p.m., Monday through Friday. Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities such as interior painting are not subject to these restrictions. Signs stating these restrictions shall be provided by the Applicant and posted on site. Signs shall be in place prior to issuance of Land Use Permit and throughout grading and construction activities.	Insignificant
N.3	Produced Water	Operations noise from pumps	Long-	No mitigation measures have been identified.	Insignificant

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CLASS III Impacts of the Proposed Projects[a]

Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
	Facility *New Operations* Tranquillon Ridge *New Operations, Extension of Life*	would increase long- term ambient noise levels.	term Local		
AESTHETICS/VISUAL RESOURCES (Section 5.13)					
Visual.2	Tranquillon Ridge *New Operations*	Visual impacts due to installation of new equipment at Valve Site #2, the LOGP and the Tosco Pump Stations.	Long-term Local	Visual-1 To minimize visual effects, all new equipment shall be painted in the colors that are compatible with the surroundings.	Insignificant
AGRICULTURAL RESOURCES (Section 5.15)					
AG.1	Tranquillon Ridge *Construction*	Addition of power poles and substation to Valve Site #2 could disturb farm operations.	Short-term Local	No mitigation measure has been identified.	Insignificant
AG.2	Tranquillon Ridge *Construction Increased Throughput Extension of Life*	Increased truck trips during construction and operation. Increased traffic unlikely to interfere with farm operations.	Long-term Local	No mitigation measure has been identified.	Insignificant
ENERGY AND MINERAL RESOURCES (Section 5.16)					
Energy.1	Tranquillon Ridge *Construction* Produced Water Facility *Construction* Sisquoc Pipeline Bi-directional Flow	Impacts to energy resources due to electricity and fuel consumption during construction phase.	Short-term Regional	No mitigation measures have been identified.	Insignificant

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CLASS III Impacts of the Proposed Projects[a]

Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
	Construction				
Energy.2	Tranquillon Ridge *New Operations* *Increased Throughput* *Extension of Life* Tosco Point Pedernales *Increased Throughput* *Extension of Life* Produced Water Facilities *New Operations*	Impacts due to increased electricity consumption by additional or upgraded equipment and due to increased operation of the existing equipment.	Long-term Regional	No mitigation measures have been identified.	Insignificant
Accidental Releases (e.g. Oil Spills and Gas Releases)					
HAZARDOUS MATERIALS/RISK OF UPSET (Section 5.1)					
Risk.1	Tranquillon Ridge *Increased Throughput* *Extension of Life* Tosco Point Pedernales *Increased Throughput* *Extension of Life*	The proposed project could generate risks to public safety by exposing the public to crude oil spills and subsequent fires.	Long-term Regional	No mitigation measures are needed for public safety related to crude oil transportation by pipeline.	Insignificant
Risk.2	Tranquillon Ridge *Extension of Life*	The proposed project could generate risks to public safety by exposing the public to produced gas releases	Long-term Regional	Risk-1 The Applicant shall ensure that pipeline operation does not exceed 600 psig and 8,000 ppm hydrogen sulfide.	Insignificant

a. The Proposed Projects include the Tranquillon Ridge Project, the LOGP Produced Water Facility Project, and the Sisquoc Bi-Directional Flow Project. In addition, the Tosco Point Pedernales Pipeline is include since it is affected by the Tranquillon Ridge Project and is covered under a separate FDP permit.

CLASS III Impacts of the Proposed Projects[a]

Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Accidental Releases (e.g. Oil Spills and Gas Releases)					
		from the sour gas pipeline from Platform Irene to the LOGP..			
COMMERCIAL AND RECREATIONAL FISHING/KELP HARVESTING (Section 5.7)					
CRF/ KH.1	Tranquillon Ridge *Increased Throughput Extension of Life*	Oil spills may potentially impact commercial and recreational kelp harvests in the proposed project area.	Long-term Regional	CRF/KH-1 Same as Mitigation Measure MB-1 in Section 5.5, Marine Biology.	Insignificant
FIRE PROTECTION/ EMERGENCY RESPONSE (Section 5.11)					
Fire.1	Tranquillon Ridge *New Operations*	Due to equipment modifications at the Valve Site #2 the increased potential for upset conditions at the site could create impacts to fire protection and emergency response resources.	Long-term Regional	Fire-1 The Applicants shall review and update if needed the fire protection plan, emergency response plan and oil spill response plan to address the new equipment at Valve Site #2.	Insignificant
Fire.2	Tranquillon Ridge *New Operations*	Operation of the new power line to Valve Site #2 could result in impacts to fire protection and emergency response resources due to addition of an ignition source into a high fire hazard area.	Long-term Local	Fire-2 The Applicants shall update the LOGP Fire Protection Plan to include the power line, in particular the Flammable Vegetation Management part of the plan to minimize possibility of a brush fire.	Insignificant
Fire.3	Tranquillon Ridge *Increased Throughput Extension of Life* Tosco Point Pedernales *Increase Throughput*	Increased risk of upset due to increased oil flow rates through the project pipelines and pipeline facilities could create impacts to fire protection and emergency response resources.	Long-term Regional	No mitigation measure has been identified.	Insignificant

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CLASS III Impacts of the Proposed Projects[a]

Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Accidental Releases (e.g. Oil Spills and Gas Releases)					
	Extension of Life				
Fire.4	Tranquillon Ridge *New Operations Increased Throughput Extension of Life*	Increased likelihood of upset conditions due to equipment modifications at the LOGP and potential increase of wet oil and sour gas quantities processed at the facility could create impacts to fire protection and emergency response.	Long-term Regional	No mitigation measures have been identified.	Insignificant

a. The Proposed Projects include the Tranquillon Ridge Project, the LOGP Produced Water Facility Project, and the Sisquoc Bi-Directional Flow Project. In addition, the Tosco Point Pedernales Pipeline is include since it is affected by the Tranquillon Ridge Project and is covered under a separate FDP permit.

CLASS IV Impacts of the Proposed Projects[a]

Beneficial Impacts

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
Construction and Operations					
OCEANOGRAPHY AND MARINE WATER QUALITY (Section 5.6)					
MWQ.5	Produced Water Facilities *New Operations*	Marine water-quality impacts caused by accidental release of produced water from a rupture along water-return pipeline would be decreased under the proposed project as the produced water would be treated to NPDES requirements.	Long-term Regional	No mitigation measures necessary.	Beneficial
ENERGY AND MINERAL RESOURCES (Section 5.16)					
Energy.3	Tranquillon Ridge *Increased Throughput Extension of Life*	Beneficial impacts as the project would be a net-producer of petroleum-based fuels.	Long-term Regional	No mitigation measures necessary.	Beneficial
Energy.4	Tranquillon Ridge *Increased Throughput Extension of Life*	Beneficial impacts as the project would be a net-producer of natural gas.	Long-term Regional	No mitigation measures necessary.	Beneficial

a. The Proposed Projects include the Tranquillon Ridge Project, the LOGP Produced Water Facility Project, and the Sisquoc Bi-Directional Flow Project. In addition, the Tosco Point Pedernales Pipeline is include since it is affected by the Tranquillon Ridge Project and is covered under a separate FDP permit.

Alternatives Impact Summary Tables

This portion of the impact summary tables provides a list of the new impacts or impacts for which the level of significance has changed compared to the proposed project for each of the alternatives evaluated throughout the EIR. The majority of the alternatives represent changes to various components of the projects. This is because the proposed projects involve modifications to existing facilities. As such, many of the impacts identified for the proposed project would also apply to the alternatives. Table IST.1 provides a list of all of the proposed projects' impacts and identifies which ones apply to the various alternatives. Impacts that are common to the proposed projects and an alternative are not listed in the alternative impact tables unless the impact class has changed. The reader is referred to the impact summary tables for the Proposed Projects for these common impacts.

There is no listing of any impacts for the No Project Alternatives since there are no new impacts that are not already identified for the proposed projects. Table IST.1 provides a list of the impacts from the proposed project that apply to the No Project Alternatives.

There is no listing of Class I impacts for the Oil Emulsion Pipeline Replacement Alternative since there are no new Class I impacts that are not already identified for the proposed projects. Table IST.1 provides a list of the Class I impacts from the proposed project that apply to this alternative.

There is no listing of Class I or Class II impacts for the Drill Muds and Cuttings Alternatives since there are no new Class I or Class II impacts that are not already identified for the proposed projects. Table IST.1 provides a list of the Class I and Class II impacts from the proposed project that apply to these alternatives.

There is no listing of Class IV impacts for any of the alternatives since there are no new Class IV impacts that are not already identified for the proposed projects. Table IST.1 provides a list of the Class IV impacts from the proposed project that apply to the alternatives.

Table IST.1 Impacts of the Proposed Projects that Also Apply to the Alternatives

Impact #	Impact Description	Alternatives				
		No Project	Casmalia Site	New Oil Emission Pipeline	Power Line Routes to Valve Site #2	Mud and Cuttings Disposal
Risk.1	The proposed project could generate risks to public safety by exposing the public to crude oil spills and subsequent fires (Class III).		√	√	√	√
Risk.2	The proposed project could generate risks to public safety by exposing the public to produced gas releases from the sour gas pipeline from Platform Irene to the LOGP (Class III).		√	√	√	√
Risk.3	The proposed project could generate risks to public safety by exposing the public to transportation hazards (Class I).		√	√	√	√
TB.1	Modification of Valve Site #2 and installation of power poles and transformer station would result in disturbance or loss of less than one acre of native vegetation and wildlife habitat and possible injury to wildlife (Class III).		√		√	√
TB.2	Modification of Valve Site #2, modifications at LOGP, and installation of power poles and the transformer station have the potential to increase erosion and sedimentation in aquatic habitats (Class III).		√		√	√
TB.3	Pipeline maintenance and repair, if needed, would result in potential removal of native vegetation and wildlife habitat and erosion and sedimentation as a result of ground disturbance (Class II).		√	√	√	√
TB.4	Pipeline repair may injure or eliminate individuals or colonies and habitat of state or federally listed plant species including seaside bird's beak, Surf thistle, beach spectacle pod, La Graciosa thistle and possibly Pismo clarkia (Class II).		√	√	√	√
TB.5	Pipeline repair or maintenance may cause injury or mortality to individuals and affect habitat of common and federally and state-listed fish and other sensitive wildlife species including western snowy plover, California least tern, California red-legged frog, southwestern pond turtle, tidewater goby, and steelhead (Class II).		√	√	√	√
TB.6	A pipeline leak or rupture could result in an oil spill and subsequent degradation of upland, riparian and aquatic habitats and injury to plants and terrestrial and aquatic wildlife through direct toxicity, smothering, and entrapment as well as through resultant cleanup efforts (Class I).		√	√	√	√

Table IST.1 Impacts of the Proposed Projects that Also Apply to the Alternatives

Impact #	Impact Description	Alternatives				
		No Project	Casmalia Site	New Oil Emission Pipeline	Power Line Routes to Valve Site #2	Mud and Cuttings Disposal
TB.7	A spill and/or subsequent cleanup efforts may directly or indirectly cause the loss of habitat and individuals or colonies of state-or federally-listed plant species including seaside bird's beak, Surf thistle, beach spectacle pod, La Graciosa thistle and possibly Pismo clarkia or degrade designated critical habitat for the Lompoc yerba santa and the La Graciosa thistle (Class I).		√	√	√	√
TB.8	An oil spill and/or subsequent cleanup effort may directly or indirectly cause the loss of individual state or federally-listed wildlife species or cause the loss or degradation of sensitive species habitat. An oil spill and/or subsequent cleanup effort may impact designated critical habitat for steelhead, western snowy plover, and California red-legged frog (Class I).		√	√	√	√
GR.1	Remediation activities associated with a pipeline spill could increase slope failures, erosion, sedimentation, and gullying (Class II).		√	√	√	√
GR.2	Ground-disturbing construction activities could result in geologic disturbances such as slope failure, gullying, erosion, and sedimentation (Class II).		√	√	√	√
GR.3	Ground-disturbing maintenance activities could result in geologic disturbances such as slope failure, gullying, erosion, and sedimentation (Class II).		√	√	√	√
GR.4	Scouring along drainage areas could cause impacts to the pipeline and increase pipeline failure probabilities (Class II).		√	√	√	√
OWR.1	Project related construction could cause erosion or siltation resulting in substantial degradation of surface water quality (Class II).		√	√	√	√
OWR.2	A rupture or leak from the emulsion, produced water or dry oil pipelines could substantially degrade surface and groundwater quality (Class I).		√	√	√	√
OWR.3	Continued monitoring and pipeline maintenance and replacement activities associated with the onshore pipeline system could cause disturbances to soils that could cause erosion and subsequent siltation resulting in degradation of surface water quality (Class II).		√	√	√	√
OWR.4	Remediation activities associated with a pipeline spill could increase erosion, and siltation and substantially degrade surface water quality (Class II).		√	√	√	√
OWR.5	Increased water injection rates could potentially infiltrate fresh water aquifers.		√	√	√	√
OWR.6	LOGP's contribution to the overdraft of the Lompoc groundwater basin would occur over a longer period (Class III).			√	√	√

Table IST.1 Impacts of the Proposed Projects that Also Apply to the Alternatives

Impact #	Impact Description	Alternatives				
		No Project	Casmalia Site	New Oil Emission Pipeline	Power Line Routes to Valve Site #2	Mud and Cuttings Disposal
MB.1	Oil spills from the project may impact benthic and intertidal organisms, fish, marine mammals, marine birds, and marine turtles. Oil spills from the project may impact plankton (Class I).		√	√	√	√
MB.2	The discharge of drilling muds and cuttings from Platform Irene may potentially impact marine organisms in the project area (Class III).	√	√	√	√	
MB.3	Discharge of produced water from Platform Irene may potentially impact marine organisms in the project area (Class III).		√	√	√	√
MB.4	Noise caused by drilling activities may potentially disturb marine mammals and marine birds in the project area (Class III).	√	√	√	√	√
MB.5	Increased vessel traffic resulting from the proposed project may impact marine mammals and marine turtles (Class II).	√	√	√	√	√
MWQ.1	Accidental discharge of petroleum hydrocarbons into marine waters would adversely affect marine water quality (Class I).		√	√	√	√
MWQ.2	Reduced marine water and sediment quality would result from increased oceanic discharge of drilling fluids (Class III).	√	√	√	√	
MWQ.3	Reduced marine water quality would result from the oceanic discharge of produced water (Class III).		√	√	√	√
MWQ.4	Reduced marine water quality would result from additional discharges of sanitary wastes, desalinization brine, and other materials from Platform Irene (Class III).	√	√	√	√	√
MWQ.5	Marine water-quality impacts caused by accidental release of produced water from a rupture along water-return pipeline would be decreased under the proposed project as the produced water would be treated to NPDES requirements (Class IV).		√	√	√	√
CRF/ KH.1	Oil spills may potentially impact commercial and recreational kelp harvests in the proposed project area (Class III).		√	√	√	√
CRF/ KH.2	Oil spills may potentially impact commercial and recreational fishing in the proposed project area (Class I).		√	√	√	√
CRF/ KH.3	The discharge of drilling muds and drill cuttings from Platform Irene may potentially impact kelp communities in the project area (Class III).	√	√	√	√	√

Table IST.1 Impacts of the Proposed Projects that Also Apply to the Alternatives

Impact #	Impact Description	Alternatives				
		No Project	Casmalia Site	New Oil Emission Pipeline	Power Line Routes to Valve Site #2	Mud and Cuttings Disposal
CRF/ KH.4	Marine Vessel traffic to and from Platform Irene could cause loss or damage to commercial fishing gear in the project area.	√	√	√	√	√
CRF/ KH.5	The deposition of shells, or shell mounds, could prevent commercial trawling activities beneath Platform Irene (Class III).	√	√	√	√	√
Air.1	Construction activities would generate air emissions (Class III).		√	√	√	√
Air.2	Increased oil processing and drilling of the new Tranquillon Ridge Unit wells at Platform Irene would result in an increase in operational air emissions (Class II).	√	√	√	√	√
Air.3	Increased health risks from the increased air emissions due to the expected increase in equipment operation and oil volumes processed (Class III).		√	√	√	√
T.1	Onshore construction associated with the project would temporarily add to local road traffic (Class III).		√	√	√	√
T.2	Increased production would increase facility truck traffic on local roads (Class III).		√	√	√	√
T.3	Increased offshore drilling activity would increase ocean traffic (Class III).	√	√	√	√	√
T.4	An oil spill from the proposed Tranquillon Ridge project could result in the disruption of commercial shipping, fishing, and recreational marine traffic (Class I).		√	√	√	√
N.1	Drilling associated with the proposed project would increase ambient noise levels due to drilling rig operation and additional helicopter and supply boat trips (Class III).	√	√	√	√	√
N.2	Construction noise would temporarily increase ambient daytime noise levels (Class III).		√	√	√	√
N.3	Operations noise from pumps would increase long- term ambient noise levels (Class III).		√	√	√	√
Fire.1	Due to equipment modifications at the Valve Site #2 the increased potential for upset conditions at the site could create impacts to fire protection and emergency response resources (Class III).		√		√	√
Fire.2	Operation of the new power line to Valve Site #2 could result in impacts to fire protection and emergency response resources due to addition of an ignition source into a high fire hazard area (Class III).		√		√	√
Fire.3	Increased risk of upset due to increased oil flow rates through the project pipelines and pipeline facilities could create impacts to fire protection and emergency response resources (Class III).		√	√	√	√

Table IST.1 Impacts of the Proposed Projects that Also Apply to the Alternatives

Impact #	Impact Description	Alternatives				
		No Project	Casmalia Site	New Oil Emission Pipeline	Power Line Routes to Valve Site #2	Mud and Cuttings Disposal
Fire.4	Increased likelihood of upset conditions due to equipment modifications at the LOGP and potential increase of wet oil and sour gas quantities processed at the facility could create impacts to fire protection and emergency response (Class III).		√	√	√	√
CR.1	Pipeline maintenance and repair would result in ground disturbance and potential impacts on cultural resources (Class II).		√	√	√	√
CR.2	Modifications to Valve Site #2 and installation of power poles would result in ground disturbance and potential impacts on cultural resources (Class II).		√		√	√
CR.3	Containment and cleanup activities associated with an accidental oil spill would result in ground disturbance and potential impacts on cultural resources (Class I).		√	√	√	√
CR.4	Pipeline repair associated with an accidental produced water spill from the pipeline would result in ground disturbance and potential impacts on cultural resources (Class II).		√	√	√	√
Visual.1	Visual impacts due to long-term continued presence of the project facilities visible from coastal zone (Platform Irene and Surf substation) (Class I).		√	√	√	√
Visual.2	Visual impacts due to installation of new equipment at Valve Site #2, the LOGP and the Tosco Pump Stations (Class III).		√	√	√	√
Visual.3	Visual impacts due to the new transformer station and power lines to Valve Site #2 (Class II).		√		√	√
Visual.4	Visual impacts due to long-term continued presence of the LOGP (Class I).		√	√	√	√
Rec.1	The proposed projects would increase the likelihood and volume of an oil spill, which could result in public access restrictions to coastal and inland recreational resources (Class I).		√	√	√	√
AG.1	Addition of power poles and substation to Valve Site #2 could disturb farm operations (Class III).		√		√	√
AG.2	Increased truck trips during construction and operation. Increased traffic unlikely to interfere with farm operations (Class III).		√	√	√	√
AG.3	Potential degradation and reduced productivity of agricultural land from a pipeline leak or rupture resulting in an oil or produced water spill (Class II).		√	√	√	√
AG.4	Potential loss of agricultural productivity during pipeline repair and maintenance (Class II).		√	√	√	√
Energy.1	Impacts to energy resources due to electricity and fuel consumption during construction phase (Class III).		√	√	√	√

Table IST.1 Impacts of the Proposed Projects that Also Apply to the Alternatives

Impact #	Impact Description	Alternatives				
		No Project	Casmalia Site	New Oil Emission Pipeline	Power Line Routes to Valve Site #2	Mud and Cuttings Disposal
Energy.2	Impacts due to increased electricity consumption by additional or upgraded equipment and due to increased operation of the existing equipment (Class III).	√	√	√	√	√
Energy.3	Beneficial impacts as the project would be a net-producer of petroleum-based fuels (Class IV).	√	√	√	√	√
Energy.4	Beneficial impacts as the project would be a net-producer of natural gas (Class IV).	√	√	√	√	√

CLASS I Impacts of the Casmalia East Oil Processing Alternative
Impacts That May Not Be Fully Mitigated To Less Than Significant Levels

(Impacts that must be addressed in a "statement of overriding consideration" if the project is approved in accordance with Sections 15091 and 15093 of the State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
TERRESTRIAL AND FRESHWATER BIOLOGICAL RESOURCES (Section 5.2)					
TB.10	Tranquillon Ridge *Construction*	Installation of the new pipelines from LOGP to Casmalia has the potential to remove or damage up to 152 acres of native vegetation, wildlife habitat including sensitive plant species and previously disturbed natural areas.	Short-term Local	See Mitigation Measures TB-2a, scheduling the work during the dry season, TB-2b, controlling erosion, TB-3a and TB-3b, which address, in part, the restoration of native plant species would also reduce loss of native vegetation and wildlife habitat in affected project area.	Significant
AIR QUALITY (Section 5.8)					
Air.1	All Projects *Construction*	Construction activities would generate air emissions.	Long-term Regional	Air-1 The Applicants shall implement dust reduction measures during construction. Coordination with the SBCAPCD on dust control measures shall be implemented. The following APCD Standard Dust Mitigation Measures shall be implemented: 1. Dust generated by the development activities shall be retained onsite and kept to a minimum by following the dust control measures listed below. Reclaimed water shall be used whenever possible. a. During clearing, grading, earth moving or excavation, water trucks or sprinkler systems are to be used in sufficient quantities to prevent dust from leaving the site and to create a crust, after each day's activities cease. b. After clearing, grading, earth moving or excavation is completed, the disturbed area must be treated by watering, or revegetating; or by spreading soil binders until the area is paved or otherwise developed so that dust generation would not occur. c. During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency will be required whenever the wind speed exceeds 15 mph. 2. Importation, exportation and stockpiling of fill material: a. Soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. b. Trucks transporting fill material to and from the site shall be tarped from the point of origin.	Significant

CLASS I Impacts of the Casmalia East Oil Processing Alternative
Impacts That May Not Be Fully Mitigated To Less Than Significant Levels

(Impacts that must be addressed in a "statement of overriding consideration" if the project is approved in accordance with Sections 15091 and 15093 of the State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
				c. If the construction site is greater than five acres, gravel pads must be installed at all access points to minimize tracking of mud on to public roads. 3. Activation of increased dust control measures: a. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD.	
AESTHETICS/VISUAL RESOURCES (Section 5.9)					
Visual.5	Tranquillon Ridge *New Operations*	New oil and gas processing plant due to its tall structures and glare from lighting could impact visual resources in the area where no other man-made structures exist.	Long-term Local	Mitigation Measure Visual-2 would apply for all equipment for the new facilities. Visual-5 The Applicants shall implement a lighting plan that would minimize nighttime glare.	Significant

CLASS II Impacts of the Casmalia East Oil Processing Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
HAZARDOUS MATERIAL/RISK OF UPSET (Section 5.1)					
Risk.4	Tranquillon Ridge *Operation Extension of Life*	The Casmalia Processing alternative could generate risks to public safety by exposing the public to produced gas releases from the additional sour gas pipeline between LOGP and Casmalia	Long-term Local	Risk-2 The Applicant shall route the LOGP-Casmalia pipeline such that it is not closer than 7,000 feet from the southern area of the City of Orcutt. The route shall turn westward from Highway 1/135 near the Harris Canyon Creek area in order to avoid impacts to the southern areas of the City of Orcutt. (Tranquillon Ridge) Risk-3 Excess flow valves shall be installed on the gas pipeline at the LOGP location and automatic shutoff valves and/or check valves shall be installed on the emulsion pipeline at intermittent locations to minimize the amount of gas or crude oil/emulsion that could be released in the event of a pipeline leak or rupture. (Tranquillon Ridge)	Insignificant
TERRESTRIAL AND FRESHWATER BIOLOGICAL RESOURCES (Section 5.2)					
TB.12	Tranquillon Ridge *Construction*	Installation of the new pipelines has the potential to result in disturbance to and loss of wetland and aquatic biota during pipeline installation.	Short-term Local	TB-12a Erosion and sediment control measures, which shall include the use of silt fencing, dust control, and other appropriate measures, shall be implemented at drainages; along portions of the ROW that intersect slopes greater than a 2-to-1 incline; and within 200 feet of downslope water bodies. (The use of straw bales and silt fences as erosion control protection shall not be considered to be appropriate in areas grazed by cattle unless the cattle are excluded from the area.). Appropriate erosion and sediment control measures shall be installed and maintained until revegetation of the disturbed area is considered successful. TB-12b Drainages shall be restored to original contours after construction activities in order to preserve downstream biological resources and minimize sedimentation. TB-12c All ground disturbance activities shall occur, if feasible, during the dry season (generally April 1 through November 1). TB-12d Biological monitors shall be on-site during construction activities to ensure avoidance of individual animals and minimization of habitat destruction. TB-12e A spill response plan shall be prepared prior to the onset of construction to ensure a prompt and effective response to any accidental spills or leaks of diesel, gasoline, oil or other contaminating materials. Examples of measures would include	Insignificant

CLASS II Impacts of the Casmalia East Oil Processing Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
				the following: All equipment will be inspected for fuel, lubricant, and hydraulic fluid leaks prior to and during the work. Any leaks will be repaired immediately. Drip pans will be used to capture leaked fluids until the repair is completed. Fueling of stationary equipment will be by fuel truck and no equipment shall be fueled or maintained within 100 feet of drainages. Fueling or maintenance will occur over a drip pan or in a lined fueling area.	
TB.13	Tranquillon Ridge *Construction*	Installation of the pipelines has the potential to remove or damage federally or state-listed plant species.	Short-term Local	See Mitigation Measures TB-3a and TB-3b, to minimize the disturbed area to the maximum extent feasible; TB-4a, to map locations of sensitive plant species; TB-4b, to develop a program to salvage, propagate, and reestablish plant species that could not be avoided during project activities; and TB-4c, to reestablish and monitor state and federally listed plant species.	Insignificant
TB.16	Tranquillon Ridge *Construction*	Pipeline installation in the riparian woodland, wetlands, could adversely impact California red-legged frogs as well as several California species of concern (southwestern pond turtles, Cooper's hawk, yellow warbler, yellow-breasted chat).	Short-term Local	TB-16a Preconstruction surveys shall be conducted by SBC-approved biologists with suitable experience to determine the presence of California red-legged frogs and other sensitive species. If surveys indicate that California red-legged frogs would likely be present in the work areas in or near stream crossings or riparian vegetation, construction activities shall be postponed and federal and state agencies shall be contacted to coordinate suitable protection measures (such as relocations, through authorization for incidental take, or avoidance) for implementation by the Applicant. If southwestern pond turtles, two-striped garter snakes or other sensitive species are encountered in work areas they shall be relocated or otherwise protected from harm by means acceptable to CDFG. TB-16b Before any construction activities begin on the project, the biological monitor(s) shall conduct an employee training session for all construction crews and others present during construction. At a minimum, the training shall include a discussion of the biology, identification, and habitat needs of California red-legged frogs and the importance of their habitat, their status under the California Endangered Species and Federal Endangered Species Acts, and measures taken for the protection of these species and their habitat as part of the project. Upon completion of the orientation, employees shall sign a form stating that they attended the program and understand all protection measures for the species. TB-16c Construction shall be scheduled to avoid the rainy season (after first soaking rains through April) when California red-legged frogs would be most likely to be	Insignificant

CLASS II Impacts of the Casmalia East Oil Processing Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
				moving between different bodies of water. Construction shall be completed between April 1 and November 1. If necessary, the project proponent shall seek approval from the Corps and the USFWS to work outside of this time period. TB-16d A qualified SBC-approved California red-legged frog biologist shall be present throughout the construction phase to monitor for the species and to implement additional mitigation for the species. The approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated during review of the action by the Corps and the USFWS. TB-16e The pipeline trench shall be provided with escape ramps constructed of earth fill to prevent entrapment of sensitive species or other animals during the construction phase of the project. The ramps shall be located at no greater than 1,000-foot intervals and be constructed at less than 45 degrees inclination. TB-16f All trenches, open pipes and culverts, or similar structures at the construction site open for one or more overnight periods shall be thoroughly inspected for trapped animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. Pipes in, or adjacent to, trenches left overnight shall be capped. If an animal is discovered inside a pipe during construction, that section of pipe shall not be moved, or if necessary, moved only once, to remove it from the path of construction until the animal has voluntarily escaped. TB-16g All trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas. TB-16h If dewatering is necessary, such as in Santa Lucia Canyon, intakes shall be completely screened with wire mesh (not larger than five millimeters mesh size) to prevent California red-legged frogs from entering the pump system. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. No water containing any sediment shall be allowed to flow back into any flowing water. Upon completion of construction, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance	

CLASS II Impacts of the Casmalia East Oil Processing Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
				to the substrate. TB-16i. A SBC-approved biologist shall permanently remove from within suitable habitat in the disturbance corridor any individuals of exotic species, such as bullfrogs, crayfish, and non-native fishes, to the maximum extent possible. TB-16j Surveys in suitable habitat shall be conducted on a regular basis (twice a week at night) during the construction phase to ensure that California red-legged frogs are not present in the work areas. TB-16k If construction work is scheduled to occur during the period April 1 to August 1, a qualified avian biologist shall survey riparian habitat within 100 feet of the ROW. If surveys reveal Cooper's hawks, yellow warblers, or yellow-breasted chats are nesting within 100 feet of the ROW, construction activities in those areas shall be postponed until after the conclusion of the nesting period, April 1 to August 1. TB-16l Drainage and wetland crossings shall be revegetated with an appropriate assemblage of native riparian and wetland species suitable for the area. A species list and restoration and monitoring plan shall be included with the project proposal for approval by SBC. This plan must include, but not be limited to, location of restoration, species to be used, restoration techniques, timing of restoration, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.	
GEOLOGIC RESOURCES (Section 5.3)					
GR.2	Tranquillon Ridge *Construction*	Ground-disturbing construction activities could result in geologic disturbances such as slope failure, gullying, erosion, and sedimentation.	Long-term Local	See Mitigation Measure GR-1 above. GR-3 Ensure that all pipeline and facility construction areas have adequate review by soil geologists for expansive/collapsible soils and for potential areas of slope instability prior to construction.	Insignificant

CLASS II Impacts of the Casmalia East Oil Processing Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
FIRE PROTECTION (Section 5.11)					
Fire.6	Tranquillon Ridge *New Operations* *Extension of Life*	Operation of the new oil and gas facility at Casmalia East site could create long-term impacts to fire protection and emergency response.	Long-term Regional	*Fire-3. For the new facilities the Applicants shall follow all appropriate fire protection and safety measures outlined in the Point Pedernales Project FDP, System Safety and Reliability, Part P.* Fire-4 The new facility shall be designed in accordance with all applicable fire protection and emergency response standards. The new facility should be designed with all early fire detection and prevention of fire spread as the basis of the fire safety design. The facility should have adequate supply of water and oil fire fighting foam as per NFPA requirements (i.e., Standards 11, 15, 22, 24, 25). The facility layout should provide sufficient access for emergency response vehicles and provide adequate equipment spacing as per the API and IRI guidelines (IRI IM 2.5.2). The new facility should have fire detection monitors positioned in the locations most likely to be affected by fire. All appropriate equipment such as crude oil storage tanks should have sufficient secondary containment. The grading under the LPG storage vessels should be sloped to allow any spilled flammable liquids to flow outward from the vessel and into an impoundment area. Fire-5 Fire protection, oil spill contingency and emergency response plans of the new facility shall be developed or adjusted using the similar LOGP plans and coordinated with the SBCFD. These plans shall address the fire prevention measures at the facility, the fire suppression systems, the specific hazards at the facility, and fire and emergency response training and planning. Fire-6 The Applicants shall provide funding to the SBCFD to provide adequate staffing and equipment for the Santa Maria Fire Station to address the emergency response requirements of the Casmalia oil and gas processing facility.	Insignificant
Fire.7	Tranquillon Ridge *New Operations*	Operation of the sour gas pipeline to the new plant at Casmalia East site could create long-term impacts to fire protection and emergency response.	Long-term Regional	Fire-7 The sour gas pipeline shall be equipped with a SCADA system that is capable of detecting leaks as small as ¼". The pipeline shall be equipped with remotely operated block valves to limit the volume of material release in the event of a leak or rupture. Fire-8 The pipeline shall be constructed following all applicable standards for sour gas pipeline service.	Insignificant

CLASS II Impacts of the Casmalia East Oil Processing Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
CULTURAL RESOURCES (Section 5.12)					
CR.5	Tranquillon Ridge *Construction*	Constructing a new processing site (the Casmalia East Site) and installing new pipelines from the new processing site to the LOGP would result in extensive ground disturbance and impacts on cultural resources.	Long-term Local	CR-6 An intensive archaeological surface survey shall be conducted along the new pipeline ROW and at the location of the new processing site prior to any ground disturbances to identify any cultural resources that may be affected during construction. If a cultural resource is encountered during the survey, it shall be documented by a county-qualified archaeologist and its potential significance evaluated in terms of applicable criteria prior to any construction activities. Resources considered significant shall be avoided or subject to a Phase 3 data recovery program (with Native American monitoring, if applicable), consistent with Santa Barbara County Cultural Resource Guidelines.	Insignificant
AGRICULTURAL RESOURCES (Section 5.15)					
AG.5	Tranquillon Ridge *Construction*	Construction of a new processing site and the installation of new pipelines between LOGP and the new site would result in extensive ground disturbance to grazing land and a potential loss of agricultural productivity.	Long-term Local	Mitigation Measures AG-1 through AG-4 are applicable as well as the following mitigation measure. AG-5 Restore grazing land once installation of new pipelines has been completed.	Insignificant
AG.6	Tranquillon Ridge *Construction*	Boring locations could reduce farmland areas.	Short-term Local	Mitigation Measures AG-2 through AG-5 are appropriate for this impact.	Insignificant

CLASS III Impacts of the Casmalia East Oil Processing Alternative
Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
TERRESTRIAL AND FRESHWATER BIOLOGICAL RESOURCES (Section 5.2)					
TB.11	Tranquillon Ridge *Construction*	Installation of the new pipelines from the LOGP to Casmalia has the potential to cause temporary habitat loss for mobile wildlife species and to cause mortality to individual animals.	Short-term Local	See Mitigation Measures TB-1c, removing sensitive species out of the harm's way, TB-3a, minimize disturbance to native habitats, and TB-3b, preparation and implementation of an approved Habitat Revegetation, Restoration and Monitoring Plan.	Insignificant
FIRE PROTECTION (Section 5.11)					
Fire.5	Tranquillon Ridge *Construction*	Construction of Casmalia site facilities and dismantling of the LOGP could create short-term impacts to fire protection and emergency response.	Long-term Regional	Fire-3 For the new facilities the Applicants shall follow all appropriate fire protection and safety measures outlined in the Point Pedernales Project FDP, System Safety and Reliability, Part P.	Insignificant

CLASS I Impacts of the Power Line to Valve Site #2 Alternatives
Impacts That May Not Be Fully Mitigated To Less Than Significant Levels

(Impacts that must be addressed in a "statement of overriding consideration" if the project is approved in accordance with Sections 15091 and 15093 of the State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
Option 2b					
TERRESTRIAL AND FRESHWATER BIOLOGICAL RESOURCES (Section 5.2)					
TB.9	Tranquillon Ridge *Construction*	Accidental release of boring materials ("frac-outs") during construction activities related to boring could impact one or more sensitive wildlife species.	Short-term Local	TB-9a If construction activities are scheduled to occur during the breeding season for the sensitive bird species (April 1 through August 31), pre-construction surveys shall be carried out by a qualified biologist to determine if nests of any of these species are present within 100 meters from the construction locations. If nests are found, construction activities shall be postponed until after the end of the breeding seasons of these bird species, on September 1. TB-9b Prior to commencement of boring, a detailed site-specific bore plan shall be developed that would include, but is not limited to the following, site analysis to determine optimum depth to prevent "frac-outs", use of fluorescent dye in drilling fluids, seasonal restrictions on work to be conducted, mapped locations of sensitive resources, measures to reduce the project footprint. The plan shall also contain a site specific "frac-out" contingency plan, which details methods to identify, report, and respond to "frac-outs." TB-9c All boring activities shall be monitored to ensure all precautionary measures are taken to prevent release of drilling fluids into aquatic and terrestrial habitats. Bore crews and monitors shall receive specific training in operational methods to reduce the incidence of "frac-outs", and in "frac-out" response and reporting procedures.	Significant

CLASS II Impacts of the Power Line to Valve Site #2 Alternatives
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
Option 2b					
ONSHORE WATER RESOURCES (Section 5.4)					
OWR.7	Tranquillon Ridge *Construction*	Potential "frac-out" of boring muds could cause siltation and degrade surface water quality.	Short-term Local	OWR-8 Applicant shall monitor boring operations, immediately cleaning spilled drilling muds, restricting construction activities to avoid potential conflicts with special status species, and use of best management practices to prevent or minimize soil erosion and effects of siltation on surface waters.	Insignificant
Underground Along Terra Road					
CULTURAL RESOURCES (Section 5.12)					
CR.6	Tranquillon Ridge *Construction*	Trenching along Terra Road would result in ground disturbance and potential impacts on cultural resources.	Short-term Local	CR-7 Avoid impacts on known cultural resources by rerouting the trench so that no ground disturbance occurs within 200 feet from established site boundaries of CA-SBA-913, -1917, -689, and –2126.	Insignificant

CLASS III Impacts for the Power Lines to Valve Site #2 Alternatives
Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/Region	Mitigation Measures	Residual Impact
Underground Along Terra Road					
AESTHETICS/VISUAL RESOURCES (Section 5.13)					
Visual.3	Tranquillon Ridge *New Operations*	Visual impacts due to the new transformer station and power lines to Valve Site #2.	Long-term/Local	No mitigation measure has been identified.	Insignificant

CLASS II Impacts of the Oil Emulsion Pipeline Replacement Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
TERRESTRIAL AND FRESHWATER BIOLOGICAL RESOURCES (Section 5.2)					
TB.10	Tranquillon Ridge *Construction*	Replacement of the existing pipeline from landfall to the LOGP has the potential to remove or damage up to 88.6 acres of native vegetation and wildlife habitat including sensitive plant species.	Short-term Local	See Mitigation Measures TB-2a, scheduling the work during the dry season, TB-2b, controlling erosion, TB-3a and TB-3b, which address, in part, the restoration of native plant species would also reduce loss of native vegetation and wildlife habitat in affected project area.	Insignificant
TB.12	Tranquillon Ridge *Construction*	Replacement of the existing pipeline has the potential to result in disturbance to and loss of wetland and aquatic biota during pipeline replacement.	Short-term Local	TB-12a Erosion and sediment control measures, which shall include the use of silt fencing, dust control, and other appropriate measures, shall be implemented at drainages; along portions of the ROW that intersect slopes greater than a 2-to-1 incline; and within 200 feet of downslope water bodies. (The use of straw bales and silt fences as erosion control protection shall not be considered to be appropriate in areas grazed by cattle unless the cattle are excluded from the area.). Appropriate erosion and sediment control measures shall be installed and maintained until revegetation of the disturbed area is considered successful. TB-12b Drainages shall be restored to original contours after construction activities in order to preserve downstream biological resources and minimize sedimentation. TB-12c All ground disturbance activities shall occur, if feasible, during the dry season (generally April 1 through November 1). TB-12d Biological monitors shall be on-site during construction activities to ensure avoidance of individual animals and minimization of habitat destruction. TB-12e A spill response plan shall be prepared prior to the onset of construction to ensure a prompt and effective response to any accidental spills or leaks of diesel, gasoline, oil or other contaminating materials. Examples of measures would include the following: All equipment will be inspected for fuel,	Insignificant

CLASS II Impacts of the Oil Emulsion Pipeline Replacement Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
				lubricant, and hydraulic fluid leaks prior to and during the work. Any leaks will be repaired immediately. Drip pans will be used to capture leaked fluids until the repair is completed. Fueling of stationary equipment will be by fuel truck and no equipment shall be fueled or maintained within 100 feet of drainages. Fueling or maintenance will occur over a drip pan or in a lined fueling area.	
TB.13	Tranquillon Ridge *Construction*	Replacement of the pipeline has the potential to remove or damage federally or state-listed plant species.	Short-term Local	See Mitigation Measures TB-3a and TB-3b, to minimize the disturbed area to the maximum extent feasible; TB-4a, to map locations of sensitive plant species; TB-4b, to develop a program to salvage, propagate, and reestablish plant species that could not be avoided during project activities; and TB-4c, to reestablish and monitor state and federally listed plant species.	Insignificant
TB.14	Tranquillon Ridge *Construction*	Replacement of the pipeline in the coastal beach and foredune habitat, where the pipeline array makes landfall, would result in potential impacts to nesting western snowy plovers and California least terns.	Short-term Local	See Mitigation Measure TB-5, to schedule construction activities within the beach and foredune habitat at Wall Beach to avoid the nesting season for snowy plovers and California least terns.	Insignificant
TB.15	Tranquillon Ridge *Construction*	Replacement of the pipeline in the Eucalyptus tree habitat, between catchment basins 8 and 9, could result in potential impacts to a monarch butterfly autumnal aggregation site.	Short-term Local	TB-15 Avoid scheduling construction activities between catchment basins 8 and 9 when aggregations of monarch butterflies are present, typically during the fall and winter months. Do not remove or trim trees within or surrounding the aggregation site if it would significantly alter temperature or humidity within the aggregation site, due to altered air flow patterns.	Insignificant
TB.16	Tranquillon Ridge *Construction*	Pipeline replacement in the riparian woodland, wetlands, and upland habitats in Oak Canyon and Santa Lucia Canyon could adversely impact California red-legged frogs as well as several California species of concern (southwestern pond turtles, Cooper's hawk, yellow	Short-term Local	TB-16a Preconstruction surveys shall be conducted by SBC-approved biologists with suitable experience to determine the presence of California red-legged frogs and other sensitive species. If surveys indicate that California red-legged frogs would likely be present in the work areas in or near stream crossings or riparian vegetation, construction activities shall be postponed and federal and state agencies shall be contacted to coordinate suitable protection measures (such as relocations, through authorization for incidental take, or avoidance) for implementation by the Applicant. If southwestern pond turtles,	Insignificant

CLASS II Impacts of the Oil Emulsion Pipeline Replacement Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
		warbler, yellow-breasted chat).		two-striped garter snakes or other sensitive species are encountered in work areas they shall be relocated or otherwise protected from harm by means acceptable to CDFG. TB-16b Before any construction activities begin on the project, the biological monitor(s) shall conduct an employee training session for all construction crews and others present during construction. At a minimum, the training shall include a discussion of the biology, identification, and habitat needs of California red-legged frogs and the importance of their habitat, their status under the California Endangered Species and Federal Endangered Species Acts, and measures taken for the protection of these species and their habitat as part of the project. Upon completion of the orientation, employees shall sign a form stating that they attended the program and understand all protection measures for the species. TB-16c Construction shall be scheduled to avoid the rainy season (after first soaking rains through April) when California red-legged frogs would be most likely to be moving between different bodies of water. Construction shall be completed between April 1 and November 1. If necessary, the project proponent shall seek approval from the Corps and the USFWS to work outside of this time period. TB-16d A qualified SBC-approved California red-legged frog biologist shall be present throughout the construction phase to monitor for the species and to implement additional mitigation for the species. The approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated during review of the action by the Corps and the USFWS. TB-16e The pipeline trench shall be provided with escape ramps constructed of earth fill to prevent entrapment of sensitive species or other animals during the construction phase of the project. The ramps shall be located at no greater than 1000-foot intervals and be constructed at less than 45 degrees inclination. TB-16f All trenches, open pipes and culverts, or similar structures at the	

CLASS II Impacts of the Oil Emulsion Pipeline Replacement Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
				construction site open for one or more overnight periods shall be thoroughly inspected for trapped animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. Pipes in, or adjacent to, trenches left overnight shall be capped. If an animal is discovered inside a pipe during construction, that section of pipe shall not be moved, or if necessary, moved only once, to remove it from the path of construction until the animal has voluntarily escaped. TB-16g All trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas. TB-16h If dewatering is necessary, such as in Santa Lucia Canyon, intakes shall be completely screened with wire mesh (not larger than five millimeters mesh size) to prevent California red-legged frogs from entering the pump system. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. No water containing any sediment shall be allowed to flow back into any flowing water. Upon completion of construction, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate. TB-16i. A SBC-approved biologist shall permanently remove from within suitable habitat in the disturbance corridor any individuals of exotic species, such as bullfrogs, crayfish, and non-native fishes, to the maximum extent possible. TB-16j Surveys in suitable habitat shall be conducted on a regular basis (twice a week at night) during the construction phase to ensure that California red-legged frogs are not present in the work areas. TB-16k If construction work is scheduled to occur during the period April 1 to August 1, a qualified avian biologist shall survey riparian habitat within 100 feet of the ROW. If surveys reveal Cooper's hawks, yellow warblers, or yellow-breasted chats are nesting within 100 feet of the ROW, construction activities in	

CLASS II Impacts of the Oil Emulsion Pipeline Replacement Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
				those areas shall be postponed until after the conclusion of the nesting period, April 1 to August 1. TB-16l Drainage and wetland crossings shall be revegetated with an appropriate assemblage of native riparian and wetland species suitable for the area. A species list and restoration and monitoring plan shall be included with the project proposal for approval by SBC. This plan must include, but not be limited to, location of restoration, species to be used, restoration techniques, timing of restoration, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.	
TB.17	Tranquillon Ridge *Construction*	Replacement of the pipeline in the drainages in Oak Canyon and Santa Lucia Canyon could cause downstream impacts to tidewater gobies and southern steelhead.	Short-term Local	See mitigation measures identified previously including TB-2a, scheduling the work during the dry season, TB-2b, controlling erosion,TB-3a and TB-3b, minimize disturbance to native habitats, TB-3b, preparation and implementation of an approved Habitat, Revegetation, Restoration and Monitoring Plan, and TB-12e, equipment spill control measures, would reduce downstream impacts to tidewater gobies and southern steelhead.	Insignificant
GEOLOGIC RESOURCES (Section 5.3)					
GR.4	Tranquillon Ridge *Extension of Life*	Scouring along drainage areas could cause impacts to the pipeline and increase pipeline failure probabilities.	Long-term Local	GR-2 The Applicant shall implement a creek and drainage maintenance program to monitor and repair potential scour areas that could affect the pipeline integrity. The plan shall include annual surveys of the pipeline route and any adjacent drainages within 500 feet that are up slope of the pipeline ROW. Any areas that exhibit scouring or erosion shall be documented. Areas that exhibit increased scour should be addressed through stabilization or other appropriate permanent erosion control measures. GR-4 Geotechnical analyses shall be completed in existing erosion-prone areas (as described by Coastal Geoscience, Inc. 2001) to determine proper pipeline burial depth.	Insignificant
GR.5	Tranquillon Ridge *Construction*	Pipeline installation offshore could result in increased resuspension of bottom sediment material, increased bottom sediment drift, and	Short-term Local	GR-5 Pipeline surveys shall be conducted to confirm the absence of unsupported spans after installation of the offshore pipeline and at periodic intervals during the life of the facility. Initial surveys shall be conducted annually, but may be reduced in frequency as the discretion of the MMS, CSLC and SBC.	Insignificant

CLASS II Impacts of the Oil Emulsion Pipeline Replacement Alternative

Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
		decreased stability of sediments within the offshore pipeline ROW.			

CLASS II Impacts of the Oil Emulsion Pipeline Replacement Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
ONSHORE WATER RESOURCES (Section 5.4)					
OWR.1	Tranquillon Ridge *Construction*	Project related construction could cause erosion or siltation resulting in substantial degradation of surface water quality.	Short-term Local	See Mitigation Measure GR-1 above. OWR-9 To the extent feasible, pipeline construction shall occur during the dry season to minimize erosion potential due to surface runoff.	Insignificant
CULTURAL RESOURCES (Section 5.12)					
CR.7	Tranquillon Ridge *Construction*	Offshore oil emulsion pipeline replacement would result in seafloor disturbance and potential impacts on cultural resources.	Short-term Local	CR-8 The original offshore construction corridor shall be mapped and labeled on appropriate offshore Project maps. All seafloor disturbances from construction activities associated with the new pipeline shall be confined within the original pipeline construction corridor to avoid impacts on potentially significant cultural resources.	Insignificant
CR.8	Tranquillon Ridge *Construction*	Onshore oil emulsion pipeline removal and replacement would result in ground disturbance and potential impacts on cultural resources.	Short-term Local	CR-9 The normal 100-foot wide ROW shall be reduced to a 40-foot wide ROW when within 200 feet of a recorded archaeological site unless the resource has been previously determined to have no potential for significance because it is re-deposited, an isolated occurrence, modern, or otherwise lacks data potential. CR-10 Develop a Construction Monitoring Plan to prepare for archaeological and Native American monitoring activities during construction.	Insignificant
AESTHETICS/VISUAL RESOURCES (Section 5.13)					
Visual.6	Tranquillon Ridge *Construction*	Visual impacts due to new pipeline installation construction activities.	Short-term Local	Visual-6 The Applicant shall re-vegetate the cleared portion of the pipeline right-of-way with species that are biologically and visually compatible with the surroundings; and continue with the appropriate watering schedule, if necessary, for establishing the permanent ground cover.	Insignificant
AGRICULTURAL RESOURCES (Section 5.15)					
AG.7	Tranquillon Ridge *Construction*	Potential loss of agricultural productivity during pipeline replacement.	Short-term Local	Mitigation measures AG-2 through AG-5 would be applicable, as well as, AG-6 Same as GR-1. Temporary berms and sedimentation traps, such as silt fencing, straw bales, and sand bags, shall be installed during construction to minimize erosion of soils and sedimentation into nearby drainages, irrigation systems, and crop areas. AG-7 Sedimentation basins and traps installed pursuant to Mitigation Measure	Insignificant

CLASS II Impacts of the Oil Emulsion Pipeline Replacement Alternative
Impacts That Can Be Mitigated To Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Section 15091 State CEQA Guidelines)

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
				GR-PR-2 and 3 from the original 1985 Point Pedernales EIR/EIS shall be inspected, cleaned, and if necessary replaced. Silt fences shall be inspected monthly during dry periods and immediately after each rainfall. Sediment must be removed when more than 1/3 filled, until vegetation is reestablished in the area of the disturbed soil. Straw bales shall be inspected weekly and after each rain. Sediment shall be removed when it reaches a depth of 6 inches, until vegetation is reestablished.	

CLASS III Impacts of the Oil Emulsion Pipeline Replacement Alternative
Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measure	Residual Impact
TERRESTRIAL AND FRESHWATER BIOLOGICAL RESOURCES (Section 5.2)					
TB.11	Tranquillon Ridge *Construction*	Replacement of the existing pipeline from landfall to the LOGP has the potential to cause temporary habitat loss for mobile wildlife species and to cause mortality to individual animals.	Short-term Local	See Mitigation Measures TB-1c, removing sensitive species out of the harm's way, TB-3a, minimize disturbance to native habitats, and TB-3b, preparation and implementation of an approved Habitat Revegetation, Restoration and Monitoring Plan.	Insignificant
MARINE BIOLOGICAL RESOURCES (Section 5.5)					
MB.6	Tranquillon Ridge *Construction*	The burial of the pipeline would disturb soft-bottom habitats	Short-term Local	No mitigation measure has been identified.	Insignificant
OCEANOGRAPHY AND MARINE WATER QUALITY (Section 5.6)					
MWQ.6	Tranquillon Ridge *Extension of Life*	Marine water quality impacts would result from seafloor sediments resuspended during the installation of a new offshore pipeline.	Short-term Local	See MWQ-1.	Insignificant
NOISE (Section 5.10)					
N.4	Tranquillon Ridge *Construction*	Construction activities along the pipeline route would temporarily increase ambient noise levels near Surf Beach and Ocean Beach Park, at residences along the north edge of Vandenberg Village and at Cabrillo High School, and at the residential complex at the Lompoc Federal Penitentiary.	Short-term Local	See N-2 above about limiting operating hours of construction.	Insignificant
FIRE PROTECTION (Section 5.11)					
Fire.8	Tranquillon Ridge *Construction*	Installation of the replacement emulsion pipeline could create short-term impacts to fire protection and emergency response.	Short-term Regional	Fire-9 All construction equipment shall be equipped with the appropriate spark arrestors and functioning mufflers. Fire-10 A water truck shall be available at the project site at all times when welding or grinding activities are taking place. Fire-11 All rubber-tired construction vehicles shall be equipped with appropriate fire fighting equipment, such as shovels and axes or pulaskis, to aid in the prevention or spread of fires.	Insignificant
RECREATION/LAND USE (Section 5.14)					
Rec.2	Tranquillon Ridge *Construction*	Pipeline construction could interfere with or restrict recreational activities along the pipeline route.	Short-term Regional	No mitigation measures have been identified.	Insignificant

CLASS III Impacts for the Drill Muds and Cuttings Disposal Alternative
Impacts That Are Adverse But Insignificant

Impact #	Project and *Project Phase*	Description of Impact	Scope/ Region	Mitigation Measures	Residual Impact
MARINE BIOLOGICAL RESOURCES (Section 5.5)					
MB.7	Tranquillon Ridge *Drilling*	Marine organisms would be impacted by accidental discharge of drilling muds and cuttings during transit to shore.	Short-term Local	See Mitigation Measures MWQ-3 and MWQ-4.	Insignificant
OCEANOGRAPHY AND MARINE WATER QUALITY (Section 5.6)					
MWQ.7 Inject	Tranquillon Ridge *Drilling*	Marine water quality impacts could result from the marine release of interstitial waters contaminated by drill-muds injection into a near surface formation.	Short-term Local	MWQ-2 Muds and cuttings shall be reinjected into a formation that is far enough below the seafloor that the marine release of contaminated groundwater is unlikely. The integrity of the well-bore and cap rock shall be sufficient to prevent near-surface formations from being fractured. The injection shall conform to all underground injection control regulations.	Insignificant
MWQ.7 Onshore Disposal	Tranquillon Ridge *Drilling*	Marine water quality would be impacted by accidental discharge of drill muds and cuttings during transit to the disposal site.	Short-term Local	MWQ-3 Baker tanks, bins, and hoses used to transfer muds and cuttings to the boats shall be checked regularly for leaks. MWQ-4 Wastewater generated by cleaning the boats, transport containers, and muds-transfer equipment shall be collected and disposed of onshore.	Insignificant
RECREATION/LAND USE (Section 5.14)					
Rec.3	Tranquillon Ridge *Drilling*	Muds and cuttings spilled near the shore could disrupt recreational activities such as SCUBA diving.	Short-term Local	Rec-1 Require project vessels to travel in recommended marine traffic corridors. Also, refer to MWQ-6 in the Marine Water Quality section.	Insignificant

Summary of Cumulative Impacts

CLASS I – SIGNIFICANT UNAVOIDABLE IMPACTS
HAZARDOUS MATERIALS/RISK OF UPSET
Other oil and gas projects proposed in the area would increase risks from oil spills and gas releases, therefore their cumulative impacts are significant. Non-energy projects would have significant impacts because of development along the Harris Grade Route would exacerbate an already significant impact assocaited with gas liquids transportation. Statistics indicates that increases in traffic would not increase LOS of local roadways above C or D, and therefore, would not have subsequent increases in accident rates. Because operational increases in traffic (LPG truck service to the LOGP) due to the proposed projects would not significantly increase the LOS of the local roads, risks due to cumulative traffic increases would be not significant.
TERRESTRIAL AND FRESHWATER BIOLOGY
Incrementally, the proposed project would not contribute significantly to cumulative biology impacts or the project impacts could be mitigated. However, the combined impacts from other projects are significant due to increased potential of oil spills, removal of vegetation due to construction, introduction of non-native vegetation, increased disturbance of wildlife from additional lights, traffic, noise, etc.
ONSHORE WATER RESOURCES
Although impacts to onshore water from the residential projects would cumulatively be not significant, impacts from the cumulative oil facilities and pipelines could significantly impact onshore water due to increased potential for oil spills into the surface water bodies.
MARINE BIOLOGICAL RESOURCES
Residential projects would not impact marine biological resources. Cumulative impacts from increased likelihood for marine traffic collisions with marine animals would be mitigable. However, cumulative impacts from the additional offshore oil facilities and underwater pipelines could significantly impact marine biology due to increased potential for oil spills.
OCEANOGRAPHY AND MARINE WATER QUALITY
Although there would be no impacts to marine water quality from the residential projects, cumulative impacts from the additional offshore oil facilities and underwater pipelines could significantly impact marine water quality and sediments due to increased potential for oil spills.
COMMERCIAL AND RECREATIONAL FISHING/KELP HARVESTING
Although there would be no impacts from the residential projects, cumulative impacts from the additional offshore oil facilities and underwater pipelines could significantly impact commercial and recreational fishing due to increased potential for oil spills.
TRAFFIC
The marine traffic associated with construction and operations of the proposed oil and gas projects would be cumulatively not significant. However, impacts from construction phases of the onshore projects, if they occur at the same time as the proposed projects, could be cumulatively significant due to use of the same roadways such as Harris Grade Road.

Summary of Cumulative Impacts

CLASS I – SIGNIFICANT UNAVOIDABLE IMPACTS
CULTURAL RESOURCES
Cumulative impacts to cultural resources due to the proposed oil and gas and other projects could be significant but fully mitigable. However, potential impacts from oil spills cleanup activities could be potentially significant although unlikely. The likelihood of a spill and the subsequent cleanup would be increased because the cumulative projects involve construction of additional oil facilities and pipelines. This was found to be cumulatively significant.
AESTHETICS/VISUAL RESOURCES
Although most of the onshore oil and gas projects would use the existing facilities, cumulatively significant impacts on visual resources are likely due to potential construction of several offshore facilities visible from the coastal zone. Residential and Industrial projects would have significant impacts due to the irreversible loss of open space and altering the visual character of the area from semi-rural to urban.
RECREATION/LAND USE
Although non-energy projects would have not significant cumulative impacts to recreation and land use, cumulative impacts from the additional offshore oil facilities and underwater pipelines could significantly impact coastal recreational areas due to increased potential for oil spills.
AGRICULTURAL RESOURCES
The proposed projects would not significantly contribute to the cumulative impacts to agriculture since the agricultural land area that would be affected by construction and facilities modification is small, and impacts to productivity from maintenance and repair would be mitigable. However, impacts of the cumulative oil and gas projects could have significant cumulative impacts to agriculture due to reduced productivity due to increased maintenance, repair and potential for oil spills and subsequent cleanup activities.

CLASS II – SIGNIFICANT BUT MITIGABLE IMPACTS
GEOLOGICAL RESOURCES
Cumulative impacts to geological resources from the oil and gas projects would be localized and small in scale. The combined impacts to erosion and sedimentation due to construction and underground facilities (pipelines) maintenance and repairs are mitigable to insignificance. Non-energy projects would have a not significant cumulative impact.
AIR QUALITY
Air impacts from construction of the new oil and gas facilities could be significant, however mitigable by provisions of emission reduction credits consistent with SBCAPCD regulations. Operation impacts are likely to be mitigable with emission reduction credits consistent with SBCAPCD regulations. Non-energy projects operation is likely to be significant for the projects with more that 125 units. However these projects were accounted for in the 1998 Clean Air Plan, and therefore these air emissions are expected and would be consistent with the planning document used to bring the region into attainment with ambient air quality standards.

Summary of Cumulative Impacts

CLASS II – SIGNIFICANT BUT MITIGABLE IMPACTS
NOISE
Cumulative noise impacts from the oil and gas projects would be not significant since the construction is proposed in areas far from the sensitive receptors, and operational noise increases would be minimal. Construction phase of the non-energy projects however is proposed close to the sensitive receptors and therefore could have cumulatively significant but mitigable impacts.

CLASS III – INSIGNIFICANT IMPACTS
FIRE PROTECTION AND EMERGENCY RESPONSE
Most of the proposed oil and gas projects would use the existing onshore facilities, and these facilities are required to update on a regular basis their emergency response and fire protection plans. These plans would be reviewed and approved by local fire departments. The existing facilities contribute funds to the local fire protection and emergency response services, therefore the impacts would be not significant. Residential and other cumulative projects in Lompoc area would be adequately covered due to the planned expansion of the Fire Station No.51, and therefore impacts are not significant.

CLASS IV – BENEFICIAL IMPACTS
ENERGY
The cumulative residential and industrial projects in the area would consume energy, but the amount would not be considered significant. However, due to the oil and gas projects (including the proposed projects) that would produce energy the cumulative impacts from all projects would be beneficial because there would be a net increase in energy production.

ATTACHMENT C:
01-EIR-04 IMPACT SUMMARY TABLES

ATTACHMENT D: POLICY CONSISTENCY ANALYSIS

Policy Consistency Analysis

This section contains a policy consistency analysis for the proposed project.

Coastal Act and Coastal Plan Policies

The following policies are applicable to the section of the Tranquillon Ridge Project within the coastal zone. This includes Valve Site #2, Valve Site #1 and the Point Pedernales pipelines/facilities west of Valve Site #2.

Coastal Act Policy 30232

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 clean up facilities and procedures shall be provided for accidental spills that do occur.

The Tranquillon Ridge Project would result in an increased throughput of oil and would extend the life over which the oil emulsion, dry oil, and produced water pipelines would operate. Currently, to reduce the risk of a spill, pipeline inspections and corrosion prevention measures are implemented and a Supervisory Control and Data Acquisition System is in place to monitor the pipeline. In addition, 12 secondary containment basins are located at strategic locations (predominately in the vicinity of the Santa Ynez River) to contain the oil in the event of a spill. An OSCP is also in place to address response to, clean up of, and restoration of, spill affected areas. To provide further protection against crude oil spills the EIR identifies the need for an additional catchment basin at Valve Site #2, annual inspection and maintenance of the pipeline, and additional updates to the OSCP. This finding cannot be made because the enforceability of certain key mitigation measures is in doubt. Without these mitigation measures, County finds that the increase in impacts is unacceptable and that the permit should be denied.

Coastal Act Policy 30250

(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 addition, land divisions, other than leases, for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

(b) Where feasible, new hazardous industrial development shall be located away from existing developed areas.

The proposed Tranquillon Ridge Project would primarily use the existing Point Pedernales infrastructure. New construction at Valve Site #2 would be adjacent to the existing development within previously disturbed areas. The project is consistent with this policy.

Coastal Plan Policy 2-6

Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the Applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development. The Applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project. Lack of available public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan. Where an affordable housing project is proposed pursuant to the Affordable Housing Overlay regulations, special needs housing or other affordable housing projects which include at least 50 percent of the total number of units for affordable housing or 30 percent of the total number of units affordable at the very low income level are to be served by entities that require can-and-will-serve letters, such projects shall be presumed to be consistent with the water and sewer service requirements of this policy if the project has, or is conditioned to obtain all necessary can-and-will-serve letters at the time of final map recordation, or if no map, prior to issuance of land use permits. ***(amended by 93-GP-11)***

The portion of the Point Pedernales facilities within the coastal zone does not generate a demand for water, wastewater disposal, or solid waste disposal. The facilities are accessed via New Terra Road on VAFB. This existing road provides adequate access. Emergency response and fire protection services would be provided by the Applicant and by COUNTYFS No. 51 (first responder) and Lompoc City Fire Station No. 2. An ERP is in place for the existing Point Pedernales Project and would need to be updated to address new equipment and operating conditions associated with the Tranquillon Ridge Project. Public services are available and adequate to serve the proposed project, thus the project is consistent with this policy.

Coastal Plan Policy 2-11

All development, including agriculture, adjacent to areas designated on the land use plan or resource maps as environmentally sensitive habitat area shall be regulated to avoid adverse impacts on habitat resources. Regulatory measures include, but are not limited to, setbacks, buffer zones, grading controls, noise restrictions, maintenance of natural vegetation, and control of runoff.

: The Santa Ynez River estuary is designated as environmentally sensitive habitat. The existing Point Pedernales pipelines and associated facilities were sited to minimize impacts to the river. In addition, catchment basins were required along the pipeline route in the vicinity of the river to collect and contain oil in the event of a leak or rupture. Installation of new pumps at Valve Site #2 would increase the risk of a spill over current conditions. To further minimize spill related impacts, the EIR identifies the need for installation of a new catchment basin or berm at Valve Site #2 and revision to the OSCP to address protection and restoration of sensitive resources. With incorporation of these measures, the project would be consistent with this policy.

Coastal Act Policy 30253

New development shall:

1. Minimize risks 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, or 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.

The existing Point Pedernales facilities are located within a designated high fire hazard area and traverse areas with high geologic hazards. Because the proposed Tranquillon Ridge Project involves minimal new development and would use the existing Point Pedernales facilities, exposure to new hazard areas would be minimal. The project is consistent with this policy.

Coastal Plan Policy 3-9

Water, gas, sewer, electrical, or crude oil transmission and distribution lines which cross fault lines, shall be subject to additional safety standards, including emergency shutoff where applicable.

The project pipeline route does not cross any active faults. However, the existing pipeline does cross several potentially active faults. The existing Point Pedernales FDP required the installation and use of a SCADA system along the pipeline which allows the Applicant to monitor and if necessary isolate the pipeline segments in the event of an upset condition. The proposed Tranquillon Ridge Project would use the existing pipelines and would be monitored using the existing SCADA system. The project is consistent with this policy. Given the scope of Nuevo's objection in its litigation to County's authority to impose any conditions on the operation of the pipelines, it is not known if this condition will be fully implemented. Therefore, this finding cannot be made.

Coastal Act Policy 30231

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 wastewater discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface waterflow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

The Tranquillon Ridge Project would result in an increased throughput of oil and would extend the life over which the oil emulsion, dry oil, and produced water pipelines would operate. If a rupture or leak of the pipelines were to occur, significant degradation could occur to surface water, groundwater, and wetland resources in the project area. Currently to reduce the risk of a spill, pipeline inspections and corrosion prevention measures are implemented. In addition, 12 secondary containment basins are located at strategic locations (predominately in the vicinity of

the Santa Ynez River) to contain the oil in the event of a spill. An OSCP is also in place to address response to, clean up of, and restoration of, spill affected areas. To further reduce potential water quality impacts from the proposed Tranquillon Ridge Project the EIR identifies the need for an additional catchment basin at Valve Site #2, annual inspection and maintenance of the pipeline, and additional updates to the OSCP.

The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of a spill (An increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline; and an increase of 8.5 percent for ruptures and large spills and 4.4 percent for leaks and small spills – for the offshore pipeline and Platform Irene.) may allow for a finding of potential consistency with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

Coastal Act Policy 30251

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.

The modifications to Valve Site #2 would be adjacent to and compatible with existing development on the site. The Surf substation, which was constructed as a part of the original Point Pedernales Project, is currently visible from Ocean Avenue (Highway 246). As a part of the condition effectiveness review, the County determined that the landscaping at the substation is not meeting the original intent of the landscaping condition, which was to screen the facility from view. The proposed Tranquillon Ridge Project would extend the life of this facility and its visual impacts. With full compliance with the existing permit conditions the project would be consistent this policy.

Coastal Plan Policies 3-13 and 3-14

3-13. Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

3-14. All development shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited for development because of known soils, geologic, flood, erosion, or other hazards shall remain in open space.

Only a minor amount of grading would be required to construct the new project facilities associated with the Tranquillon Ridge Project. With the exception of the new power line to serve Valve Site #2, the grading would occur in previously disturbed areas. Grading for installation of the power line would not require excessive cuts or fills and would occur in relatively level areas.

Pipeline repair and maintenance activities could result in additional vegetation removal and ground disturbance. The EIR includes a mitigation measure that requires use of existing poles and/or mounting the power line on the 13th Street bridge if feasible and if not feasible, implementation of erosion control measures, protective fencing, and restoration of the disturbed areas. The proposed mitigation measures in addition to the existing Point Pedernales FDP conditions would reduce potential impacts to a less than significant level. Therefore, the project can be found consistent with these policies

Coastal Plan Policy 3-19

Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.

Construction related discharges are expected to be minimal and controlled through the implementation of erosion and sediment control measures as specified in the EIR. Potential discharges during pipeline repair and maintenance would also be minimized through implementation of erosion and sediment control measures as required in this EIR.

The Tranquillon Ridge Project would result in an increased throughput of oil and would extend the life over which the oil emulsion, dry oil, and produced water pipelines would operate. If a rupture or leak of the pipelines were to occur significant degradation could occur to surface water, groundwater, and wetland resources in the project area. Currently to reduce the risk of a spill, pipeline inspections and corrosion prevention measures are implemented. In addition, 12 secondary containment basins are located at strategic locations (predominately in the vicinity of the Santa Ynez River) to contain the oil in the event of a spill. An OSCP is also in place to address response to, clean up of, and restoration of, spill affected areas. To further reduce potential water quality impacts from the proposed Tranquillon Ridge Project the EIR identifies the need for an additional catchment basin at Valve Site #2, annual inspection and maintenance of the pipeline, and additional updates to the OSCP.

The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of a spill (An increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline; and an increase of 8.5 percent for ruptures and large spills and 4.4 percent for leaks and small spills – for the offshore pipeline and Platform Irene.) would allow for a finding of consistency with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

Coastal Act Policy 30251

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, 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.

Coastal Plan Policies 4-2, 4-3 and 4-7

4-2. All commercial, industrial, planned development, and greenhouse projects shall be required to submit a landscaping plan to the County for approval.

4-3. In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.

4-7. Utilities, including television, shall be placed underground in new developments in accordance with the rules and regulations of the California Public Utilities Commission, except where the cost of undergrounding would be so high as to deny service.

The modifications to Valve Site #2 would be adjacent to and compatible with existing development on the site. The Surf substation, which was constructed as a part of the original Point Pedernales Project, is visible from Ocean Avenue (Highway 246). As a part of the condition effectiveness review, County determined that the landscaping at the substation was not meeting the original intent of the landscaping condition, which was to screen the facility from view. The proposed Tranquillon Ridge Project would extend the life of this facility and its visual impacts.

The EIR includes a mitigation measure that requires use of existing poles and/or mounting the power line on the 13th Street bridge if feasible. Implementation of this measure and/or undergrounding visually sensitive portions of the line (e.g., along New Terra Road) would reduce the visual impacts of the new power line. Full compliance with the existing FDP conditions would be required to reduce the visual impact of the Surf substation and in order to make a finding of consistency with these policies.

Coastal Plan Policy 6-3

All oil and gas development in areas designated as environmentally sensitive habitats in the land use plan shall be subject to environmental review.

The proposed Tranquillon Ridge Project would use the existing Point Pedernales infrastructure. The project would include the installation of additional pumps at Valve Site #2. The facilities are

located in proximity to the Santa Ynez River in an area designated as ESH in the land use plan. Impacts of the Tranquillon Ridge Project have been analyzed in this EIR pursuant to the requirements of this policy. A number of additional mitigation measures have been identified in this EIR (additional catch basin at Valve Site #2, pipeline inspections, and updates to the OSCP) to reduce impacts to the river. With implementation of these measures the project would be consistent with this policy.

Coastal Plan Policy 6-4

Upon completion of production, the area affected by the drilling, processing, or other related petroleum activity, shall be appropriately contoured, reseeded, and landscaped to conform with the surrounding topography and vegetation.

The existing FDP requires that immediately following shutdown of the facility, the Applicant remove any and all abandoned processing facilities and unburied portions of the pipeline between Surf and Orcutt, recontour the site, and revegetate the site in accordance with a county approved revegetation plan. This condition would continue to apply to the Tranquillon Ridge Project. However restoration activities would occur later than originally projected when the Point Pedernales FDP was approved since the Tranquillon Ridge Project would extend the life of the Point Pedernales by 10 to 25 years (or more). As conditioned, the Tranquillon Ridge Project is consistent with this policy.

Coastal Plan Policy 6-6B

Except for facilities not-directly related to oil and gas processing as referenced in Policy 6-11B (Marine Terminals), this policy applies to areas of the coastal zone that are outside the South Coast Consolidation Planning Area (SCCPA). The SCCPA is the unincorporated area from Point Arguello to the western boundary of the City of Santa Barbara, and from the ridge of the Santa Ynez Mountains to the three-mile offshore limit. (Added 12/14/87, B/S Resol. #87-616).

If new sites for processing facilities to serve offshore oil and gas development are needed, expansion of facilities on existing sites or on land adjacent to existing sites shall take precedence over opening up additional areas, unless it can be shown that the environmental impacts of opening up a new site are less than the impacts of expansion on or adjacent to existing sites. Consideration shall also be given to economic feasibility.

The Tranquillon Ridge Project would use the existing Point Pedernales infrastructure. New development (additional pumps and processing equipment) would be located adjacent to the existing facilities at Valve Site #2 and the LOGP. The addition of equipment at these two sites would have minimal environmental effects and residual. Extension of electric transmission lines would create additional visual impacts. Use of existing VAFB transmission lines, mounting the lines on the 13th Street Bridge across the Santa Ynez River where feasible and/or undergrounding the most visually sensitive portion of the line (as identified in the EIR) would reduce the visual impacts. If full mitigation were applied, the project would be consistent with this policy.

Coastal Plan Policy 6-6F

Review of Oil and Gas Facility Permits. (Added 12/14/87, B/S Resol #87-616) - The Planning Commission shall review permits that are approved after August 12, 1985 for new or modified oil and gas facilities when throughput, averaged (arithmetic mean) over any twelve (12) consecutive months, does not exceed 3 percent of the facility's maximum permitted operating capacity. The review shall be conducted in a duly-noticed public hearing to determine if facility abandonment or facility modifications are appropriate.

This requirement is included as a condition of approval (R-1) on the existing Point Pedernales FDP and would continue to apply to the Tranquillon Ridge Project.

Coastal Plan Policy 6-14

Except for pipelines exempted from coastal development permits under Section 30610(c) and (e) of the Coastal Act as defined by the State Coastal Commission's Interpretive Guidelines, a survey shall be conducted along the route of any pipeline in the coastal zone to determine what, if any, coastal resources may be impacted by construction and operation of a pipeline. The costs of this survey shall be borne by the Applicant. (This survey may be conducted as a part of environmental review if an EIR is required for a particular project.) The survey shall be conducted by a consultant selected jointly by the Applicant, the County and the Department of Fish and Game. If it is determined that the area to be disturbed will not revegetate naturally or sufficiently quickly to avoid other damage, as from erosion, the Applicant shall submit a revegetation plan. The plan shall also include provisions for restoration of any habitats which will be disturbed by construction or operation procedures.

For projects where a revegetation plan and/or habitat restoration plan has been deemed necessary, one year after completion of construction, the area crossed by the pipeline shall be resurveyed to assess the effectiveness of the revegetation and restoration plan. This survey shall continue on an annual basis to monitor progress in returning the site to pre-construction conditions or until the County feels no additional progress is possible.

The County may require the posting of a performance bond by the Applicant to ensure compliance with these provisions.

The proposed Tranquillon Ridge Project would use the existing Point Pedernales pipelines. In addition, a Restoration, Erosion Control and Revegetation Plan was required to address restoration of the lands disturbed during construction of the Point Pedernales facilities. Since the project is proposing to use these existing pipelines the project could be found consistent with this policy. However, it should be noted that over 15 years have past since the original Point Pedernales Project was constructed and to date restoration requirements for the pipeline corridor have not be fully achieved (particularly with respect to the portion of Old Terra Road located in the coastal zone).

Coastal Plan Policy 6-14A

Impacts of new pipelines outside of industry facilities shall be minimized by requiring the use of available or planned common carrier or multiple-user pipelines to the maximum extent feasible. New pipeline construction shall be permitted only if the Planning Commission determines that the use of available common carrier or multiple-user pipelines is not feasible or is not the environmentally preferred alternative. New pipelines that are permitted shall be constructed, operated, and maintained as common carrier or multiple-user pipelines unless the Planning Commission determines that it is not feasible. New multiple-user pipelines shall provide equitable access to all shippers with physical compatible stock on a nondiscriminatory basis. To determine physical compatibility of stocks, the Planning Commission shall consider available information on the physical and chemical characteristics of the stacks, including but not limited to API gravity, sulfur and water content, viscosity, and pour point. (Added 7/28/86, B/S Resol 86-380; Revised 12/22/86, B/S Resol #86-656).

Since the proposed Tranquillon Ridge Project proposes to use the existing Point Pedernales pipelines the project is consistent with this policy.

Coastal Plan Policies 6-18 and 6-19

6-18. For pipeline segments passing through important coastal resource areas, including recreation, habitat, and archaeological areas, the segment, in the case of a break, shall be isolated by automatic shutoff valves.

6.19. Unavoidable routing through recreation, habitat, or archaeological areas, or other areas of significant coastal resource value, shall be done in a manner that minimizes the impacts of a spill, should it occur, by considering spill volumes, durations, and trajectory. Appropriate measures for cleanup or structures such as catch basins to contain a spill shall be included as part of an oil spill contingency plan.

Currently to reduce the risk of a spill, pipeline inspections and corrosion prevention measures are implemented. In addition, 12 secondary containment basins are located at strategic locations (predominately in the vicinity of the Santa Ynez River) to contain the oil in the event of a spill. As required by the existing Point Pedernales FDP, a SCADA system is in place and seven remotely operated valves are located along the pipeline to isolate the pipeline segments in the event of a leak or rupture. An OSCP is also in place to address response to, clean up of, and restoration of, spill affected areas. To further reduce potential water quality impacts from the proposed Tranquillon Ridge Project the EIR identifies the need for an additional catchment basin at Valve Site #2, annual inspection and maintenance of the pipeline, and additional updates to the OSCP. With implementation of existing FDP conditions and proposed new mitigation measures the Tranquillon Ridge Project could be found consistent with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

Coastal Act Policies 30230, 30231, and 30240

30230. 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 will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

30231. **The biological productivity and the quality of coastal water, 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, controlling runoff, preventing depletion of ground water supplies and encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.**

30240. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.
(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

The Tranquillon Ridge Project would include the installation of 3 new booster pumps at Valve Site #2. Installation of these pumps would be within the existing foot print of Valve Site #2.

The Tranquillon Ridge Project would result in an increased throughput of oil and would extend the life over which the oil emulsion, dry oil, and produced water pipelines would operate. If a rupture or leak of the pipelines were to occur significant degradation could occur to marine and coastal waters. The addition of pumps at Valve Site #2 increases the risk or a spill or rupture at the site. Currently to reduce the risk of a spill, pipeline inspections and corrosion prevention measures are implemented. In addition, 12 secondary containment basins are located at strategic locations (predominately in the vicinity of the Santa Ynez River) to contain the oil in the event of a spill. An OSCP is also in place to address response to, clean up of, and restoration of, spill affected areas. To further reduce potential water quality impacts from the proposed Tranquillon Ridge Project the EIR identifies the need for an additional catchment basin at Valve Site #2, annual inspection and maintenance of the pipeline, and additional updates to the OSCP.

The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of a spill (An increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline; and an increase of 8.5 percent for ruptures and large spills and 4.4 percent for leaks and small spills – for the offshore pipeline and Platform Irene) would allow for a finding of potential consistency with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the

mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

Coastal Plan Policy 9-4

All permitted industrial and recreational uses shall be regulated both during construction and operation to protect critical bird habitats during breeding and nesting seasons. Controls may include restriction of access, noise abatement, restriction of hours of operations of public or private facilities.

Construction activities at Valve Site #2 are not expected to adversely affect critical bird habitats (e.g., for the American Peregrine Falcon, Western Snowy Plover, California Least Tern and California Brown Pelican) due to the distance (over 1,000 feet) between these habitats and Valve Site #2.

The Tranquillon Ridge Project would result in an increased throughput of oil and would extend the life over which the oil emulsion, dry oil, and produced water pipelines would operate. If a rupture or leak of the pipelines were to occur significant damage could occur to the critical bird habitats listed above. Currently to reduce the risk of a spill, pipeline inspections and corrosion prevention measures are implemented. In addition, 12 secondary containment basins are located at strategic locations (predominately in the vicinity of the Santa Ynez River) to contain the oil in the event of a spill. An OSCP is also in place to address response to, clean up of, and restoration of, spill affected areas. The existing FDP also requires implementation of a Marine Biology Impact Reduction Plan. The plan restricts helicopter overflights of sensitive bird habitats on VAFB. To further reduce potential impacts to critical bird habitats from the proposed Tranquillon Ridge Project the EIR identifies the need for an additional catchment basin at Valve Site #2, annual inspection and maintenance of the pipeline, and additional updates to the OSCP to specifically address clean up and restoration of sensitive habitats.

The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of a spill (An increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline; and an increase of 8.5 percent for ruptures and large spills and 4.4 percent for leaks and small spills – for the offshore pipeline and Platform Irene), would allow for a finding of consistency with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

Coastal Plan Policy 9-14

New development adjacent to or in close proximity to wetlands shall be compatible with the continuance of the habitat area and shall not result in a reduction in the biological productivity or water quality of the wetland due to runoff (carrying additional sediment or contaminants), noise, thermal pollution, or other disturbances.

No new physical development would occur within close proximity to the Santa Ynez River estuary. Modifications at Valve Site #2 are at least 1,300 feet from any mapped wetlands.

The Tranquillon Ridge Project would result in an increased throughput of oil and would extend the life over which the oil emulsion, dry oil, and produced water pipelines would operate. If a rupture or leak of the pipelines were to occur significant degradation could occur to marine and coastal waters. The addition of pumps at Valve Site #2 increases the risk or a spill or rupture at the site. Currently to reduce the risk of a spill, pipeline inspections and corrosion prevention measures are implemented. In addition, 12 secondary containment basins are located at strategic locations (predominately in the vicinity of the Santa Ynez River) to contain the oil in the event of a spill. An OSCP is also in place to address response to, clean up of, and restoration of, spill affected areas. To further reduce potential water quality impacts from the proposed Tranquillon Ridge Project the EIR identifies the need for an additional catchment basin at Valve Site #2, annual inspection and maintenance of the pipeline, and additional updates to the OSCP.

The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of a spill (An increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline; and an increase of 8.5 percent for ruptures and large spills and 4.4 percent for leaks and small spills – for the offshore pipeline and Platform Irene), would allow for a finding of consistency with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

Coastal Plan Policies 9-35 and 9-36

9-35. Oak trees, because they are particularly sensitive to environmental conditions, shall be protected. All land use activities, including cultivated agriculture and grazing, should be carried out in such a manner as to avoid damage to native oak trees. Regeneration of oak trees on grazing lands should be encouraged.

9-36. When sites are graded or developed, areas with significant amounts of native vegetation shall be preserved. All development shall be sited, designed, and constructed to minimize impacts of grading, paving, construction of roads or structures, runoff, and erosion on native vegetation. In particular, grading and paving shall not adversely affect root zone aeration and stability of native trees.

The proposed Tranquillon Ridge Project would not require removal of any oak trees and new development at Valve Site #2 would occur in a previously disturbed area containing little to no native vegetation. The project is consistent with these policies.

Coastal Plan Policies 10-2, 10-3, and 10-5

10-2. When developments are proposed for parcels where archaeological or other cultural sites are located, project design shall be required which avoids impacts to such cultural sites if possible.

10-3. When sufficient planning flexibility does not permit avoiding construction on archaeological or other types of cultural sites, adequate mitigation shall be required. Mitigation shall be designed in accord with guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission.

10-5. Native Americans shall be consulted when development proposals are submitted which impact significant archaeological or cultural sites.

There are 29 recorded archaeological sites located along the Point Pedernales Project pipeline corridor, several of which are located within the Coastal Zone. No recorded sites are known to occur within areas proposed for new disturbance at Valve Site #2 and surveys conducted in this area did not reveal the presence of any resources. Measures have been included in the EIR to address encountering previously unknown cultural deposits in the vicinity of the new construction.

The known sites could be impacted during future repair and maintenance activities and by spill related clean up activities. To minimize disturbance to these known resources, the EIR requires pipeline monitoring within 200 feet of any known site during pipeline maintenance and appropriate data recovery if resources are encountered. Containment and clean up activities in emergency response condition could significantly impact cultural resource. To help reduce this impact the EIR requires updating the OSCP to provide procedures for minimizing impacts, however avoidance and or data recovery may not be feasible depending on the extent and magnitude of the spill.

The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of an onshore spill (An increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline), would allow for a finding of with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

Coastal Act Policy 30253.3

New development shall be consistent with requirements imposed by an air-pollution control district or the State Air Resources Control Board as to each particular development.

As required by APCD rules the Tranquillon Ridge Project would be required to obtain an "authority to construct" and "permit to operate" to allow for new emissions from the facilities. According to the EIR analysis, increased emissions associated with the Tranquillon Ridge Project would be fully mitigated by the existing available emission credits originally required as a condition of approval of the Point Pedernales FDP. Conditioning of the project to ensure that total emissions do not exceed the available emission credits would allow the project to be found consistent with this policy.

Comprehensive Plan Policies

Land Use Element

Land Use Development Policies

4. Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the Applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development. The Applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project. Lack of available public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan.

The LOGP is located within the Lompoc Groundwater Basin. Water for the LOGP is currently and would continue to be supplied by the Mission Hills Community Service District. Wastewater disposal is provided by a private on-site septic system. Fire protection is provided by Lompoc Fire Station No. 51. The proposed projects would not introduce any new development or personnel that would increase water demand, wastewater disposal, or fire protection needs above existing levels.

Access to the LOGP is from Harris Grade Road. The Tranquillon Ridge Project would increase LPG/NGL truck trips from the LOGP from 2.9 to 5 trips/week. However, the increase in truck trips would not change the roadway's LOS. All other services (e.g., electricity, solid waste disposal) are available and adequate to serve the projects; therefore, the project is consistent with this policy.

No new services are required for the LOGP Produced Water Treatment Facility or the Sisquoc Bi-directional Flow Project.

10. Impacts of oil, gas, and produced-water pipelines outside of industry facilities shall be minimized by requiring the use of available or planned common carrier and multiple-user pipelines to the maximum extent feasible.

New oil and gas development from the Tranquillon Ridge Project would be transported using the existing pipeline infrastructure in place for the Point Pedernales Project. The proposed project is consistent with this policy.

11. For the purpose of ensuring safe, orderly, and planned development of oil and gas resources, the Board of Supervisors designates the northwestern and midwestern portion of the county as the North County Consolidation Planning Area, or NCCPA (as defined under the section "Other Definitions" in this element) and subjects oil and gas development in this planning area to the following policies:

a. Due to estimated oil and gas reserves located offshore, the County has prepared a study entitled Siting Gas Processing Facilities: Screening & Siting Criteria. That study is incorporated herein by reference to guide a comprehensive analysis of

alternative sites should the county receive an application for a Development Plan to construct or expand a facility in the NCCPA for treating or processing either onshore or offshore gas production. The criteria are designed to optimize public safety, environmental protection, and the benefits of consolidation. (89-GP-9)

The SEIR for the previously approved Unocal gas plant at the LOGP evaluated the proposed site and several other sites using the siting study criteria. The LOGP site was identified as the environmentally superior location for processing gas from the Point Pedernales Project. This EIR has also analyzed an alternative gas processing location in the Casmalia west area as recommended in the North County Siting Study. This EIR also finds that the LOGP site is the environmentally superior location for processing gas from the Point Pedernales Project. The project is therefore consistent with this policy.

12. If an onshore pipeline for transporting crude oil to refineries is determined to be technically and economically feasible, proposals for expansion, modification, or construction of new oil and gas processing facilities, which receive oil from offshore fields exclusively or from both offshore and onshore fields, shall be conditioned to require transportation of oil through the pipeline when constructed, unless such condition would not be feasible for a particular shipper.

New oil and gas development from the Tranquillon Ridge Project would be transported using the existing pipeline infrastructure in place for the Point Pedernales Project. The proposed project are is consistent with this policy.

<u>Hillside And Watershed Protection Policies</u>

1. Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

2. All developments shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion or other hazards shall remain in open space.

Only a minor amount of grading would be required to construct the new project facilities associated with the Tranquillon Ridge Project. With the exception of the new power line to serve Valve Site #2, grading associated with these projects would occur in previously disturbed areas. Grading for installation of the power line would not require excessive cuts or fills and would occur in relatively level areas. In addition, the EIR identifies that impacts could be further reduced by mounting the proposed power line on existing poles and/or crossing the Santa Ynez River attached to the 13th Street bridge if feasible.

Pipeline repair and maintenance activities could result in additional vegetation removal and ground disturbance. Implementation of erosion control measures, protective fencing, and restoration of the disturbed areas as required in this EIR and the existing Point Pedernales FDP would reduce potential impacts to a less than significant level. Therefore, the project can be found to be consistent with these policies

7. Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.

Construction related discharges are expected to be minimal and controlled through the implementation of erosion and sediment control measures as specified in the EIR. Potential discharges during pipeline repair and maintenance would also be minimized through implementation of erosion and sediment control measures as required in this EIR.

The Tranquillon Ridge Project would result in an increased throughput of oil and would extend the life over which the oil emulsion, dry oil, and produced water pipelines would operate. If a rupture or leak of the pipelines were to occur significant degradation could occur to surface water, groundwater, and wetland resources in the project area. Currently to reduce the risk of a spill, pipeline inspections and corrosion prevention measures are implemented. In addition, 12 secondary containment basins are located at strategic locations (predominately in the vicinity of the Santa Ynez River) to contain the oil in the event of a spill. An OSCP is also in place to address response to, clean up of, and restoration of, spill affected areas. To further reduce potential water quality impacts from the proposed Tranquillon Ridge Project the EIR identifies the need for an additional catchment basin at Valve Site #2, annual inspection and maintenance of the pipeline, and additional updates to the OSCP.

The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of a spill (An increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline; and an increase of 8.5 percent for ruptures and large spills and 4.4 percent for leaks and small spills – for the offshore pipeline and Platform Irene), would allow for a finding of consistency with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

<u>Streams And Creeks Policies</u>

1. All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution.

Tranquillon Ridge: No new construction is proposed within any stream corridors. There are numerous stream crossings along the Point Pedernales and Sisquoc pipeline corridors. Future

repair and maintenance activities could involve grading and construction within these stream corridors. Implementation of erosion and sediment control measures and restoration activities required under the current FDP and this EIR would allow for a finding of consistency with this policy.

Historical And Archaeological Sites Policies

2. When developments are proposed for parcels where archaeological or other cultural sites are located, project design shall be required which avoids impacts to such cultural sites if possible.

3. When sufficient planning flexibility does not permit avoiding construction on archaeological or other types of cultural sites, adequate mitigation shall be required. Mitigation shall be designed in accord with guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission.

5. Native Americans shall be consulted when development proposals are submitted which impact significant archaeological or cultural sites.

There are 29 recorded archaeological sites located along the Point Pedernales Project pipeline corridor. No recorded sites are known to occur within areas proposed for new disturbance (the power line route, Valve Site #2, and the LOGP) and surveys conducted in these areas did not reveal the presence of any resources. Measures have been included in the EIR to address encountering previously unknown cultural deposits in the vicinity of the new construction.

The known sites could be impacted during future repair and maintenance activities and by spill related clean up activities. To minimize disturbance to these known resources, the EIR requires pipeline monitoring within 200 feet of any known site during pipeline maintenance and appropriate data recovery if resources are encountered. Containment and clean up activities in emergency response condition could significantly impact cultural resource. To help reduce this impact the EIR requires updating the OSCP to provide procedures for minimizing impacts, however avoidance and or data recovery may not be feasible depending on the extent and magnitude of the spill.

The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of an onshore spill (increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline), would allow for a finding of consistency with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

Visual Resources Policies

1. All commercial, industrial, and planned developments, shall be required to submit a landscaping plan to the County for approval.

Landscaping plans were required and previously submitted and approved for the Surf Substation and the LOGP. However, the Surf Substation plan was never fully implemented. The condition effectiveness review (B-2 analysis) prepared by the County for the Point Pedernales FDP determined that the landscaping was not effectively screening the substation and visual impacts of the substation are therefore not being fully mitigated. Therefore, for the Tranquillon Ridge Project to be consistent with this policy full implementation of the existing FDP conditions would be required.

2. In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.

5. Utilities, including television, shall be placed underground in new developments in accordance with the rules and regulations of the California Public Utilities Commission, except where cost of undergrounding would be so high as to deny service.

Both Valve Site #2 and the LOGP are located in areas designated as rural on the land use plan maps. Modifications at Valve Site #2 and the LOGP will be located adjacent to existing industrial development and would be compatible in design and scale with the existing development. The new power line to serve Valve Site #2, particularly the section of the line from the intersection of 13th Street and New Terra Road to the valve site is located in a relatively open, undeveloped area comprised of agricultural uses and native vegetation (coastal sage scrub). With the exception of the existing Point Pedernales pipeline infrastructure (Valve Site #2, the catch basins and the access road) minimal development is located in the area. The power line poles would be 60 feet in height and would be located every 350 to 400 feet. Because the majority of the vegetation is low growing coastal sage scrub, the power lines and poles would not be subordinate in appearance to the natural landforms and would intrude into the skyline. Therefore, the project would be inconsistent with this policy. Use of existing transmission lines poles and mounting of the power line on the 13th Street bridge across the Santa Ynez River if feasible and undergrounding the power line in areas of visual sensitivity (e.g., along New Terra Road) would allow for a finding of consistency with this policy.

<u>Lompoc Area-Land Use</u>

The unique character of the area should be protected and enhanced with particular emphasis on protection of agricultural lands, grazing lands, and natural amenities.

Residential, commercial and industrial growth should be confined to urban areas.

Commercial and industrial development that complements and expands the existing agricultural industry of the area should be encouraged.

Industrial development should be light intensity.

The LOGP site has a land use overlay designation of Petroleum Resource Industry and has a zoning designation of M-CR (Coastal Related Industry). The site has been designated by the County as a consolidation site for oil and gas development. New construction associated with the Tranquillon Ridge Project would occur within the existing confines and developed area of the LOGP. The project is consistent with these goals. It must be stated, however, that when the Comprehensive Plan and Zoning Ordinance were amended in 1985, these actions were based on representations that the proposed Point Pedernales project would be fully mitigated with safety conditions that Nuevo now contends are unenforceable.

Provision should be made for the systematic re-establishment of lands that have been misused by destruction of natural habitats, inappropriate construction, erosion, grading, mining, or waste disposal.

Changes in natural or re-established topography, vegetation, biological communities should be minimized in an attempt to avoid the destruction of natural habitats.

With the exception of the new power line to Valve Site #2, all new development associated with the Tranquillon Ridge Project would be within existing disturbed areas. Due to the small area of disturbance associated with each pole installation (approximately 315 square feet for the pole footing and machinery maneuvering), it is expected that biological impacts associated with the power line poles would also be minimal and/or impacts could be avoided through siting. To further minimize biological impacts, the EIR includes a measure which would require use of existing poles and/or mounted on the 13th Street bridge to cross the Santa Ynez River.

The existing FDP conditions require restoration of any impacted biological resources. These conditions would continue to apply to the project in association with future repair and maintenance activities. In addition, to further reduce impacts during repair and maintenance, the EIR identifies the need for development and implementation of a Pipeline Maintenance and Repair Plan.

Containment and clean up activities of an oil spill could significantly impact biological resources along the pipeline and in the proximity of the LOGP. To help reduce this impact the EIR requires updating the OSCP to provide procedures for minimizing impacts and restoring affected resources. The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of a spill (an increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline; and an increase of 8.5 percent for ruptures and large spills and 4.4 percent for leaks and small spills – for the offshore pipeline and Platform Irene.), would allow for a finding of consistency with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

<u>Lompoc Area -Environment</u>

Growth and employment must be consistent with the preservation and enhancement of resources and environmental quality.

The proposed Tranquillon Ridge Project would provide additional economic growth in the Lompoc area. The project would primarily use the existing Point Pedernales facilities, thereby minimizing impacts due to new development. The existing permit conditions and the additional EIR mitigation measures require the preservation and restoration of environmental resources. Therefore, the project is consistent with this policy.

Pollution of streams, sloughs, drainage channels, underground water basins, estuaries, the ocean, and areas adjacent to such waters should be minimized.

Refer to the discussion under Hillside and Watershed Policy 7.

The groundwater resources should be protected against prolonged overdrafting.

The County should plan for and encourage the maximum conservation of water.

Refer to the discussion under Land Use Development Policy 4. No increase in project-related water demand is expected. Continued compliance with Condition F-6 (water conservation) would also be required. The project is consistent with these policies.

Good air quality should be maintained as one of our greatest assets.

Implementation of the air quality measures identified in this EIR would help to minimize air quality impacts of the project. The project would be consistent with this policy.

Excessive noise should be eliminated through the development of noise pollution standards.

Construction related noise levels at sensitive receptors nearest to the LOGP would increase above existing levels but would not exceed 65 dBA. Operational noise would also not exceed the 65 dBA level and the increase above current noise levels would be minimally perceptible. Nuisance noise levels would be mitigated to the maximum extent feasible by the existing FDP noise conditions and construction noise would be further minimized by limiting construction hours. Thus, the project would be consistent with this policy.

Noise Element

1) In the planning of land use, 65 dB Day-Night Average Sound Level should be regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project designs.

Noise sensitive land uses in the vicinity of Valve Site #2 include Ocean Beach County Park and in the vicinity of the LOGP include residence in Mission Hills and Vandenberg Village and the

Burton Mesa Ecological preserve. Due to the distance (over 5,000 feet from Valve Site #2 and over 4,000 feet from the LOGP to the closest residence) between the project sites and the sensitive receptors, no exceedance of the 65 dB L_{dn} would occur. The project is consistent with this policy.

Circulation Element

B. Roadway Standards:

The policy capacities provided in this Element shall be used as guidelines for evaluating consistency with this section of this Element. A project's consistency with this section shall be determined as follows:

a. A project that would contribute ADTs to a roadway where the Estimated Future Volume does not exceed the policy capacity would be considered consistent with this section of this Element.

The Tranquillon Ridge Project would result in an increased production of LPG/NGL and possibly sulfur products from the LOGP. Access to the facility is from Harris Grade Road. It is estimated that truck traffic would increase from 2.9 per week to 5 per week. The estimated future traffic volumes on Harris Grade Road would not exceed the policy capacity. The project is consistent with this policy.

Energy Element

POLICY 5.3: COGENERATION - The County shall encourage installation and use of cogenerating systems where they are cost-effective and appropriate.

The Tranquillon Ridge Project does not include the installation and use of a cogenerating system. Several other County oil and gas development projects (e.g. Santa Ynez Unit and the Point Arguello Project) operate cogeneration facilities and rely on the electricity produced through these facilities. Since under the proposed Tranquillon Ridge Project the Point Pedernales facilities would still be fully dependent on the grid for electricity. However, at the time the Point Pedernales project was approved, the SBCAPCD was strongly in favor of reducing new air emissions by using utility grid power for the Point Pedernales facilities. In light of this previous decision by the County, the project is consistent with this policy.
Due to the extension of life of the facilities and the volatile energy environment, a cogeneration facility might be cost effective and appropriate. Additional analysis would be required for such a determination, and may be conducted during future B-2 reviews.

POLICY 4.1: CONSTRUCTION - Encourage recycling and reuse of construction waste to reduce energy consumption associated with extracting and manufacturing virgin materials.

The Tranquillon Ridge Project largely depends on existing infrastructure, thereby avoiding energy use to fabricate and install new production facilities and reduce the amount of construction waste generated. Therefore, the project is consistent with this policy.

Agricultural Element

GOAL I. Santa Barbara County shall assure and enhance the continuation of agriculture as a major viable production industry in Santa Barbara County. Agriculture shall be encouraged. Where conditions allow, (taking into account environmental impacts) expansion and intensification shall be supported.

Policy IA. The integrity of agricultural operations shall not be violated by recreational or other non-compatible uses.

GOAL II. Agricultural lands shall be protected from adverse urban influence.

Policy II.D. Conversion of highly productive agricultural lands whether urban or rural, shall be discouraged. The County shall support programs which encourage the retention of highly productive agricultural lands.

Pipelines associated with the proposed projects traverse a variety of agricultural resources, including lands mapped as prime farmland (9 miles), unique farmland (2.5 miles), farmland of local importance (5.9 miles, and grazing land (11.7 miles). Lands adjacent to Valve Site #2 are designated as grazing land according to the Department of Conservation. Development of new electrical pumps at the valve site would be immediately adjacent to existing equipment in an existing disturbed area. Therefore, no impacts to agricultural resources are expected. The proposed power line serving Valve Site #2 would require construction of a small substation (40' x 40') to be built on cultivated lands (currently used for hay production) and placement of power line and poles across other cultivated lands. The new poles would be located immediately adjacent to existing VAFB power lines. As identified in the EIR impacts could be further reduced by using existing poles if feasible.

The LOGP has a land use designation of Agriculture but has been used for oil and gas related processing since 1987. Modifications at the LOGP would be within the existing disturbed area of the site. In total approximately 0.33 acres of agricultural land would be disturbed as a result of new construction associated with the Tranquillon Ridge Project. The small amount of agricultural land displaced by the Tranquillon Ridge Project and the minor amount of construction and operation traffic generated by the project would not adversely impact agricultural production.

Pipeline repair and maintenance activities along the pipelines could result in the disruption of agricultural activities and the removal of topsoil, which could adversely affect productivity. To address this potential loss in productivity the EIR requires compensation for crops taken out of production, soil replacement, and crop replanting.

The Tranquillon Ridge Project would result in an increased throughput of oil and would extend the life over which the oil emulsion, dry oil, and produced water pipelines would operate. If a rupture

or leak of the pipelines were to occur significant degradation could occur to marine and coastal waters. The addition of pumps at Valve Site #2 increases the risk of a spill or rupture at the site. Currently to reduce the risk of a spill, pipeline inspections and corrosion prevention measures are implemented. In addition, 12 secondary containment basins are located at strategic locations (predominately in the vicinity of the Santa Ynez River) to contain the oil in the event of a spill. An OSCP is also in place to address response to, clean up of, and restoration of, spill affected areas. To further reduce potential impacts from the proposed Tranquillon Ridge Project the EIR identifies the need for an additional catchment basin at Valve Site #2, annual inspection and maintenance of the pipeline, and additional updates to the OSCP. Specifically, the EIR includes a mitigation measure requiring that the OSCP incorporate specific clean up techniques on agricultural lands (e.g., minimizing removal of top soil).

The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of an onshore spill (increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline), would allow for a finding of consistency with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

Hazardous Waste Element

2-2 All businesses that generate hazardous wastes including home occupations, but excluding normal household activities, shall provide the County with information regarding the type, amount and management of all hazardous wastes generated. Such information shall be required as part of the EHD hazardous waste generator permit program and shall be updated annually.

2-3 All hazardous waste treatment, storage, and disposal facilities in the County shall provide the County with information regarding their operations and treatment, storage, and disposal capacity. Such information shall be updated annually.

As required pursuant to the original FDP for the Point Pedernales facilities and subsequent amendments (e.g., for the Gas Plant), a Hazardous Material and Waste Management Plan and Business Plan has been prepared for the LOGP. This document would need to be updated to address production and processing from the Tranquillon Ridge Project. Review and approval of this plan prior to land use clearance for the Tranquillon Ridge Project would allow for a finding of consistency with this policy.

8-1 Any land use permit for a hazardous waste generator or a hazardous waste facility shall require submittal of an emergency response plan prior to operations, if such a plan is required under Chapter 6.95 (section 25500 et seq.) of the California Health and Safety Code.

As required pursuant to the original FDP for the Point Pedernales facilities and subsequent amendments (e.g., for the Gas Plant), an ERP been prepared. This document would need to be

updated to address production and processing from the Tranquillon Ridge Project. Review and approval of this plan prior to land use clearance for the Tranquillon Ridge Project would allow for a finding of consistency with this policy.

Seismic Safety and Safety Element (Safety Element Supplement)

Policy Hazardous Facility Safety 1-A, *Risk Estimates*
The County shall employ accurate estimates of risk associated with hazardous facilities to inform discretionary land-use decisions where substantial, preliminary evidence indicates involuntary public exposure to significant risk may result from the land-use decision.

A risk analysis has been prepared and included in the EIR for the Tranquillon Ridge Project consistent with the requirements of this policy.

Policy Hazardous Facility Safety 2-B, *Unacceptable Risk Involving Modifications to Existing Development*
Proposed modifications to existing development that require a discretionary land-use permit and meet any of the following three criteria shall represent an unacceptably high level of risk and constitute a *prima facie* standard for denial.

(1) Modifications that increase risk and the resulting mitigated risk registers in the red zone of the County's risk thresholds, unless the proposed modification is required to comply with law, the modification does not increase significant risk to highly sensitive land uses, and no other feasible alternatives are achievable.
(2) Modifications that increase risk and the resulting mitigated risk registers in the red zone of the County's risk thresholds, unless the proposed modification is made to an urban dependent land use and highly sensitive land uses are not exposed to significant risk as a result of the modification.
(3) Modifications that increase risk and the resulting, mitigated risk registers in the amber zone of the County's risk thresholds if exposure of a highly sensitive land use would occur as result of project approval.

Based on the risk analysis conducted in the EIR, under current operating conditions the fatality FN curves register in the green region for pipeline operations from Platform Irene to the LOGP and the LOGP to the Summit Pump Station. Under current operating conditions the Injury FN curves register in the amber region for Platform Irene to LOGP pipeline operations, and in the green region for LOGP to Summit Pump Station.

The proposed Tranquillon Ridge Project would extend the life of the Point Pedernales facilities and the duration during which the public would be exposed to significant risk during operation of the Platform Irene to LOGP pipeline (injuries). To reduce risks (injuries) associated with Platform Irene to LOGP operations, the EIR includes a mitigation measures that would require that the Applicant implement a sour gas pipeline operation pressure limit as a function of sour gas H_2S

concentration, not to exceed 600 psig at 8,000 ppm H_2S. Current FDP conditions also require development and implementation of a Safety Inspection, Maintenance, and Quality Assurance Program with review and oversight by the County System Safety Reliability and Review Committee.

With implementation of the proposed mitigation measures the Tranquillon Ridge Project will not increase risks above current operating levels. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

Conservation Element

Mineral Resources

"No Mineral Resource Extraction should be permitted in the County if significant adverse impacts on the air, water, or land environment would result, if flooding and erosion problems would be increased, or if polluting emissions likely to be generated directly or indirectly by the activity in question would result in adopted federal or State environmental quality standards being exceeded."

By using the existing Point Pedernales infrastructure the Tranquillon Ridge Project would minimize new construction impacts. Impacts associated with new development at Valve Site #2, the LOGP, and along the new power line corridor would be less than significant or with implementation of measures identified in the EIR could be reduced to a less than significant level.

The Tranquillon Ridge Project would result in an increased throughput of oil and would extend the life over which the oil emulsion, dry oil, and produced water pipelines would operate. If a rupture or leak of the pipelines were to occur significant degradation could occur to marine and coastal waters. The addition of pumps at Valve Site #2 increases the risk or a spill or rupture at the site. Currently to reduce the risk of a spill, pipeline inspections and corrosion prevention measures are implemented. In addition, 12 secondary containment basins are located at strategic locations (predominately in the vicinity of the Santa Ynez River) to contain the oil in the event of a spill. An OSCP is also in place to address response to, clean up of, and restoration of, spill affected areas. To further reduce potential impacts from the proposed Tranquillon Ridge Project the EIR identifies the need for an additional catchment basin at Valve Site #2, annual inspection and maintenance of the pipeline, and additional updates to the OSCP.

The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of a spill (An increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline; and an increase of 8.5 percent for ruptures and large spills and 4.4 percent for leaks and small spills – for the offshore pipeline and Platform Irene.) would allow for a finding of consistency with this policy. However, due to the Applicant's litigation regarding the County's authority to regulate pipeline and related platform operations, the enforceability, and hence the feasibility of the mitigation measure included in the EIR are

unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, the project would be inconsistent with this policy.

Ecological Systems

The Conservation Element contains descriptions of ecological systems in Santa Barbara County and recommendations for their use and protection. The proposed project components associated with the Tranquillon Ridge Project (Torch and Tosco Point Pedernales facilities) run adjacent to and traverses a number of sensitive habitats including the riparian and wetland areas associated with the Santa Ynez River, areas containing Burton Mesa chaparral, coastal dune scrub, oak savannah and woodlands, vernal pools, etc.

The new project components associated with the Tranquillon Ridge project would primarily be within existing disturbed areas and would use existing pipeline infrastructure, thereby minimizing impacts to sensitive habitats.

The proposed power line alignment to Valve Site #2 (Tranquillon Ridge) would require siting of support poles near the Santa Ynez River and spanning the river. Impacts to the sensitive biological resources in and along the river would be reduced by mounting the power line on the 13th Street Bridge and/or using existing poles, if feasible. If this measure is not feasible impacts could be reduced by locating the pole footing outside of sensitive riparian and wetland areas, timing the construction to avoid the breeding seasons for sensitive birds, and by placing the power line at height above the river that minimizes bird collisions.

The existing FDP conditions require restoration of any impacted biological resources. These conditions would continue to apply to the project in association with future repair and maintenance activities. In addition, to further reduce impacts during repair and maintenance, the EIR identifies the need for development and implementation of a Pipeline Maintenance and Repair Plan.

Containment and clean up activities of an oil spill could significantly impact biological resources along the pipeline. To help reduce this impact the EIR requires updating the OSCP to provide procedures for minimizing impacts and restoring affected resources. The implementation of existing FDP measures and the proposed new measures, combined with the small increase in the probability of a spill The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of a spill (an increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline; and an increase of 8.5 percent for ruptures and large spills and 4.4 percent for leaks and small spills – for the offshore pipeline and Platform Irene would allow for a finding of with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

Other Plans and Policies

1998 Clean Air Plan

The purpose of the 1998 Clean Air Plan is to continue to improve air quality in Santa Barbara County as required by both the California Clean Air Act (CCAA) of 1988 and the Federal Clean Air Act Amendments (FCAAA) of 1990.

As required by APCD rules the Tranquillon Ridge Project would be required to obtain an "authority to construct" and "permit to operate" to allow for new emissions from the facilities. According to the EIR analysis, increased emissions associated with the Tranquillon Ridge Project would be fully mitigated by the existing available emission credits originally required as a condition of approval of the Point Pedernales FDP. Conditioning of the project to ensure that total emissions do not exceed the available emission credits would allow the project to be found consistent with the Clean Air Plan.

ATTACHMENT E: LIST OF ABBREVIATIONS AND ACRONYMS

ADT	Average Daily Traffic
AADT	Annual Average Daily Trips
AADT	Annual Average Daily Traffic
AAPL	All American Pipeline
AFY	acre-feet/year
ANSI	American National Standards Institute
API	American Petroleum Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATC	Authority to Construct
AQAP	Air Quality Attainment Plan
Bbls	Barrels
BMP	best management practices
Bod	biological oxygen demand
bpd	barrels per day
BTEX	benzene, toluene, ethylbenzene and xylenes
CAAQS	California Air Quality Standards
CalCOFI	California Cooperative Oceanic Fisheries Investigations
CaMP	California Monitoring Program
CAMP	California Offshore Monitoring Program
CAP	Clean Air Plan
CARB	California Air Response Board
CCAA	California Clean Air Act
CCC	California Coastal Commission
CCCCS	Central California Coastal Circulation Study
CCIC	Central Coastal Information Center
CCMP	California Coastal Management Program
CCPS	Center for Chemical Process Safety
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CDOGGR	California Department of Geology and Geological Resources
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic foot per second
CH_4	Methane
CHL	California State Historic Landmark
CINMS	Channel Islands National Marine Sanctuary
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society

CO	carbon monoxide
CO_2	carbon dioxide
COOGER	California Offshore Oil and Gas Energy Resources
CPFV	commercial passenger fishing vessel
CSFM	California State Fire Marshal
CSLC	California State Lands Commission
CSC	California Species of Concern
CV	check valve
CWA	Clean Water Act
CZARAA	Coastal Zone Act Reauthorization Amendments
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act
dB	decibel
dBA	decibel A-weighted
DFG	Department of Fish and Game
DOCD	Development Operations Coordination Documents
DOGGR	Division of Oil, Gas, and Geothermal Resources
DOT	Department of Transportation
DPP	Development and Production Plan
EDL	elevated data levels
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EIS	Environmental Impact Study
ERD	extended-reach drilling
ERL	effects range-low
ERM	effects range-medium
ERP	Emergency Response Plan
ERPG	Emergency Response Planning Guidelines
ERW	electric resistance welded
ESA	Endangered Species Act
ESD	emergency shutdown
ESE	Entire Source Emissions
FAA	Federal Aviation Administration
FBE	Fusion bonded epoxy
FDP	Final Development Plan
FHWA	Federal Highway Administration
FMC	Fishery Management Council
FMP	Fishery Management Plan
FSC	Federal Species of Concern
FT	flow transmitter
FWKO	Free Water Knock-Out
FWPCA	Federal Water Pollution Control Act
GHG	greenhouse gases

Gpd	Gallons per day
H_2S	hydrogen sulfide
HAP	Hazardous Air Pollutants
HS&P	Heating, Separation and Pumping [Facility]
hp	horse power
IC	Incident Commander
IRI	Industrial Risk Insurers
JRP	Joint Review Panel
kV	kilovolt
LCP	local coastal programs
LOGP	Lompoc Oil and Gas Plant
LOS	Level of Service
LPG	Liquefied petroleum gas
LTS	low temperature separation
m	meters
MAOP	maximum allowable operating pressure
mbd	thousand barrels per day
MCE	Maximum Credible Earthquakes
MGD	million gallons per day
mg/kg	milligrams per kilogram
MLLW	mean lower low water
mm	millimeters
MMPA	Marine Mammals Protection Act
MMS	Minerals Management Service
mmscfd	million standard cubic feet per day
MMTCE	million metric tons of carbon equivalent
MOV	motor actuated valve
mph	miles per hour
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
N_2O	nitrous oxide
NAAQS	National Air Quality Standards
NACE	National Association of Corrosion Engineers
NAROC	Non-Alkaline Reactive Organic Compounds
NDBC	NOAA Data Buoy Center
NEC	National Electric Code
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NGL	natural gas liquids
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO_2	nitrogen dioxide

NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of preparation
NO_x	oxides of nitrogen
NPDES	National Polluting Discharge Elimination System
NRHP	National Register of Historic Places
NS&T	National Status and Trends
O_3	ozone
OCS	Outer Continental Shelf
OCSLA	Outer Continental Shelf Lands Act
OD	outer diameter
OPA	Oil Pollution Act
OPS	Office of Pipeline Safety
OPUS	Organization of Persistent Upwelling Structures
OSCP	Oil Spill Contingency Plan
OSMB	Offshore Santa Maria Basin
OSPR	Oil Spill Prevention and Response
OSRA	Oil Spill Risk Analysis
OSRP	Oil Spill Response Plan
PAH	poly-aromatic hydrocarbons
PANGL	Point Arguello Natural Gas Pipeline
PAPCO	Point Arguello Pipeline Company
PEL	probable effects level
PLC	Programmable Logic Controller
PM	particulate matter
POPCO	Pacific Offshore Pipeline Company
ppb	parts per billion
ppm	parts per million
psia	pounds per square inch
psig	pounds per square inch
PT	pressure transmitter
PTO	permit to operate
ROC	reactive organic compounds
ROG	reactive organic gases (see ROC)
ROP	Rate of Progress Plan
ROW	right of way
RTU	Remote Terminal Unit
RVP	Reid vapor pressure
RWQCB	Regional Water Quality Control Board
SBCAPCD	Santa Barbara County Air Pollution Control District
SBC	Santa Barbara County
SBCh	Santa Barbara Channel
SBCFD	Santa Barbara County Fire Department
SBCP&D	Santa Barbara County Planning & Development Department

SCADA	supervisory control and data acquisition system
SCCAB	South Central Coast Air Basin
SCCPA	South Coast Consolidation Planning Area
SCGC	Southern California Gas Company
SDV	shutdown valve
SEIR	Subsequent Environmental Impact Report
SFA	Sustainable Fisheries Act
SFSCC	Santa Fe Springs Control Center
SIMQAP	Safety Inspection, Maintenance and Quality Assurance Program
SLC	California State Lands Commission
SLOB	San Luis Obispo Bay
SMB	Santa Maria Basin
SMW	State Mussel Watch
SO_2	sulfur dioxide
SOO	Suspension of Operation
SOP	Suspension of Production
SO_x	oxides of sulfur
SPCC	Spill Prevention Control and Countermeasures
SPCP	Spill Prevention and Cleanup Plan
SSLO	South San Luis Obispo
SSRRC	System Safety and Reliability Review Committee
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resource Control Board
TAC	Toxic Air Contaminants
TDS	total dissolved solids
TEL	threshold effects level
TOC	total oxygen content
UCSB	University of California – Santa Barbara
UFC	Uniform Fire Code
UNOCAP	Unocal California Pipeline Company
USDOI	U.S. Department of Interior
USEPA	United States Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USMR	Unocal Santa Maria Refinery
VAFB	Vandenberg Air Force Base
VCE	vapor cloud explosion
WDP	Waste Discharge Permit
WIS	Wave Information Study
YOY	young of the year

ATTACHMENT F: AERIAL PHOTOGRAPHS OF THE PIPELINE ALIGNMENTS

Revised Findings 6/19/02

ATTACHMENT A: TRANQUILLON RIDGE FINDINGS

1.0 CEQA FINDINGS

FINDINGS PURSUANT TO PUBLIC RESOURCES CODE SECTION 21081 AND THE CALIFORNIA ENVIRONMENTAL QUALITY ACT GUIDELINES SECTIONS 15090 AND 15091:

1.1 CONSIDERATION OF THE EIR

The Final Environmental Impact Report (EIR), 01-EIR-04 was presented to the Planning Commission and all voting members of the Commission have reviewed and considered the EIR, 01-EIR-04, its appendices prior to approving this proposal. In addition, all voting Commissioners have reviewed and considered testimony and additional information presented at or prior to public hearing on June 20, 2001. The EIR reflects the independent judgement of the Planning Commission and is are adequate for the Tranquillon Ridge Project ~~LOGP Produced Water Treatment Facility~~.

1.2 FULL DISCLOSURE

The Planning Commission finds and certifies that the Final EIR constitutes a complete, accurate, adequate and good faith effort at full disclosure under CEQA. The Commission further finds and certifies that the Final EIR has been completed in compliance with CEQA.

1.3 LOCATION OF RECORD OF PROCEEDINGS

The documents and other materials which constitute the record of proceedings upon which this decision is based are in the custody of: Mr. Steve Case, Deputy Director, Planning and Development Energy Division located at 30 E. Figueroa St., Santa Barbara, CA 93101.

1.4 FINDINGS THAT CERTAIN UNAVOIDABLE IMPACTS ARE MITIGATED TO THE MAXIMUM EXTENT FEASIBLE

The proposed Tranquillon Ridge Project has Class I Impacts, as identified in the Final EIR (01-EIR-04). Findings that certain impacts are mitigated to the maximum extent feasible ~~of overriding consideration~~ cannot, however, be made for the Tranquillon Ridge Project. In particular, the risks associated with the increase of production and extension of life of the processing plant and oil and gas pipelines are unacceptable for the proposed location and surrounding environment. Mitigation measures are identified in the EIR and exist in the Torch Point Pedernales permit to reduce these impacts. However, a - ~~F~~findings~~s~~ of ~~overriding consideration~~ maximum

feasible mitigation is ~~are also~~ impossible to fully weigh and determine because the applicant current contests the enforceability of basic safety conditions in section "P" of the permit. County takes official notice of Nuevo's lawsuit against County in declining to make this finding.

1.7 STATEMENT OF OVERRIDING CONSIDERATIONS

The proposed Tranquillon Ridge Project has Class I Impacts, as identified in the Final EIR (01-EIR-04). Findings of overriding consideration cannot, however, be made for the Tranquillon Ridge Project. In particular, the risks associated with the increase of production and extension of life of the processing plant and oil and gas pipelines are unacceptable for the proposed location and surrounding environment. Findings of overriding consideration are also impossible to fully weigh and determine because the applicant current contests the enforceability of basic safety conditions in section "P" of the permit. County takes official notice of Nuevo's lawsuit against County in declining to make this finding.

2.0 DEVELOPMENT PLAN FINDINGS

2.1 Article II – Coastal Zoning Ordinance

Pursuant to Article II Section 35-174.7, a Preliminary or Final Development Plan shall be approved only if all of the required findings can be made. The following findings cannot be made for the proposed project:

2.1.1 That adverse impacts are mitigated to the maximum extent feasible.

As evidenced by the EIR analysis, the greatest environmental impacts posed by the Tranquillon Ridge Project are almost entirely associated with a potential spill of rupture of the wet oil pipeline, continued transportation of NGLs/LPGs, and the visual presence of the LOGP and Platform Irene. A spill or rupture has the potential to result in significant unavoidable impacts to marine and terrestrial environments. The existing Pt. Pedernales Project contains 181~~0~~ conditions of approval. The EIR identifies a number of mitigation measures that would further reduce but not eliminate the significant risk of upset/safety related environmental impacts of the project. These measures include use of a Supervisory Control and Data Acquisition System (SCADA), implementation of a Safety, Inspection, Maintenance and Quality Assurance Program (SIMQAP), review of project operations by the County's System Safety Review and Reliability Committee (SSRRC) including approval of the pipeline operating manual, Emergency Response Plan and implementation, and preparation of an Oil Spill Contingency Plan for the on- and offshore crude oil pipelines. While these measures have all been required as conditions of the existing Pt. Pedernales projects and would be applicable to the Tranquillon Ridge Project, their enforceability and therefore their feasibility are in question due the

Applicant's current litigation regarding the County's jurisdiction over pipeline and platform operations. The County's conditions and inspections required pursuant to these conditions have been critical to ensuring safe operation of the pipeline.

However, Nuevo contends that the County is preempted by federal law from ~~regulating~~ enforcing County conditions of approval addressing pipeline operations. Without the continued implementation of the existing Pt. Pedernales safety-related conditions and the additional mitigation measures identified in the Tranquillon Ridge EIR, the finding that adverse impacts are mitigated to the maximum extent feasible cannot be made[1].

2.1.2 That the project will not be detrimental to the health, safety, comfort, convenience, and general welfare of the neighborhood and will not be incompatible with the surrounding area.

The project poses a significant risk to public safety due to the continued and increased transportation of NGL/LPG from the LOGP. The risk to public health and safety is reduced but not eliminated by the implementation of a Transportation Risk Reduction and Management Plan. Based on the analysis in the EIR, the continued health and safety risk due to the presence of H_2S in the Platform Irene to LOGP 8-inch gas line and the potential fire or explosion hazard associated with the oil emulsion pipeline would represent an adverse but less than significant public safety impact.

The proposed Tranquillon Ridge Project would extend the life of the Pt. Pedernales facilities including the pipelines that connect Platform Irene to the LOGP by up to 25 years and would increase impact levels over current levels. The crude oil pipeline has had historic integrity problems that have included defective flanges on the subsea portion of the pipeline and corrosion problems on the onshore portion of the pipeline. Potential leaks or ruptures of this pipeline (as has occurred in the past) could be detrimental to the comfort, convenience and general welfare of Lompoc area residents and the public in general. Pipeline spills could significantly damage biological, agricultural, cultural, and recreational resources in the project area and adversely effect the public use and enjoyment of these resources.

Potential impacts to these resources could be reduced through existing permit conditions and additional mitigation measures identified in the EIR. These measure include continued pipeline inspections and repairs (as required by the SIMQAP), use of, and updates to, the pipeline SCADA system, SSRRC review of pipeline operations including approval of the Pipeline Operating Manual, and implementation and updates to the Oil Spill Contingency Plans. While these mitigation measures exist, their enforceability and hence their feasibility is in question due to the Applicant's pending litigation regarding the County's jurisdiction over the pipeline. Therefore, this finding cannot be made.

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[1] Because these conditions have also not been required by the other regulatory agencies, the County cannot make the CEQA finding that the mitigation measures are the responsibility of another agency.

Further, the proposed project presents environmental and safety risks and impacts beyond those considered for the original Point Pedernales Project. The original EIS/EIR for the Point Pedernales project was specifically based on a project description in the original application that included mitigation measures for state of the art leak detection systems. The measures proposed for the leak detection system went beyond the requirements of the MMS and DOT but were still assumed in the original EIS/EIR based on the application submitted. These measures ultimately were incorporated into the "P" conditions of the permit and incorporated into the SIMQAP and Oil Spill Contingency Plan.

If Nuevo's objections to the permit ultimately prevail in court, County is unable to identify any other feasible mitigation measures within its jurisdiction that can mitigate the impacts of the proposed project to acceptable levels. The mitigation measure considered by County for the existing project have frequently been considered and not required by the MMS. (See Table 7) County concludes based on the evidence in the record that the impacts from the proposed project will be significantly greater without such mitigation measures. In particular, the evidence presented in and documented by Table 7 demonstrates this point.

Further, County is concerned that Nuevo may well contend that other mitigation measures contained in the current permit and proposed in the new project are beyond the subject matter jurisdiction of County to impose on this project. Under Nuevo's legal position as expressed in its lawsuit against County, Nuevo can attack the enforcement of permit conditions where federal preemption denies County subject matter jurisdiction even where the applicant specifically agrees to the conditions, never objects during the permitting process, and then accepts the permit and all of its benefits. Most troubling is that Nuevo, under its legal argument, need not even object to mitigation measures during the public hearing process if such measures are later found to be beyond the subject matter jurisdiction of the County. The approach denies County, other permitting agencies, and the public the opportunity to consider the proposed project and its impacts, as finally mitigated though conditions on the project, before a decision is made to approve or deny the project. It also potentially denies County the opportunity to consider if findings of overriding consideration are appropriate because the final impacts of the project cannot be known.

Nuevo's position, if successful, represents an approach that is the antithesis of the informed public process that is envisioned under CEQA, where decision makers are required to fully consider the benefits and environmental impacts of a project, before approving the project.

County also finds that while Nuevo questions County's authority to enforce permit conditions concerning the pipelines, there is no question that County has discretionary authority to determine, through its general plan and zoning ordinance, the appropriate location for industrial facilities within the County, including oil and gas processing plants. In 1985, County approved Unocal's request for the comprehensive plan amendment and rezone to allow for the building of the oil processing plant near Lompoc. This legislative action also made it possible for Torch and Nuevo to expand the plant and add gas processing in 1996. These approvals were all predicated or specifically conditioned on compliance with County requirements for the safety, including the

SIMQAP (found in Condition P-2) and Oil Spill Contingency Plan (found in Conditions P-13 and P-16.)

2.1.3 That the project is in conformance with the applicable provisions of Article II and the Coastal Land Use Plan.

The project as proposed would be inconsistent with a number of Coastal Land Use Plan policies as discussed in section 6.4.1 and Attachment D of the staff report.

2.2 Article III – Inland Zoning Ordinance

Pursuant to Article III Section 35-317.7, a Preliminary or Final Development Plan shall be approved only if all of the required findings can be made. The following findings cannot be made for the proposed project:

2.2.1 That adverse impacts are mitigated to the maximum extent feasible.

Refer to the discussion provided under Section 2.1.1 above.

2.1.2 That the project will not be detrimental to the health, safety, comfort, convenience, and general welfare of the neighborhood and will not be incompatible with the surrounding area.

Refer to the discussion provided under Section 2.1.2 above.

2.1.3 That the project is in conformance with the applicable provisions of Article III and the Comprehensive Plan.

The project as proposed would be inconsistent with a number of Comprehensive Plan policies as discussed in section 6.4.1 and Attachment D of the staff report.

Errata Sheet: Tranquillon Ridge EIR (01-EIR-04)

page(s)	revision
IS-4; 5.4-12; and 5.4-22	A 15% deviation [in pressure] sustained over a period of ~~5~~ 120 seconds shall activate a shutdown.
5.1-26	The offshore portion of the emulsion pipeline experienced a mechanical failure and subsequent spill in 1997. The spill was caused by a failure in a welded and flanged connection. As a result of the 1997 offshore failure, the emulsion pipeline would have been considered a "high-risk" pipeline by the CSFM. After the 1997 spill the SBC required inspections of the remaining welded and flanged connections ~~every six-months~~ annually. As a result of these inspections, a number of cracks were found in other welded and flanged connections. In 2001, the Applicant ch~~o~~ose to replace all but one of the remaining welded and flanged connections on the offshore portion of the emulsion pipeline. The welded and flanged connection at the Platform was not replaced. This welded and flanged connection undergoes inspection every six-months, as required by the SBC. The offshore pipeline is smart-pigged every year as required by the SIMQAP. The smart-pig survey results indicate ~~that both internal and external~~ some corrosion ~~is non-existent~~ for the offshore portion of the emulsion pipeline. External corrosion is the primary cause of the difference between "high risk" and "non-high risk" pipelines in the CSFM report, which dealt exclusively with onshore pipelines. The replacement of ~~to~~ the majority of the welded and flanged connections, the inspection of welded and flanged connection at the Platform every six-months, the annual smart-pig inspection, and the ~~lack~~ controlled level of internal and external corrosion, a "high risk" pipeline would be expected to have a similar spill frequency as a "non-high risk" pipeline, as per the CSFM report. Therefore, the offshore portion of the emulsion pipeline would be expected to have a spill frequency comparable to other "non-high risk" offshore pipelines.
5.5-38	Media accounts from 1969 include photos of living and dead oiled sea lions, and cite the observation of over a hundred oiled dead sea lions and elephant seals on San Miguel Island (Life Magazine, 6/13/69). However, ~~A~~according to Brownell, (1971) and Geraci and Smith (1977), no deaths to marine mammals could be linked to the 1969 spill. However, wildlife toxicology and survey capabilities at that period of time were less extensive than they are today.
9-26	In 2000 California consumed 14.8 ~~million~~ billion gallons of gasoline

Errata Sheet: Tranquillon Ridge Staff Report
(for P/C hearing on 6/20/02)

page(s)	revision
1	Torch Operating Company (Torch) on behalf of Nuevo Energy Company (Nuevo) requests approval of revisions to the Final Development Plan (94-FDP-027 RV02) for the Torch Pt. Pedernales project to allow oil and gas development and production from a proposed new state tidelands lease (Tranquillon Ridge unit).
4	[1] In fall 2001, after County required inspections detected additional cracks in the pipeline flanges, Nuevo undertook a program to remove and replace all of the flanges that were a part of the pipeline construction except for one flange. Several flanges had been previously removed in 1997 and 1999. Although this flange did not show any evidence of defects, ~~if~~ it shared many of the same manufacturing problems as the defective flanges. The County recommended removal and replacement of this remaining flange but Nuevo declined. In absence of the flange removal, the County now requires semiannual testing of the remaining flange.
9	The project would not exceed the permitted production levels allowed under the current Torch Pt. Pedernales FDP (See Section 5.5.1.~~1~~2).
9	[4]The pumps at Valve Site #2 would only be necessary if the 20-inch oil emulsion pipeline is derated to a MAOP below the necessary shipping pumps pressure at Platform Irene (approximately 1,000 psig). Currently the MAOP of this pipeline is 1,194 psig (see Table 2.1 of the EIR).
20	California Sate Lands Commission (CSLC)
22	82,700 bpd of water
26	A recent smart pig survey conducted by Nuevo on December 9, 2001 shows significant corrosion of the produced water line. A total of over 700,000 anomalies were detected with 3,729 anomalies greater than or equal to 40 percent metal loss and 94 anomalies greater that or equal to 50 percent metal loss. ~~In response to this survey, the Building and Safety Division is requiring that the pipeline be derated from 1,311 pounds per square inch (psig) to 1,203 psig.~~ Repairs were also conducted on the 8-inch water line in fall of 2001 to address corrosion discovered during a prior survey.
26	[8] The significant change in the number of anomalies reported in 2000 and 2001 (over 600,000 in 2000 and ~1,400 in 2001) was due to a change in the reporting format. In 2001, only anomalies greater than or equal to 30% were reported.
39	New Emulsion Pipeline from Platform Irene to the LOGP ~~(Tranquillon Ridge Only)~~
44	the potential for a spill would occur over a ~~longing~~ longer duration
44	providing for wildlife ~~car~~ care
53	The No Project Alternative would not meet the Applicant's objectives of the project.
58	Cumulative impacts of the proposed and pending projects are summarized in Attachment ~~F~~ C.

page(s)	revision
A-1; Finding 1.1	The EIR reflects the independent judgement of the Planning Commission and is ~~are~~ adequate for the ~~LOGP Produced Water Treatment Facility~~ Tranquillon Ridge Project.
A-1; Finding 1.4	The proposed Tranquillon Ridge Project has Class I Impacts, as identified in the Final EIR (01-EIR-04). Findings ~~of overriding consideration~~ that certain impacts are mitigated to the maximum extent feasible cannot, however, be made for the Tranquillon Ridge Project. In particular, the risks associated with the increase of production and extension of life of the processing plant and oil and gas pipelines are unacceptable for the proposed location and surrounding environment. Mitigation measures are identified in the EIR and exist in the Torch Point Pedernales permit to reduce these impacts. However, a ~~F~~findings of ~~overriding consideration~~ maximum feasible mitigation ~~are also~~ is impossible to fully weigh and determine because the applicant currently contests the enforceability of basic safety conditions in section "P" of the permit. County takes official notice of Nuevo's lawsuit against County in declining to make this finding.
A-2, Finding 2.1.1	The existing Pt. Pedernales Project contains ~~180~~ 181 conditions of approval.
A-3, Finding 2.1.1	However, Nuevo contends that the County is preempted by federal law from ~~regulating~~ enforcing County conditions of approval addressing pipeline operations.
A-3, Finding 2.1.2	The proposed Tranquillon Ridge Project would extend the life of the Pt. Pedernales facilities including the pipelines that connect Platform Irene to the LOGP by up to 25 years and would increase impact levels over current levels.
D-1; Coastal Act Policy 30232	Consistency with t~~T~~his ~~finding~~ policy cannot be made because the enforceability of certain key mitigation measures is in doubt due to Nuevo's legal challenge to the permit. ~~Without these mitigation measures, County finds that the increase in impacts is unacceptable and that the permit should be denied~~
D-2 and D-3; Coastal Plan Policy 2-11	: The Santa Ynez River estuary is designated as environmentally sensitive habitat. The existing Point Pedernales pipelines and associated facilities were sited to minimize impacts to the river. In addition, catchment basins were required along the pipeline route in the vicinity of the river to collect and contain oil in the event of a leak or rupture. Installation of new pumps at Valve Site #2 would increase the risk of a spill over current conditions. To further minimize spill related impacts, the EIR identifies the need for installation of a new catchment basin or berm at Valve Site #2 and revision to the OSCP to address protection and restoration of sensitive resources. With incorporation of these measures, the project would be consistent with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

page(s)	revision
D-3; Coastal Plan Policy 3-9	The project pipeline route does not cross any active faults. However, the existing pipeline does cross several potentially active faults. The existing Point Pedernales FDP required the installation and use of a SCADA system along the pipeline which allows the Applicant to monitor and if necessary isolate the pipeline segments in the event of an upset condition. The proposed Tranquillon Ridge Project would use the existing pipelines and would be monitored using the existing SCADA system. With continued use of the SCADA system and other safety conditions, the project is consistent with this policy. However, g~~G~~iven the scope of Nuevo's objection in its litigation to County's authority to impose any conditions on the operation of the pipelines, it is not known if this condition will be fully implemented. Therefore, consistency with this ~~finding~~ policy cannot be ~~made~~ found.
D-13; Coastal Plan Policies 10-2, 10-3, and 10-5	The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of an onshore spill (An increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline), would allow for a finding of consistency with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.
D-15; Land Use Development Policies	~~No new services are required for the LOGP Produced Water Treatment Facility or the Sisquoc Bi-directional Flow Project.~~
D-20; Lompoc Area Land Use policies	Containment and clean up activities of an oil spill could significantly impact biological resources along the pipeline and in the proximity of the LOGP. To help reduce this impact the EIR requires updating the OSCP to provide procedures for minimizing impacts and restoring affected resources. The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of a spill (an increases of 0.6 percent for ruptures and 2.0 percent for leaks ~~onshore pipeline; and an increase of 8.5 percent for ruptures and large spills and 4.4 percent for leaks and small spills – for the offshore pipeline and Platform Irene.),~~ would allow for a finding of consistency with this policy. However, due to the uncertainty regarding the County's authority to enforce permit conditions for the pipeline, the feasibility of the mitigation measures included in the EIR is unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, this finding cannot be made.

page(s)	revision
D-22; Energy Element policies	The Tranquillon Ridge Project does not include the installation and use of a cogenerating system. Several other County oil and gas development projects (e.g. Santa Ynez Unit and the Point Arguello Project) operate cogeneration facilities and rely on the electricity produced through these facilities. ~~Since u~~Under the proposed Tranquillon Ridge Project the Point Pedernales facilities would still be fully dependent on the grid for electricity, and would be potentially inconsistent with the policy. However, at the time the Point Pedernales project was approved, the SBCAPCD was strongly in favor of reducing new air emissions by using utility grid power for the Point Pedernales facilities. In light of this previous decision by the County, the project ~~is~~ can be found consistent with this policy. Due to the extension of life of the facilities and the volatile energy environment, a cogeneration facility might be cost effective and appropriate. Additional analysis would be required for such a determination, and may be conducted during future B-2 reviews.
D-26; Conser-vation Element	The implementation of existing FDP measures and proposed new measures, combined with the small increase in the probability of a spill (An increases of 0.6 percent for ruptures and 2.0 percent for leaks – onshore pipeline; and an increase of 8.5 percent for ruptures and large spills and 4.4 percent for leaks and small spills – for the offshore pipeline and Platform Irene.) would allow for a finding of consistency with this policy. However, due to the Applicant's litigation regarding the County's authority to ~~regulate pipeline and related platform operations, the enforceability, and hence~~ enforce key permit conditions, the feasibility of the mitigation measures included in the EIR are unknown. Due to the residual uncertainty in the ability to fully mitigate the project impacts, the project would be inconsistent with this policy.