

**CALENDAR ITEM**

**39**

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M. Voskanian

E. Gillies

J. Planck

**CONSIDER APPLICATION FOR TWO OFFSHORE NEGOTIATED SUBSURFACE  
(NO SURFACE USE) OIL AND GAS LEASES, AND DEVELOPMENT OF THE  
LEASES FROM AN OFFSHORE FEDERAL PLATFORM,  
SANTA BARBARA COUNTY**

**APPLICANT:**

Plains Exploration & Production Company (PXP)  
Attn.: Steven Rusch  
5640 South Fairfax Ave.  
Los Angeles, CA 90056

**AREA, LAND TYPE, AND LOCATION:**

One subsurface (no surface use) Oil and Gas Lease would be 4964.34± acres, and the second subsurface (no surface use) Oil and Gas Lease would be 5261.89± acres. Both are in the area offshore of Vandenberg Air Force Base located in northern Santa Barbara County, California.

**BACKGROUND:**

Since 1938, the State Lands Commission (“SLC” or “Commission”) has had exclusive jurisdiction over the leasing of oil and gas from offshore state lands. Public Resources Code, Division 6 and by the Commission’s own regulations as provided in California Code of Regulations, Title 2, Division 3, Chapter 1 provide the scope of the Commission’s jurisdiction and establish requirements and criteria for protection and promotion of the state resources on these lands.

Between 1938 and 1968, over fifty offshore oil and gas leases were issued by the

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Commission. In a manner common to most oil and gas leases, the leases that the Commission issued were either devoid of a fixed end date or were subsequently amended to remove an end date. The lease terms typically provided that the leases lasted as long as oil and gas was being produced in paying or commercial quantities. Once production ceases, the leases are to be quitclaimed back to the Commission. Two August 1968 leases, one to Continental Oil Company and the other Standard Oil Company, were the last new offshore oil and gas leases that the Commission entered into prior to the January 1969 Santa Barbara oil spill. The spill was the result of a well drilling blow-out at Union Oil's then-recently constructed Platform A located in federal Outer Continental Shelf (OCS) Tract 402. The cause was inadequate protective wellpipe casing, constructed below both federal and state standards. According to Santa Barbara County's website, the event lasted eleven days, spilled between 80,000 and 100,000 barrels of crude oil. Two hundred square miles of ocean and thirty-five miles of California coastline were oiled and thousands of animals were killed.

At its February 1969 meeting the Commission deferred the acceptance of outstanding bids for new leases and subsequently deferred deadlines for additional drilling from existing leases. Since then, the Commission has not entered into any new offshore oil and gas leases. The Commission formally imposed a moratorium in 1988 and 1989. Since 2001, the Commission has passed eight resolutions opposing the resumption or expansion of federal offshore oil and gas leasing operations (See Exhibit H for two examples). The foundation for each resolution was the same – that the danger of an oil spill like the 1969 Santa Barbara oil spill was too high and that oil development and potential spills would adversely affect fishing, tourism, and environmental, recreational, economic, scenic and other values. The resolutions are also based on and expressive of the state's policy and practice of not issuing new offshore leases. Further, the Commission staff has been pro-active in obtaining quitclaims of existing offshore oil and gas leases from oil companies back to the State.

The California Legislature has a similarly long history of excluding areas from leasing for offshore oil and gas. Beginning in 1921, and many times since, the Legislature has enacted laws that set aside offshore areas where oil and gas leasing was generally prohibited. The 1921 Leasing Act prohibited the issuance of any prospecting permits or leases within one mile of any municipality. The 1921 Act was amended in 1929 to prohibit the issuance of any new lease in offshore state waters. Between 1938 and 1955, leases could only be issued by

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the Commission if drainage of the state's oil and gas could be shown. In 1955, the Legislature authorized new oil and gas leases in state offshore waters, but has steadily increased the area which is closed to these leases. Finally, the California Coastal Sanctuary Act of 1994 ("Sanctuary Act"; Public Resources Code Section 6240, *et seq.*) removed all state lands underlying the Pacific Ocean from the Commission's oil and gas general leasing authority. The Sanctuary Act contains two limited exceptions, one of which is being utilized to consider Plains Exploration and Production Company's (PXP) application and is discussed in greater depth below.

The application presently before the Commission is similar to a 1999 joint application by Nuevo Energy Company and Bellwether Exploration Company. That application was denied by Santa Barbara County prior to the Commission having a chance to consider it. PXP's current proposed project, the Tranquillon Ridge project, is the subject of an agreement between PXP and several environmental groups led by the Environmental Defense Center and has been approved by Santa Barbara County. If the Commission approves PXP's application, PXP still needs to receive approval from the California Coastal Commission (CCC) and the Minerals Management Service of the U.S. Department of Interior (MMS). This too will be described in more detail below.

### **The Commission's Authority to Consider PXP's Application**

In April 2005, PXP submitted an application for negotiated subsurface (no surface use) Oil and Gas Leases totaling approximately 10,225 acres, offshore in northern Santa Barbara County (see Exhibit B) using Platform Irene located in federal OCS waters to drill and develop the leases. In April 2008, PXP reduced the number of wells from the earlier proposed thirty wells contemplated by the project and reviewed in the EIR to seventeen and included an end date for production of oil and gas from the project of December 31, 2022.

PXP is the current lessee of the federal OCS leases 437, 438, 440 and 441 that are contiguous to the proposed state lease areas. These leases are for the development of the federal Point Pedernales field. PXP owns and operates Platform Irene, constructed in 1985 by PXP's predecessor and located on OCS Tract 441. Oil and gas produced from those federal leases is currently transported separately by pipelines to the Lompoc Oil and Gas Processing Facility (LOGP) for processing and sale. PXP owns and operates both the pipelines, crossing state lands under State Lands Commission lease PRC 6923.1 (an amendment of which is also on the agenda for this meeting) and the LOGP.

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PXP's application is to develop state oil and gas resources by drilling up to seventeen wells from Platform Irene, of which fourteen are contemplated to be producing wells and three are proposed to be injection wells. PXP has made application to the MMS for a proposed Right of Use and Easement (RUE) to be entered into between MMS and PXP to drill the state wells from Platform Irene. The production would be measured and commingled with the ongoing federal Point Pedernales Field production and then transported through the pipelines to the LOGP.

The California Coastal Sanctuary Act prohibits new oil and gas leases in offshore lands, including the lands which PXP has applied to lease. One of the two exceptions in the Act allows the Commission to issue offshore oil and gas leases for areas in the Sanctuary if the Commission finds that state oil or gas is being drained by means of producing wells on an adjacent federal lease and that the issuance of a lease or leases is in the best interest of the state (Public Resources Code Section 6244). The 1992 version of the Sanctuary Act, subsequently repealed and re-enacted by the current Act, contained a requirement that wells in state waters could only be drilled from existing offshore platforms or from onshore locations. Although this requirement was not carried into the current Act, Public Resources Code Section 6815(b) requires that negotiated leases, which are those that could be issued under the exception to the Sanctuary Act, be developed by drilling from adjacent lands. PXP's application is consistent with those requirements.

Public Resources Code Section 6815(a) authorizes the Commission to negotiate oil and gas leases, rather than utilize an open-bidding process, if certain conditions exist. Due to the inaccessibility from surface drill sites reasonably available or obtainable by any party other than PXP and the drainage of state resources by wells located in federal waters, discussed in more detail below, staff believes that these leases are not subject to the open or competitive bidding process. The lease would permit Commission approved directional drilling from Platform Irene and production processing by the current onshore infrastructure.

The federal Point Pedernales project was initially developed and operated by Union Oil Company, but is currently being developed and operated by PXP. It utilizes Platform Irene, which has a total of 72 well slots on the platform. Platform Irene sits in 242 feet of water on federal OCS lands and was set in place in 1985. Twenty-eight wells have been drilled, with a maximum of 15 wells producing in any given month. Thirteen are currently in production. While the original Tranquillon Ridge project proposed by PXP envisioned thirty wells producing

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over a thirty year period, after PXP reached an agreement with several Santa Barbara non-governmental organizations the project life was reduced and included a specific end date. The agreement and the parties are discussed below. The project, as now contemplated by PXP, calls for drilling up to 17 wells from Platform Irene (approximately four and a half miles offshore) into two new state leases, with all state drilling and production to cease on or before December 31, 2022. The project was approved by Santa Barbara County in October 2008 and is the one before the Commission.

Oil and gas production would be measured as detailed in a "Measurement and Allocation Plan" developed by Commission staff and PXP, and incorporated as part of the Memorandum of Agreement between the Commission, MMS, and PXP. Once measured, it would then be commingled with the federal (Point Pedernales) production and sent to shore in the existing approximately 22 mile 20" emulsion (oil & water) pipeline and 8" gas pipeline (approximately 10 miles of the pipeline is located offshore, a substantial part within Commission lease PRC 6923.1 and 12 miles is located onshore between Surf Beach and the LOGP in Santa Barbara County), then to the LOGP (located approximately 3 miles north of the city of Lompoc) for processing and shipment to a refinery. Oil and gas are sold and distributed via pipelines from the plant. The majority of the produced water is injected onshore at the Lompoc Oil Field with the remaining returned via an 8" water pipeline to Platform Irene for offshore injection. Power is supplied to Irene via a subsea power cable (Commission lease PRC 6911.1) from an electrical substation located on Union Pacific Railroad property at Surf Beach. The substation is connected to the Pacific Gas and Electric power line north of Lompoc.

On September 28, 1997, part of the 20-inch oil emulsion pipeline in state waters (lease PRC 6923.1) ruptured spilling crude oil into the Pacific Ocean about 2-1/2 miles from shore. Oil reached shore at the pipeline break/Surf Beach area. About one mile was considered heavily oiled and moderately to lightly oiled for about four miles. Oil was found coming ashore at Point Arguello. Abalone and seastars were oiled and hundreds of seabirds were killed. Snowy plovers were most affected because they nest at Surf Beach. The oil and cleanup activity displaced the plovers and their shrubs and nesting habitat were trampled or oiled. Collections of sand crabs revealed that they were oiled more than a two mile length of beach. In the days following the spill, the ruptured pipeline was wrapped in fiberglass to prevent further leakage and by November 11, 1997, the pipeline was completely repaired. Studies concluded that the leak was caused by a faulty weld. Soon after the 1997 spill, the operator took several actions to

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reduce ongoing corrosion in the oil line, including an aggressive corrosion control program, additional inspections to detect and respond to signs of corrosion, and lowering (“derating”) of the maximum allowable operating pressure of the pipeline to address the reduced wall thickness of the pipeline. Annual inspection and regular maintenance of the pipelines, as required by State Lands Commission regulations, and agreed to by the MMS since the spill, have helped ensure the pipeline is maintained and operated safely.

The above mentioned offshore and onshore facilities had been acquired by Nuevo Energy Company and Bellwether Exploration Company in the 1990’s (collectively referred to as Nuevo). Nuevo proposed a project similar to the project now being considered in 1999; however, in 2002 Santa Barbara County denied approval of the offshore portion of the project and did not certify the EIR, at least with regard to the offshore development. PXP acquired the federal leases and the offshore and onshore facilities from Nuevo in May 2004.

The Point Pedernales project is permitted by Santa Barbara County to process up to 36,000 barrels of dry oil per day (bopd) and up to 15 million standard cubic feet of natural gas per day (mmscfd) (with a maximum hydrogen sulfide concentration level of under 8,000 parts per million (ppm)) at the LOGP. It currently produces around 8,000 bopd and 4.5 mmscfd. According to the EIR, the peak estimated production from the proposed Tranquillon Ridge project will be 27,000 bopd and 5 mmscfd of natural gas.

**Well A-28**

Pursuant to a Lease Line Well Agreement between the MMS and the Commission dated February 13, 1997, Nuevo drilled “Well A-28” into Federal Lease OCS-P 0441, to a bottom hole location located close to the offshore 3-mile state-federal boundary. Well A-28 was completed in the Monterey formation and has produced over 200,000 barrels (bbls) of oil which makes it one of the poorest producing wells in the federal lease. Initially, the well produced at an oil rate of 800 bopd and 200 thousand standard cubic feet per day (mscfd) of natural gas, although now the amount of oil produced on a daily basis is minimal. Pursuant to the terms of the Lease Line Well Agreement, the State’s royalty share in this well is 50% of all hydrocarbons originating within 500 feet of the State/Federal boundary. In addition, because Well A-28 is located within three nautical miles of the state/federal boundary, per the requirements of section 8(g)(2) of the OCS Lands Act (43 USC 1337(g)(2)), the State is entitled to, and does, receive payment of 27% from the federal royalty production of the well.

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**Onshore Alternative (“Vahevala Project”)**

Onshore alternatives are primarily limited by the presence of Vandenberg Air Force Base and the air and space operations conducted from that base. Those operations occupy the entire extent of the onshore area from which an onshore oil and gas project could occur. An application to the Commission for a lease by Sunset Petroleum Company and ExxonMobil (collectively referred to here as Sunset) to develop the same state resources as is proposed in this agenda item, but from an onshore site on the Base, has not been deemed complete to date by the County of Santa Barbara due to lack of the surface owner’s (United States Air Force) approval for a surface location for the project. Until the statutory requirement of the County is met, the Sunset project application is not considered viable. Although the Commission staff did deem the application complete, the site that was proposed to be used for the project in that application was later denied by the Air Force. Therefore, because the proposed drill site is not available, the project description in that application is no longer valid.

The EIR for PXP’s Tranquillon Ridge project did conceptually examine the potential of development from an onshore site similar to what Sunset had proposed for the Vahevala project. The EIR concluded that there is no clear indication that a new onshore drilling and production site would reduce significant impacts associated with the Tranquillon Ridge project, with the important exception of marine resource impacts due to a possible marine oil spill. However, a detailed environmental analysis of a specific Sunset onshore proposal potentially could provide information supporting a different conclusion and might determine that there would likely be a substantial reduction in potential impacts related to a marine oil spill that could outweigh other significant impacts of an onshore project. However, the onshore drilling project would also require a new onshore pipeline and other construction which could cause impacts.

The independent drainage and reservoir study, discussed in greater depth below, considered Sunset’s Vahevala project and found it would produce more state oil and gas resources than the proposed project. However, Sunset’s project as proposed to the Commission, and evaluated in the drainage study, proposes more wells and has, at a minimum, twice the project life of the Tranquillon Ridge project. These are project elements that are both strongly opposed by local environmental groups and by comments received from the public.

**Drainage and Reservoir Studies**

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To assist the Commission in its determination of drainage, staff contracted with third party engineering and reservoir evaluation services to develop independent determinations of whether drainage was occurring and to estimate the potential of the state resources to be developed. The first study was done in conjunction with the Nuevo application discussed above. The study, done by Allan Spivak Engineering and published in November 2001 (the Spivak study), determined that Well A-28 was on the same structure as the state reservoir and that there was current drainage of hydrocarbons from the state side to the federal side on the structure. The study also confirmed that there was a single aquifer (water drive) under both the Point Pedernales and Tranquillon Ridge structures. The consultant believed, based on his limited observation and Nuevo's information, that drainage of state resources was only occurring by and through the production of Well A-28. The estimated recoverable oil from the state side of the structure was between 100 and 310 million barrels.

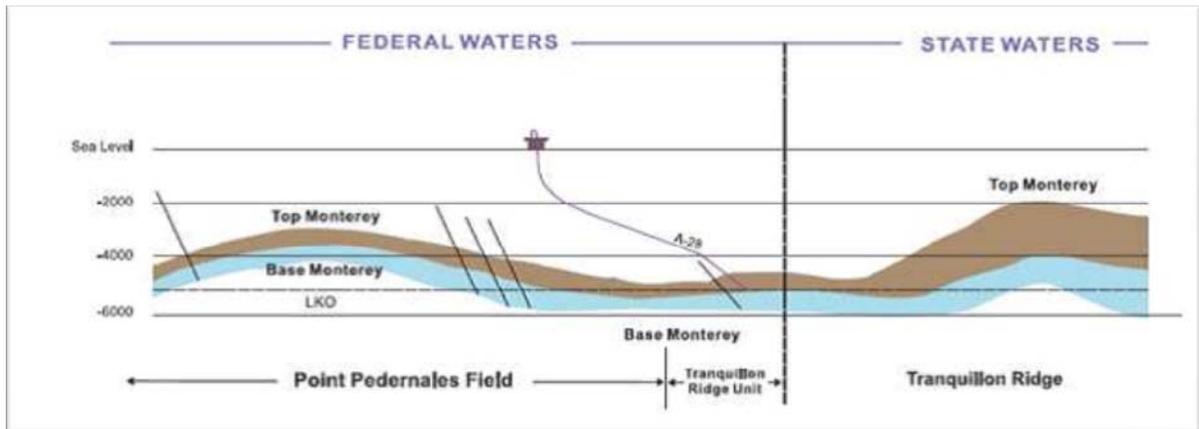
With the applications of PXP and Sunset, staff felt that it needed not only an update of the Spivak report (specifically relating to Well A-28 after 10 years of production history), but also a regional picture including whether development from the Point Pedernales field was also causing drainage of state resources. This independent study was conducted by NAFT Consulting in two separate concurrent studies. The first study (Volume I) took a fresh look at the Spivak study, as well as the production history and other geophysical information to update the findings. The second study (Volume II) looked to the regional aspects of the reservoir. Those studies were completed during June-July 2008 and are summarized below.

**Volume I: Drainage from the Tranquillon Ridge by Well A-28**

The report concludes that Well A-28 has drained and is continuing to drain about 27,000 mcsf per year of natural gas and the associated natural gas liquids from the Tranquillon Ridge structure. The amount of oil being drained is harder to determine for a number of reasons and therefore the study did not conclude whether oil was being drained by this well. The report also concludes that the well is "wasting" the state's reservoir energy from that area and thereby damaging the potential oil and gas recovery from the state resources. As illustrated below, this is because the Tranquillon Ridge field is part of a continuous geologic structure that also includes the federal Point Pedernales field and includes a "saddle" structure with a common aquifer. That saddle structure allows the federal lease to fully make use of the shared common aquifer to drive the production of federal oil and gas, lessening the available energy (pressure)

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for any future production of state oil and gas resources. The report estimates that over 1.4 million barrels of recoverable oil from the state-owned portion of Tranquillon Ridge may have already been jeopardized.



The second finding of Volume I is that the state Tranquillon Ridge field conceivably has up to 170-180 million barrels of recoverable oil. However, even disregarding the loss of reservoir energy, the recoverable oil from this Tranquillon Ridge project, due to the proposed December 2022 lease end date and less than optimum well trajectories encountering the Monterey (producing formation) fracture systems from Platform Irene, may only be in a range of 40-90 million barrels of oil.

**Volume II: Drainage of the Tranquillon Ridge Prospect by the Point Pedernales Oilfield**

Volume II is an extension of the Volume I report on the oil and gas reserves in the Tranquillon Ridge geologic structure, but with a broader focus on potential drainage by the operation of the Point Pedernales oilfield in general, and from the perspective of the potential project to develop the field from an onshore drillsite (as submitted by Sunset Exploration and ExxonMobil Corp, aka the "Vahevala Project"). The same data sources and reports used and consulted in preparation of Volume I were used for the preparation of this report with the exception of additional independent seismic interpretation and other information specifically from the Vahevala proposal.

Based on further analysis of seismic data and diagnostic mapping of performance data the report finds that Point Pedernales production has benefitted from a common aquifer shared with the Tranquillon Ridge structure as

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reported in Volume I, and has drained substantial natural water drive energy causing long term recovery losses for any future potential Tranquillon Ridge operations in state waters. Continuation of Point Pedernales operations, with no correlative state development project, is putting at risk about 260,000 barrels of recoverable state oil reserves per month due to the loss of reservoir energy.

Under the Vahevala development proposal, where 30 wells were planned to produce within a 30 year operational life, the study estimates the recoverable oil to range from 100 to 150 million barrels of oil, plus the associated natural gas and natural gas liquids.

### **Volume III: Addendum (and Summary) of Drainage Studies**

Volume III summarizes that the geologic structure that includes both the Point Pedernales and Tranquillon Ridge fields is one oilfield consisting of a number of fault blocks, connected by the "saddle" area near the state/federal boundary. The development of Point Pedernales has resulted in substantial movement and migration of oil and gas and depletion of reservoir energy from the Tranquillon Ridge. Based on the geological, geophysical and production data, including that from Well A-28, the report does not see a discontinuity between the Point Pedernales and the Tranquillon Ridge fields. In other words, they are both part of the same oilfield and the division between federal and state ownership does not mirror the reservoir boundary.

### **Modifications to Existing Infrastructure**

The project as proposed would require only minor modifications and upgrades to the existing drilling and production infrastructure. The project would require installing new shipping pumps on Platform Irene. The three existing 600-hp electrical shipping pumps would be replaced with three 1,250-hp electrical shipping pumps. In addition, approximately eight of the new Tranquillon Ridge wells would utilize new 300-900 hp electrical submersible pumps. The other production wells would utilize gas-lift technology. Ongoing maintenance and upgrades of the electrical transformers and switchgear on the platform for these additional pump loads has already begun.

Drilling activities and equipment would be similar to those of current and ongoing drilling programs, but with somewhat different frequency and duration. The existing drilling rig on Platform Irene would be used to drill the project wells. The only additional equipment for drilling would be a new 1,600-horsepower electric pump for handling drilling fluids, as well as some refurbishing of the existing

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drilling fluids system. It is possible, due to new technology or improved rig efficiencies, that in the future, a new drill rig could be used to drill some of the later wells in the project

The existing 8-inch produced water return pipeline is currently used to return a portion of the Point Pedernales produced water from the LOGP to Platform Irene for offshore water injection (a portion of the produced water is also injected onshore into the Lompoc Oil Field). For the proposed development, part of the produced water would continue to be transported offshore. Produced water would continue to be injected offshore or onshore in accordance with permitting agency authorizations. Approximately 40,000 bpd of water produced from Point Pedernales and Tranquillon Ridge combined would be shipped from the LOGP to Platform Irene for injection. The operator's current federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) permit authorizes some ocean discharge of the produced water, however the proposed lease provisions would disallow such use except in an emergency.

**Environmental Impact Report**

Under the California Environmental Quality Act (CEQA, see also California Code of Regulations, Title 14), it was determined that Santa Barbara County (County) was the appropriate lead agency for this project. As such, the County commissioned both the Draft and the Final Environmental Impact Reports (EIR). The Commission staff along with the California Coastal Commission staff provided oversight in the preparation of the EIR through a Joint Review Panel Memorandum of Understanding. The Minerals Management Service, Vandenberg Air Force Base, and Santa Barbara County Air Pollution Control District were also part of the Joint Review Panel as advisory agencies. The EIR was certified on April 21, 2008, by the County Planning Commission. This action was appealed to the County Board of Supervisors, the appeal was denied, and the EIR was certified by the County Board of Supervisors on October 7, 2008. The time for any additional legal challenges to the EIR has passed. The Commission staff has reviewed the EIR and Mitigation Monitoring Program adopted by the lead agency. Exhibit G-2 sets forth the Mitigation Monitoring Program.

The EIR identified eleven significant and unavoidable (Class I) impacts as the result of the reduced-life project. These impacts result from the increased volumes of oil and gas over current production levels and are primarily related to marine oil spills or trucking of hazardous materials on local roadways. Issue area

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impacts include marine and terrestrial biological resources and water quality, fishing, recreational, and cultural resources due to the risk of oil spills and spill clean-up efforts, and significant public safety risks associated with truck transport of gas liquids from the Lompoc Oil and Gas Plant.

The County made Findings in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, sections 15091 and 15096) and is provided in Exhibit G-1. Due to the Class I impacts as a result of the project, the County also made a Statement of Overriding Considerations in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15093) and is provided in Exhibit G-3.

The Commission staff also held a hearing on the Draft EIR for the proposed lease in the city of Santa Barbara. The public hearing, held on November 13, 2007, provided an additional opportunity for representatives of fishermen operating within the area being considered for leasing, representatives of the oil industry, and other members of the public to submit additional comments on the Draft EIR related to the protection of, and potential impacts to, fisheries and marine habitat within the area being considered for leasing. No additional comments were received at the public hearing. The National Oceanic and Atmospheric Agency's (NOAA) National Marine Fisheries Service (NMFS) submitted comments with regard to essential fish habitat (EFH), marine mammals, and federally listed species (letter dated March 6, 2008). NOAA's only recommended conservation measure for EFH was to avoid discharging drill muds, cuttings, and produced water into ocean waters. The recommendation was to require that the "applicant should either inject into an underground formation or dispose of the materials onshore." Although Public Resources Code Section 6873 provides that disposal of cuttings and muds may be authorized in accordance with permits from the Regional Water Quality Control Board, the Commission has the authority to prohibit a lessee from discharging any muds and cuttings into ocean waters. NOAA's recommendation was not incorporated into the final EIR or into the terms of Santa Barbara County's permit; however, staff is recommending that any lease require PXP to comply with NOAA's recommendation.

**Environmental Benefits Enforcement**

### **PXP-EDC Agreement**

On April 10, 2008, PXP and the Environmental Defense Center (EDC) representing itself, Get Oil Out! (GOO) and the Citizen's Planning Association of Santa Barbara announced an agreement (PXP-EDC agreement) that would allow the environmental groups to actively support the development of Tranquillon Ridge by PXP. That these three groups, especially GOO, which was formed in response to the 1969 oil spill, were able to reach an agreement with PXP is especially noteworthy as they have all been staunchly opposed to any oil and gas development. Although this is a private confidential agreement, its parties agreed to provide copies to specified Commission staff. For the agreed environmental benefits to occur EDC must assist PXP in obtaining all necessary approvals for the Tranquillon Ridge project and the project must produce oil and gas and be commercially viable. The environmental benefits can be roughly described as comprising three categories: end dates for PXP's offshore oil and gas operations and onshore processing facilities in Santa Barbara County, land conveyance commitments by PXP, and green house gas mitigation measures.

The first proposed benefit, cessation of offshore oil operations by a date certain, focuses on those aspects of oil and gas production that PXP has control over within and adjacent (in the OCS) to Santa Barbara County. There are two groupings of projects that make up this proposed benefit. The first comprises the Point Pedernales project located in federal waters, the proposed Tranquillon Ridge project located in state waters, Platform Irene located in federal waters, the pipeline between Platform Irene and the Lompoc Oil and Gas Processing facility (LOGP) located in federal and state waters and onshore, and the LOGP itself located in Santa Barbara County; the second grouping is comprised of the Point Arguello project in federal waters, with its associated platforms and pipelines (including Commission lease PRC 6942.1 and 6943.1 in state waters), and the processing facility in Gaviota. Production of oil and gas from those facilities related to Point Pedernales and Tranquillon Ridge is to end by December 31, 2022; production from those related to Point Arguello is to end in 2017. By their respective end dates, PXP is to begin the application processes with the appropriate government entities to decommission and remove the facilities involved in those projects. By providing a fixed end date for the operations that currently are able to operate indefinitely, the PXP-EDC agreement seeks to have the long-term risks to the environment from oil spills lessened and to end a significant amount of production of oil and gas from state and federal waters.

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The second proposed benefit, the land conveyances from PXP to the Trust for Public Land (TPL), details of which are apparently provided for in a separate private confidential agreement that has not been provided to staff and therefore cannot be confirmed or reviewed, is to be done in phases. It has been stated that TPL intends to ultimately transfer the land to state agencies to ensure that the land is protected in perpetuity. Specifically, if certain events take place PXP is to donate in phases: 1) up to 3,700± acres (Lompoc Lands) adjacent to, and intended to be operated with, the existing 5,300 acre Burton Mesa Ecological Reserve (operated by the Department of Fish and Game (DFG) pursuant to Commission lease PRC 8129.9, 2) three parcels totaling approximately 200 acres along the Gaviota coast including the land under the Gaviota processing facility and the Smith and Sunburst parcels. Currently, some processing facilities exist on portions of two of the four parcels, so some areas will likely require remediation work. The conveyances have a two part anticipated environmental benefit – the addition of new open space lands, both coastal and inland, and the prevention of the construction of a large scale housing development in an environmentally sensitive area on a portion of the Lompoc Lands. Without this agreement, only the 30 acres of the land that PXP is already required to convey to the DFG for mitigation of a previous project is to be protected and the rest would be subject to possible development. It is suggested that the conveyance of lands underlying the processing facilities is, in addition to end dates, another mechanism to insure shutdown of the offshore operations.

The final category is Green House Gas (GHG) mitigation. PXP is required to reduce or offset (1:1) all of the GHG emissions from the Tranquillon Ridge project. This is to be done in two phases, both relying on an independent third-party auditor. Phase one occurs at the beginning of the project and looks to see what feasible measures can be done to eliminate or reduce the generation of GHG from ongoing drilling and production on the platform. The second phase occurs annually for the life of the project and requires PXP to purchase offsets for any remaining GHG that is above the current, pre-Tranquillon Ridge baseline. In addition, PXP will donate \$1,500,000 to Santa Barbara County for the reduction of GHG emissions by such mechanisms as purchasing alternative fuel transit buses. The mitigation of GHG is an important issue, but the best mechanisms to achieve full mitigation are not clear. The California Legislature passed AB 32 in 2006, requiring that GHG emissions be reduced to 1990 levels by the year 2020; however, the regulations to implement AB 32 are not yet in place. The GHG mitigation measures and framework to which PXP is agreeing, may or may not be stricter than what the state ultimately creates, but in the absence of this

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agreement the GHG emissions currently generated by the operations at Platform Irene in federal waters are not likely to be mitigated any time in the near future, if ever.

**California State Lands Commission's Ability to Enforce Benefits**

The Commission staff has analyzed the environmental benefits of the PXP-EDC agreement because they appear to provide a basis for determining whether the proposed leases are in the best interest of the state. After consultation with the Commission, staff looked for ways to include requirements in the proposed leases or as conditions of Commission approval that would give the Commission the ability to mandate and implement the same benefits as were contained in the PXP-EDC agreement.

In consultation with the Attorney General's office, staff attorneys concluded that the goals of the agreement could not be reliably enforced and that the legal context for the public benefit requirements of the agreement prevented staff from devising mechanisms to improve enforceability.

The confidentiality agreement, required by EDC and PXP before staff could review the PXP-EDC agreement, prevents disclosure by staff of specific provisions of the PXP-EDC agreement. However, staff can discuss the legal barriers to including legally enforceable provisions in the Commission's leases. Staff has looked at several options including: 1) PXP could be required through lease provisions to halt oil production from the federal leases by the PXP-EDC agreement end dates; 2) The state could negotiate an agreement with MMS wherein the federal government would agree not to litigate PXP's closure of federal lease production from Point Pedernales and Point Arguello; 3) The State could refuse to extend the leases of state lands for the pipelines and power lines that serve the federal platforms; 4) The State could require that the onshore facilities be closed down consistent with the end dates; and 5) The state could impose "backstop" requirements in the leases that would assure that the land dedications contemplated in the EDC agreement would occur.

Commission staff has concluded that the Commission cannot reliably require PXP to stop and close production on federal leases for several reasons. First, to do so could tortuously interfere with the contracts between PXP and MMS involving the federal leases. Most observers would agree that commercial oil production at Point Arguello and Point Pedernales will have declined when the respective end dates of 2017 and 2022 are reached. However, EDC believes

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there is a public benefit to these end dates because commercial production may extend beyond any a date anticipated date set 8 or 14 years in advance. Oil prices typically increase over time, enabling more costly recovery mechanisms to be employed to recover additional oil. New technology also allows more oil to be recovered. Absent the PXP-EDC agreement or similar lease conditions, commercial oil production at these two areas is likely to continue past the end dates with continued revenues for the federal government. A contract which causes PXP to prematurely abandon oil production and which halts anticipated revenue could cause the federal government to litigate against the state for damages and against PXP for either damages or continued production of the federal leases. Commission requirements to close onshore processing facilities at Gaviota and Lompoc are subject to the same legal challenges.

The federal government could also exercise its condemnation or eminent domain powers to keep open the onshore production facilities and to prevent the state from closing down the pipelines which service the federal leases. Although it is likely that this would only occur under certain economic scenarios, the federal government has exercised these powers to take control of sovereign land on previous occasions. That these pipelines and facilities are necessary for interstate commerce, the primary requirement for a condemnation or eminent domain proceeding has already been answered. In the 1980's, the Commission has heavily involved in litigation that arose out of the Commission's decisions to alter how the rental rate for the pipeline leases was established. The result of the litigation was that an oil industry association successfully relied on the Commerce Clause and the Import-Export Clause of the United States Constitution to stop the Commission from imposing a throughput based royalty. The oil industry association argued that the Commission has a monopoly over the land between the federal offshore oil and the onshore processing facilities and pipelines and that because oil and gas falls within interstate commerce, the Commission's discretionary power is tempered by the United State Constitution. The United States Court of Appeals Ninth Circuit agreed and held that the Commission, by raising its pipeline rates, was violating the Commerce Clause by disrupting the free flow of interstate commerce and the Import-Export Clause by obtaining money that other non-coastal, non-oil rich states cannot obtain. *Western Oil & Gas Association v. Cory*, 726 F.2d 1340 (1984), petition for rehearing denied in *Cory v. Western Oil and Gas Association*, 471 U.S. 1112 (1985). The state could be similarly vulnerable to federal intervention if the state tried to stop use of the pipelines for conveying the federal oil. The United States has recently condemned rights-of-way across state submerged lands.

The MMS has evinced no interest in agreeing to the end dates. In a March 10,

CALENDAR ITEM NO. 39 (CONT'D)

2008 letter, it indicated that its conservation goal remains to recover the oil and gas reserves in the Point Pedernales field. MMS indicated to PXP that it would refuse to approve a Development and Production Plan (DPP) for use of Platform Irene for Tranquillon Ridge if it included an end date for the federal leases. MMS also refused to have an end date in the Plan for production of Tranquillon Ridge. MMS has no incentive to give up the federal production. Further, in *Tucson Airport Authority v. General Dynamics; General Dynamics v. William Perry, Secretary of Defense; Sheila Widnall, Secretary of the Air Force; United States of America*, 136 F.3d 641 (1998) the United States Court of Appeals Ninth Circuit held that the federal government could be sued for damages only, not performance. Thus, if MMS entered into an agreement to end production in federal leases and chose not to implement it, California could only litigate for damages and not to obtain cessation of oil production; the potential policy basis for approval of the Tranquillon Ridge leases would therefore not be obtainable through litigation.

Further, the ability of PXP to seek MMS approval of the end dates for the federal leases may be hampered by whatever partnership agreements are in place for the Gaviota facility and the existing federal offshore leases. Staff has not been given a copy of those partnership agreements.

Staff also considered developing a lease provision in which PXP would agree to pay the state a large penalty should the federal lease end dates not be realized. However, a payment to the state would not obtain the public policy result desired – closure of the federal leases. Further, courts have declined to enforce liquidated damage provisions where the intent is to establish a penalty through the provision to obtain the desired performance. Instead, courts have limited payments to actual demonstrated damages. Establishing a monetary damage amount for failure to close a federal lease would be difficult, if not impossible.

With respect to the onshore land donations contemplated in the PXP-EDC agreement, these would not be hampered by the same legal considerations as enforcement of the federal end dates (with the exception of the relatively small acreages, which are the sites of the two processing facilities). However, PXP and EDC have refused to share the separate land donation agreement with TPL that specifies how the land would be donated. Timelines, remediation, title resolution etc. are not well spelled out in the PXP-EDC agreement. Staff asked if EDC and PXP could indicate outside parameters for conclusion of the land donations pursuant to the confidential TPL agreement. Staff contemplated developing a lease provision that would provide for donation of the lands to an

CALENDAR ITEM NO. 39 (CONT'D)

entity of the Commission's choice if the transfer had not occurred, for example, within ten years after the end dates.

In response to staff raising these issues, counsel for PXP provided a memo (Exhibit "I") advocating that the Commission not try to enforce the Point Arguello end dates and the land donations, but to focus on Point Pedernales and the GHG emissions. Among other things, the memo suggested that the donations could take a long time to complete and that title problems could prevent some of the donations from occurring at all. Without knowing the mechanics and nature of the donation process, staff could not draft backstop provisions without potentially conflicting with the PXP-EDC agreement.

Staff reviewed the GHG emission provisions and found that PXP probably will not reach the announced goal of reducing or offsetting all of the GHG emissions from the project. First, a portion of the mitigation will occur through the purchase of offsets. The agreement sets the price to be paid for offsets at \$10 per ton. In 2008, the Commission rejected an identical cap proposed on offset costs by Poseidon for its GHG mitigation program for its Carlsbad desalination facility because it could result in insufficient mitigation.

Staff research indicates that the current cost of offsets is about \$7.30 per ton but that the price has fluctuated. In the future the price of offsets may exceed \$10/ton. If so, the proposed program may not mitigate the full impacts. Second, the material submitted by PXP and the information contained in the Final EIR indicate that the mitigation is only for direct GHG emissions and that there is no mitigation proposed for the GHG emissions associated with the electricity used for well drilling, well lifting pumps and water reinjection. The Poseidon project emissions were largely composed of those associated with generation of the electricity used in the desalination process. While the exact amount of electricity for well drilling, well lifting pumps and water reinjection to be used by the Tranquillon Ridge project is not well defined, Commission staff estimates it to be roughly 424,274 megawatt hours (MWh) over the life of the project. Using the average carbon emissions of .456 pounds/kilowatt hour associated with generation by PG&E, the source of the power to be used for Tranquillon Ridge, this totals 87,741 tons over 14 years or an average of approximately 6,500 tons per year. Staff has attached supplemental provisions (Exhibit G-4) that would require all production and development resulting in GHG emissions associated with the Tranquillon Ridge project to be mitigated, should the Commission chose to approve the leases and want to improve PXP's proposed GHG mitigation. PXP's GHG emission plan assumes that offsets can be purchased at \$10 per ton

## CALENDAR ITEM NO. 39 (CONT'D)

and plans to mitigate 14,925 tons per year of direct emissions. PXP argues that there is a significant indirect effect of importing oil and gas into California and producing California oil results in a significant reduction in toxic and GHG emissions from displaced tanker trips (estimated by PXP to be 93,110 tons per year). Further, PXP argues that those reductions combined with the reductions generated from the Hybrid Bus Program to be created by the County with the \$1,500,000 donated by PXP, results in a net negative GHG emission of both direct and what could be described as indirect GHG emissions.

In conclusion, staff does not believe the PXP-EDC agreement forms a reliable basis for a determination that the project is in the best interest of the state as required by Public Resources Code Section 6244. Enforcement of the federal end dates is uncertain and the GHG mitigation appears incomplete. The land donations may provide a significant public benefit but without access to the land donation agreement, staff cannot confirm this.

### **Santa Barbara County Permit Conditions**

Santa Barbara County approved the Tranquillon Ridge project in October 2008, certified the final EIR, adopted a Statement of Overriding Considerations, and issued a Revised Development Permit. The County permit incorporates only the GHG mitigation and end date provisions of the proposed Tranquillon Ridge oil and gas lease as set forth in the PXP-EDC agreement. The end date provides that production of oil and gas from the Tranquillon Ridge project is to cease by December 31, 2022. The permit also included the same GHG mitigation terms contained in the PXP-EDC agreement. While the County initially indicated that it would attach the same end date to the LOGP facility, it ultimately did not. The County end dates do not otherwise enforce the federal lease end dates

### **California Coastal Commission Conditions of Approval**

The California Coastal Commission (CCC) is the final state government entity that will evaluate the Tranquillon Ridge project. It must make a consistency finding for the revised Development and Production Plan submitted to the MMS and issue a Coastal Development Permit to PXP. The CCC is tentatively scheduled to hear the item on February 5, 2009. Key features of the project that CCC will evaluate are: no more than seventeen wells drilled into state lands, the same GHG mitigation that is before the Commission in this Calendar Item, the December 31, 2022 end date for the state Tranquillon Ridge project and potential for oil spills. CCC staff does not intend to recommend enforcement of the federal

CALENDAR ITEM NO. 39 (CONT'D)

end dates.

**Mineral Management Service Jurisdiction**

The Mineral Management Service (MMS) is the branch of the federal Department of Interior charged with managing the federal government's offshore oil and gas resources. If the Commission approves the Tranquillon Ridge project, the MMS will need to issue a Right of Use and Easement (RUE). This must be done to allow PXP to utilize Platform Irene to access the state resources as contemplated in the Tranquillon Ridge project. This action by the MMS is a discretionary action, so Commission staff cannot inform the Commission with absolute certainty what the MMS will do. It is more likely than not that MMS will decide to issue a RUE, but it is almost certain that the MMS will not agree to include any end dates in a RUE. The MMS will also need to approve a revised Development and Production Plan (DPP) for the use of Platform Irene in developing Tranquillon Ridge. While sharing of the oil revenues with the MMS was an issue in earlier negotiations regarding a unit agreement, since some of the resource underlies federal land, the use of a RUE would eliminate any need for such sharing. When this staff recommendation was prepared, the terms of the RUE were not known. The remaining issue of concern to staff is potential control of the drilling operations into state waters. MMS has a legitimate cause for reviewing these operations because they could interfere with production from the federal leases. However, staff believes the RUE should include a process that allows for reasonable operation of the state leases. Staff recommends that any Commission approval of the proposed leases be conditioned upon subsequent Commission approval of the RUE before drilling commences.

**Proposed Lease Terms**

The royalty rate agreed to by PXP for oil and gas production from Tranquillon Ridge is defined by the chart in Exhibit F. This sliding scale royalty rate increases with increasing oil price and decreases with decreasing oil prices. At \$100/barrel, the royalty rate to the state would be 48% and the total revenue to the state if the full, optimistic estimate of 90 million barrels of oil equivalent is produced would be approximately \$4.2 billion over 14 years. At the current oil price of approximately \$34 per barrel, the royalty rate is 25% and the total revenue would be approximately \$750 million. This is the highest royalty rate structure in any oil and gas lease known to staff.

To help assist with current state fiscal problems, PXP has agreed to pre-pay

CALENDAR ITEM NO. 39 (CONT'D)

\$100 million of the royalty due the state when the first well is drilled. This also represents about a quarter of one percent of the anticipated state deficit of \$41.6 billion over the next 18 months.

Several provisions remain unresolved at the time of this staff report. First, agreement has not yet been reached on the amount for reimbursement of staff expenses for inspecting, monitoring and auditing the Tranquillon Ridge operations and leases. Second, staff has asked for a performance bond to cover two months of royalty. The latter would not be required until after the state had accumulated the royalty credit to offset the prepayment of \$100 million. Third, because of staff's experience with lessees manipulating the sales price of state minerals to reduce the royalty, staff is negotiating using a price based "floor" on a bench mark, such as percentage of West Texas Intermediate Crude. The benchmark would have an adjustment factor to reflect differences in oil quality. Final agreement has not been reached on the benchmark percentage yet. Finally, the applicant has yet to agree to inject muds and cuttings or dispose of them on land rather than dumping them from the platform under their NPDES permit. Dumping would be allowed in case of emergency, but only for a short period of time related to safety and only if PXP complies with the NPDES issued by the Regional Water Quality Control Board during that time.

Provisions agreed to include requiring the applicant to drill a minimum of three wells in the first two years of the lease, and rentals of \$100/acre until the leases produce (this equals around \$1 million for the total acreage) and, reducing to \$10/acre during production.

**Resolved Lease Terms**

Royalty (Price based sliding scale)  
Pre-paid Royalty Payment  
Lease Descriptions  
Drilling Term  
Rent  
Severance Tax Offset  
Measurement & Allocation  
Regulation & Inspection

**Unresolved Lease Terms**

Disposal of Muds, Cuttings and Produced Water  
Lease Management Fee  
Bond Amounts  
Oil Price "Floor"  
Constructive Transfer Clause  
Drill-string Requirement (requirement for time and economics for continued drilling)

**Best Interest of the State**

CALENDAR ITEM NO. 39 (CONT'D)

As indicated above, based on studies performed in 2008, staff believes that drainage of state gas and oil is occurring and that this requirement for issuing a new state lease has been met. Determining whether the proposed leases are in the **best interest of the state** as required by Section 2144, is a more difficult matter because there are good arguments on both sides of the issue. Below is a summary of the considerations known to staff. Ultimately, determining if this project is in the state's best interest is a policy decision for the Commission and it may consider factors other than those listed.

As discussed above, staff believes that the PXP-EDC agreement provides some basis for this determination only because of the land donations, and staff does not have the necessary details to verify the efficacy of the agreement in this regard. The end dates for federal lease production at Point Arguello and Point Pedernales cannot be assured. The GHG emission mitigation program does not appear to meet its goal of eliminating new emissions from production at Tranquillon Ridge. Even if the Commission adopts lease provisions to improve the GHG mitigation program, the result will not be a public benefit, but only the mitigation of a potential burden.

The new revenues that could come to the state from Tranquillon Ridge are potentially large. They will not provide a significant contribution to reducing the fiscal deficit, but they could play a part. In the past, legislation required that oil revenues be used primarily for the state's water program and higher education, and secondarily for the Veterans' Dependents Education Fund, Small Craft Harbors Revolving Fund, Beaches and Parks Fund, the State Soil Conservation Commission for soil conservation and flood control, Division of Forestry and other public priorities. Now the revenues go into the General Fund.

The drainage of oil and gas merits some consideration. The loss of water energy because of the Point Pedernales production is more significant. Annually, more state oil and gas is being lost to future potential production from loss of water energy, even though the oil and gas remains on state property, than from drainage of state oil and gas into federal lands. The drainage of this energy is not considered drainage by the statute but can be considered by the Commission when determining "best interest of the state."

The drainage provisions of the state's Coastal Sanctuary Act are intended to preserve state oil and gas resources in cases where they are being drained by wells in federal waters. However, pursuant to the Act and the Commission's own

CALENDAR ITEM NO. 39 (CONT'D)

administrative moratorium on new leases, none of this oil and gas is currently contemplated for recovery. The resolutions adopted by the Commission over the last eight years all are dedicated to the proposition that California is better off if oil and gas remains undeveloped. In adopting the resolutions, the Commission determined that environmental, tourism, recreational, economic, fishing, scenic and other values are threatened by offshore oil development and that these values were more important.

These resolutions are generally directed at opposing proposals for new federal leases. They hold up the state's refusal to issue new leases as an example that should be followed by the federal government in waters off of California. Recently, the potential for new federal leases off California has significantly increased. In the fall of 2008, President Bush, by executive order, lifted the presidential moratorium that had been in effect since 1990. Additionally, Congress has to date refused to re-enact its own moratorium that expired last year. On January 16, 2009, the Department of Interior announced plans to conduct lease sales in different parts of the country including three off of California – off Santa Barbara County, San Juan Capistrano and Mendocino County.

Based on the inconsistency of the Tranquillon Ridge projects with the Commission's previously enunciated policies on offshore oil and gas leasing and the impact a new lease would have on the potential for new federal leasing off of California, staff recommends that the Commission find that the proposed leases are not in the best interest of the state and are, therefore, inconsistent with Section 6244 of the Public Resources Code and disapprove the proposed leases.

Should the Commission determine that the proposed leases are in the best interest of the state, staff has prepared an alternate set of findings attached as Exhibit G.

**PERMIT STREAMLINING ACT DEADLINE:**

April 7, 2009

**EXHIBITS:**

- A-1 Land Description of the "north" lease
- A-2 Land Description of the "south" lease
- B. Site Map
- C. Proposed Lease Forms

CALENDAR ITEM NO. 39 (CONT'D)

- D. Memorandum of Agreement: Measurement & Allocation Plan
- E. Memorandum of Agreement: Inspection and Regulatory Protocols
- F. Royalty Rate Chart
- G. Alternative Commission Findings for Approving Leases to PXP
- G-1 CEQA Findings for Alternative Commission Findings
- G-2 CEQA Mitigation Monitoring Program for Alternative Commission Findings
- G-3 CEQA Statement of Overriding Considerations for Alternative Commission Findings
- G-4 Supplemental GHG Mitigation Measures
- H. Previous California State Lands Commission Resolutions
- I. Memo from PXP to Commission Staff
- J. Illustration of Relation Between Federal and State Resources Tranquillon Ridge Field

**RECOMMENDED ACTION:**

**IT IS RECOMMENDED THAT THE COMMISSION:**

FIND AND DETERMINE, PURSUANT TO CALIFORNIA PUBLIC RESOURCES CODE SECTION 6244, THAT THE PROPOSAL TO LEASE STATE-OWNED SUBMERGED LANDS IN THE CALIFORNIA COASTAL SANCTUARY IS NOT IN THE STATE'S BEST INTEREST; AND, DENY THE APPLICATION BY PLAINS EXPLORATION AND PRODUCTION COMPANY FOR THE LEASING OF STATE-OWNED SUBMERGED LANDS.

## EXHIBIT A-1

### **Land Description Northern Tract (Parcel One)**

A parcel of the submerged land situated in the bed of the Pacific Ocean, County of Santa Barbara, State of California, described as follows:

Beginning at a point having Universal Transverse Mercator NAD83, Zone 10 coordinates of 3834576.394 North and 714658.999 East, said point bears North 26°19'52" West, a distance of 9098.800 meters from Continuously Operating Reference Station (CORS) VNDP as shown on a record of survey filed in Book 171, Pages 24 and 25 of Record of Surveys in the Office of the County Recorder of said County;

Thence North 89°59'58" West, a distance of 3,776.458 meters to the State of California offshore boundary, also being the beginning of a non-tangent curve, concave easterly and having a radius of 5,556.000 meters, the radial center of which bears South 59°17'39" East;

Thence southerly along said offshore boundary and the arc of said curve, through a central angle of 41°44'32" and an arc distance of 4,047.764 meters to the beginning of a non-tangent curve, concave easterly and having a radius of 5,556.000 meters, the radial center of which bears South 67°26'13" East;

Thence southerly along the arc of said curve, through a central angle of 07°19'23" and an arc distance of 710.108 meters;

Thence leaving said offshore boundary South 89°59'57" East, a distance of 4,682.520 meters;

Thence North 00°00'01" East, a distance of 4,572.037 meters to the POINT OF BEGINNING.

Containing 2,009.009 hectares (4964.3 acres), more or less.

The bearings used herein are based on Universal Transverse Mercator NAD83 Zone 10, all distances are grid and in meters. To convert grid distances to ground multiply grid distances by 1.00015.

## **EXHIBIT A-2**

### **Land Description Southern Tract (Parcel Two)**

A parcel of the submerged land situated in the bed of the Pacific Ocean, County of Santa Barbara, State of California, described as follows:

Beginning at a point having Universal Transverse Mercator NAD83, Zone 10 coordinates of 3830004.357 North and 714658.977 East, said point bears North 48°24'14" West, a distance of 5396.681 meters from Continuously Operating Reference Station (CORS) VNDP as shown on a record of survey filed in Book 171, Pages 24 and 25 of Record of Surveys in the Office of the County Recorder of said County;

Thence North 89°59'57" West, a distance of 4682.520 meters to the State of California offshore boundary, also being the beginning of a non-tangent curve, concave east and having a radius of 5556.000 meters, the radial center of which bears South 74°45'35" East;

Thence southerly along said offshore boundary and the arc of said curve, through a central angle of 15°11'08" and an arc distance of 1,472.550 meters to the beginning of a non-tangent curve, concave east and having a radius of 5,556.000 meters, the radial center of which bears South 89°50'25" East;

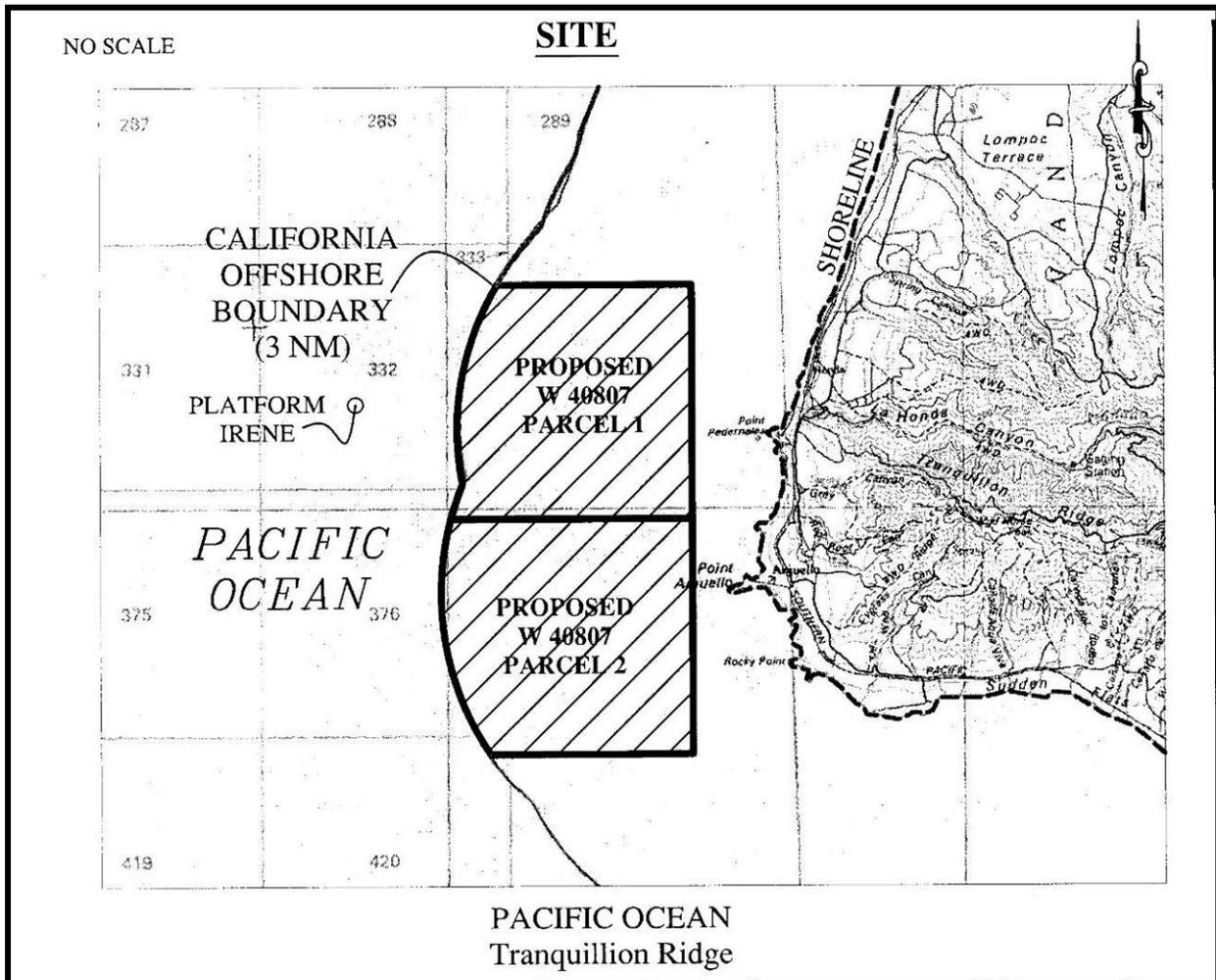
Thence southerly along the arc of said curve, through a central angle of 34°14'54" and an arc distance of 3,321.084 meters;

Thence leaving said offshore boundary North 89°48'59" East, a distance of 3,923.232 meters;

Thence North 00°00'01" East, a distance of 4,572.036 meters to the POINT OF BEGINNING.

Containing 2,127.774 hectares (5260.9 acres), more or less.

The bearings used herein are based on Universal Transverse Mercator NAD83 Zone 10, all distances are grid and in meters. To convert grid distances to ground multiply grid distances by 1.00015.



**Exhibit B**  
W 40807  
PLAINS EXPLORATION & PRODUCTION CO. (PXP)  
OFFSHORE OIL & GAS LEASE  
SANTA BARBARA COUNTY



This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

**EXHIBIT C**

W 40807

To be added

**MEMORANDUM OF AGREEMENT**

**ON**

**MEASUREMENT AND ALLOCATION WITH SURFACE  
COMMINGLING OF OIL AND GAS PRODUCTION FROM THE  
POINT PEDERNALES UNIT, THE TRANQUILLON RIDGE UNIT  
AND CALIFORNIA STATE LANDS TRANQUILLON RIDGE  
AREA**

**BETWEEN**

**THE MINERALS MANAGEMENT SERVICE,**

**THE STATE OF CALIFORNIA,**

**AND**

**PLAINS EXPLORATION & PRODUCTION COMPANY**

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WITNESSETH:

**WHEREAS**, Platform Irene is situated in the outer continental shelf on OCS – P 0441,

**WHEREAS**, Oil and gas production began at Platform Irene from the federal Point Pedernales Unit (hereinafter “Pt Ped Unit”) in 1987,

**WHEREAS**, Well A-28 was drilled from Platform Irene into the a new area called the Tranquillon Ridge field, and the federal Tranquillon Ridge Unit (hereinafter “T-Ridge Unit”) was created in 1997 to provide for the production of oil and gas from this new area,

**WHEREAS**, A Measurement and Allocation plan was generated by the operator and approved by the Minerals Management Service to account for the production from these two units from Platform Irene,

**WHEREAS**, The development and production of oil and gas reserves related to the state tidelands from the California State Lands Tranquillon Ridge Area (hereinafter “Tidelands”) will be conducted from Platform Irene. This Tidelands development fits within the existing framework of the facility infrastructure at Platform Irene and the Lompoc Oil and Gas Plant (hereinafter “LOGP”).

**WHEREAS**, The parties now wish to generate a revised measurement and allocation procedure to account for the development of the Tidelands,

**WHEREAS**, Upon production of oil and gas from the Tidelands, this Memorandum of Agreement (“hereinafter “MOA”) will supersede the previous Measurement and Allocation Plan,

**NOW THEREFORE**, in consideration of the premises and promises contained herein, the California State Lands Commission; Minerals Management Service, and Plains Exploration & Production Company do hereby agree as follows:

## **I. PARTIES**

This MOA is entered into effective the date provided below by and among the Minerals Management Service, the California State Lands Commission, and Plains Exploration & Production Company.

## **II. PURPOSE OF THE AGREEMENT**

This MOA has been generated in order to comply with the requirements of 30 CFR, Part 250.1100 & 250.1200, for Pt Ped Unit and T-Ridge Unit along with California Public Resources Code, Division 6 for Tidelands. It has been developed to replace that certain Measurement and Allocation Plan that covered only the federal T-Ridge Unit and Pt Ped Unit prior to the expansion into the Tidelands.

## **III. DEFINITIONS**

**“Condensate”** - Any liquid hydrocarbon recovered from the vessels at the inlet to the LOGP and metered through meter 2469.

**“BP-Mix” or “LPG”** A mixture of propanes and butanes extracted in the gas processing unit at LOGP and delivered for sale via the truck loading rack for BP-Mix,

**“Natural Gasoline” or “Gasoline”** – Liquid hydrocarbons typically in the range of pentane and heavier recovered during processing of the gas stream at LOGP and delivered to the truck loading racks for natural gasoline or metered through meter 2468,

**“Natural Gas Liquids”** – Liquid hydrocarbons typically in the range of propane and heavier recovered during processing of the gas stream at LOGP and delivered to the truck loading racks for either Natural Gasoline or BP Mix or metered through 2468

**“Pt Ped”** – The lands, wells and hydrocarbons collectively associated with the Pt Ped Unit and the T-Ridge Unit.

**“Theoretical Tidelands Oil Production” or “Theo Tidelands”** - The sum of the Tidelands meter readings multiplied by the Tidelands oil cut determined by the Tidelands OWD probe and corrected for temperature.

**“Theoretical Pt Ped Oil Production” or “Theo Pt Ped”**- The sum of the Pt Ped meter readings multiplied by the Pt Ped oil cut determined by the Pt Ped OWD probe and corrected for temperature. This includes volumes from both Pt Ped Unit and T-Ridge Unit.

**“Theoretical Platform Irene Total Oil production” or “Theo Irene”** - The sum of the Theoretical Tidelands Oil Production and the Theoretical Pt Ped Oil Production.

**“Theoretical Tidelands Gas”** All Tidelands gas separated on Platform Irene, as adjusted which is metered with FE-200.

**“Theoretical Pt Ped Gas”** All Pt Ped gas separated on Platform Irene, which is metered with FE-221. This includes volumes from both Pt Ped Unit and T-Ridge Unit.

## **IV. AGREEMENT**

### **1.0 INTRODUCTION**

Oil and gas production shall be prorated under a two tiered allocation. The first tier being an allocation to Tidelands and Pt Ped. The second tier being from the Tidelands or Pt Ped to their respective wells. Each allocation is more fully described below.

### **2.0 OIL METERING**

#### **2.1 PROCESS DESCRIPTION**

Chart 4.1 in Section 4 is a block flow diagram showing the overall gas and liquid flows for Platform Irene and LOGP. The gas which is not in solution in the oil is separated from the oil on Platform Irene. The oil produced from the Tidelands wells will be segregated from the oil produced from the existing Pt Ped production and metered by turbine meters and adjusted for sediments and water (hereinafter "S&W") on Platform Irene. Gravity samples will also be taken before commingling so that each area can receive the corresponding price adjustment for the purchaser's gravity scale. Initially, two of the test separators will be dedicated to the Tidelands wells. One of the test separators will be used as a gross separator. Once the production exceeds the capacity of the test separator which is being used as a gross separator, excess volume will be delivered to the three phase separator dedicated to the Tidelands wells.

All Tidelands oil produced will be combined before entering a three phase separator then metered (FT-250 & FT-251) separately and adjusted for temperature and S&W (TA-250 & OWD-250) before being commingled with Pt Ped production.

The Pt Ped production will also be delivered through a three phase separator. Oil produced will be combined before entering a three phase separator then metered (FT-220 & FT-221) and adjusted for temperature and S&W (TA-220 & OWD-220) before being commingled with the Tidelands production. The oil production is then discharged into the shipping tank that moves through a common pipeline which ships the oil

emulsion to the onshore LOGP facility. Once the oil emulsion is onshore, the oil is separated from remaining water and any gas which also evolves from the process is recovered via the vapor recovery system.

Gasoline and condensate extracted from the process stream at LOGP are metered as they leave LOGP and may be blended with the dry oil prior to entering Lease Automatic Custody Transfer unit (hereinafter "LACT") A and/or B (meters 556 and 557 respectively). The dry oil plus these additions is metered through LACT A and/or B at LOGP prior to entering the ConocoPhillips pipeline system. Oil may also be sent to storage on a limited basis.

The actual Pt. Ped and Tidelands oil production is determined by allocating the total monthly shipments from LACT A and/or B at LOGP less blended condensate (meter **2469**) and blended natural gasoline (meter **2468**) and adjusted for changes in inventory (plus ending inventory, minus beginning inventory as described in 1.2.C below) back to the two production areas based on the theoretical net oil volumes from Platform Irene.

Once the Pt. Ped and Tidelands share of the actual oil is determined, the production will then be allocated to each well based on well test data as described below. Generally, every well is tested at least twice per month for a period of 24 hours. When a well is not in test, the fluid flows through a gross separator, one designated for Pt Ped production and one designated for Tidelands production. The individual theoretical well production is determined by multiplying the applicable well test production rate per day by the corresponding days the individual well was open to production [well test production rate x days on production = individual well theoretical production]. The total Tidelands or Pt Ped actual oil production will be prorated to the producing wells by multiplying the total Tidelands or Pt Ped production by the result of dividing the individual well theoretical production by sum of all theoretical well production from the corresponding area which equals the actual individual well production [total Tidelands or Pt Ped production x (individual well theoretical production / sum of all area theoretical well production) = actual individual well production].

## 2.2 METERING

Oil metering and allocation of production described by the following (Well A-23 is used for sample calculations) is to demonstrate the well level allocation of the volume from Section 2.1. Calculation differences between the formulas below and Exhibit A are due to rounding.

### A. OIL/CONDENSATE ALLOCATION BY COMPLETION REPORT

Exhibit "A" is the allocation report which depicts each well's proportionate share of production/sales based on the metering and allocation method described herein for oil and condensate.

### B. METERING METHOD

#### 1. Oil Sales – Column 5 Exhibit A

Oil Sales is measured by LOGP LACT meters (Exhibit E). Commingled in the LACT meters is condensate blended through meter **2469** (Exhibit C) and natural gasoline blended through meter **2468** (Exhibit D). Condensate is deducted from LACT sales and shown as Condensate on Exhibit A (Row 8). Natural gasoline is deducted from LACT sales and processed on the LOGP Facility Report with the Natural Gas Liquids.

#### 2. Condensate – Meter **2469**, Exhibit C

Corresponds to "PRODUCTION VOLUME" column 4 of Exhibit A – "PRODUCT TOTALS" as noted on page 2, Row 8 for each well.

#### 3. Blended Natural Gasoline - Meter **2468**, Exhibit D

Corresponds to Column 13 of Chart 4.10, LOGP Gas Plant Statement. Included here only as information since the metered volume is used to adjust the LACT for actual oil sales.

#### 4. Beginning Inventory – Column 3 Exhibit A

Ending Inventory includes tank storage and pipeline fill from prior month, similar to Exhibit F.

#### 5. Ending Inventory – Column 6 Exhibit A

Ending Inventory includes tank storage and pipeline fill (Exhibit F).

**C. ALLOCATION METHOD – SEE EXHIBIT A**

## 1. “WELL THEORETICAL” production – Column 7

Theoretical production is based on a series of well tests conducted for each well (Exhibit B) multiplied by the corresponding producing days (Exhibit A - Column 2) to determine each wells theoretical production by product.

## 2. “BEGINNING INVENTORY” – Column 3

Beginning inventory equals previous month’s ending inventory.

## 3. “PRODUCTION VOLUME” calculation – Column 4

Total facility ending inventory plus total facility oil sales minus total facility beginning inventory equals total facility production which is then allocated to the Tidelands and Pt Ped in accordance with Section 1.1.

$$\underline{\text{Ending}} + \underline{\text{Sales}} - \underline{\text{Beginning}} = \underline{\text{Total Facility Production}}$$

$$\text{Oil } 7801.30 + 248727.50 - 20350.02 = 236178.78$$

$$\text{Condensate } 0.00 + 2224.00 - 0.00 = 2224.00$$

## 4. Allocation of Total Production to Production Areas

The Total Facility Production from Step 3 is multiplied by the result of dividing the Theoretical Tidelands Oil Production and/or Theoretical Pt Ped Oil Production equals the individual Production Area actual production (i.e. tier 1 allocation).

$$\underline{\text{Total Prod}} \times (\text{Theo } \underline{\text{Pt Ped}} / \underline{\text{Theo Irene}}) = \underline{\text{Pt Ped Prod Vol}}$$

$$236178.78 \times (215114.25 / 215114.25) = 236178.78$$

$$\underline{\text{Total Prod}} \times (\text{Theo } \underline{\text{Tidelands}} / \text{Theo Irene}) = \underline{\text{Tidelands Prod Vol}}$$

$$236178.78 \times (0.00 / 215114.25) = 0.00$$

## 5. Allocation of Individual Well Actual Production – Column 4

Total Tidelands or Pt Ped production from Step 4 multiplied by the result of dividing the individual well theoretical production by the sum of all theoretical well production from the corresponding area equals the individual well actual production (i.e. tier 2 allocation). (Data for A-23 used as an example)

$$\underline{\text{Pt Ped Prod Vol}} \times (\text{Theo } \underline{\text{Well}} / \underline{\text{Theo Pt Ped Prod}}) = \underline{\text{Well Prod}}$$

$$236178.78 \times (23870.36 / 215114.25) = 26205.49$$

## 6. Allocation of Other (Condensate) – Row 8

Condensate is allocated based on theoretical gas production. Total facility Condensate multiplied by the result of dividing the individual well theoretical gas production by the sum of all theoretical well gas production equals individual well Condensate. (data for A-23 used as an example)

$$\frac{\text{Total Cond} \times (\text{Theo Well Gas} / \text{Theo Gas})}{2224} = \text{Well Cond}$$

$$2224 \times (12592.75 / 210541.16) = 133.02$$

## 7. Individual Well Oil/Condensate Sales Calculation – Column 7

Total facility oil sales less beginning inventory, prorated to each well based on current month well oil production from above, divided by total facility oil production for the month plus beginning well inventory (if any). (data for A-23 used as an example)

$$\frac{(\text{Total Facility Oil Sales} - \text{Beg Inv}) \times (\text{Well Oil Prod} / \text{Total Fac Oil Prod})}{\text{Oil}} = \text{Sub-Total}$$

$$\text{Oil } (248727.50 - 20350.02) \times (26205.46 / 236178.78) = 25339.79$$

$$\text{Sub-Total} + \text{Beg Inv} = \text{Well Oil Sales}$$

$$\text{Oil } 25339.79 + 2293.10 = 27632.89$$

$$\frac{(\text{Total Fac Cond Sales} - \text{Beg Inv}) \times (\text{Well Cond Prod} / \text{Total Fac Cond Prod})}{\text{Condensate}} = \text{Well Sales}$$

$$\text{Condensate } (2224.00 - 0.00) \times (133.02 / 2224.00) = 133.02$$

## 8. Ending Inventory Calculation – Column 8

Beginning oil inventory plus oil production minus oil sales equals ending inventory. (data for A-23 used as an example)

$$\text{Beg Inv} + \text{Oil Prod} - \text{Oil Sales} = \text{End Inv}$$

$$2293.10 + 26205.46 - 27632.89 = 865.67$$

## 9. Water Production – Row 9

Water production is a series of well tests for each well to determine well estimated water production.

## 10. Days Produced – Column 2

Days produced is determined by tracking the downtime of each well to arrive at the number of days the well is open for production.

### 3.0 GAS METERING

#### 3.1 PROCESS DESCRIPTION

Chart 4.1 in Section 4 is a block flow diagram showing the overall gas and liquid flows for Platform Irene and the LOGP.

The oil and gas production is allocated for royalty purposes as the production is commingled from both Pt Ped and Tidelands offshore. Each of the respective gas streams for Pt Ped gas and Tidelands gas are kept separate and a gas analysis is taken of each before commingling for transporting to LOGP. The gas is analyzed using gas chromatography by a state certified lab to determine BTU content and natural gas liquid content for each source of gas delivered to LOGP. This is used to determine the theoretical MMBTU and theoretical natural gas liquid products used for allocation purposes. Theoretical Pt Ped Gas and Theoretical Tidelands Gas, are adjusted each month by the gas lift gas volume so as to reflect net theoretical gas production. Gas lift gas is assumed to be the first gas recovered from gas lift wells and is therefore deducted from the Theoretical Pt Ped Gas and Theoretical Tidelands Gas. Meters FE-101GL ("Pt Ped Gas Lift Gas") and FE-201GL ("Tidelands Gas Lift Gas") will meter the volume of gas sent into the respective areas of production and will be subtracted from Theoretical Pt Ped Gas and Theoretical Tidelands Gas, respectively. At LOGP, the crude oil is reheated, dewatered and shipped to ConocoPhillips Santa Maria Refinery. Gas released from the crude oil during processing at LOGP is captured in the vapor recovery system and combined (via meter **2452**) with gas from Platform Irene (via meter **2453**). This mixture passes through meter **2450** and mixes with gas from Lompoc Field (from meter **2675**) along with gas recovered from injection ( Purisima 73, meter 2451) before treatment in the gas processing unit.

The gas processing unit removes heavy hydrocarbons (C3+) and waste products (water, H<sub>2</sub>S, and CO<sub>2</sub>) from the gas to be sold. Treated gas is normally compressed and sold into the SOCAL Pipeline (via meter **5811**).

During maintenance shutdowns or whenever the sales gas is “off specification,” the gas is injected into the Lompoc Field at Purisima well P-73 (via meter **2462**). Gas from Platform Irene that is injected onshore, is metered, allocated and royalties are paid on the volume injected based on the weighted average sales price per Mcf for the month of injection. Gas recovered from storage (via meter 2451) is non-royalty bearing since the royalty was paid as the gas was injected.

Natural Gas Liquids condense in the gas plant. Natural Gasoline is usually blended into the dry crude oil (via meter **2468**) using a metering pump as discussed in Section 2. The Natural Gasoline may also be sold by loading it onto tank trucks (via meter **2470**). This generally occurs during shut-downs of the refinery and/or the oil pipeline The Natural Gasoline produced can vary from 0 to 11,000 gallons per day (“gpd”).

The BP-Mix that is removed from the gas stream at the gas processing unit is sold and transported by truck (via meter **2471**). BP-Mix production will vary from 0 to 18,000 gpd.

Each well that is produced by gas lift has an individual meter for the gas volume injected. The gas production from the test separator (when a well is in test), is adjusted for the gas injected volume to arrive at the well’s theoretical produced gas. For wells that are produced using electric submersible pumps, the gas which is metered at the test separator is the theoretical produced gas for the well.

### **3.2 METERING**

The LOGP Facility is equipped with meters for all major gas and liquid streams. Turbine, mass flow, diaphragm, rotary vane, and orifice meters are used, depending on the service. All natural gas liquid flows are measured by meters. The measurement methodology for BP-Mix sales is included in Section 5.

A list of meters and their calibration frequencies are shown in Chart 4.2 (see Section 4). Basic meter data is summarized in Chart 4.6.

### **3.3 CALIBRATION**

The meters will be calibrated as indicated on Chart 4.2, with frequencies ranging between twice a month to annually. The MMS and State will be notified before calibration where indicated in Chart 4.2. The MMS and State shall also be notified concerning the calibration of the SOCAL meter. A yearly calibration schedule is shown on Chart 4.3.

### **3.4 ANALYSES**

The process stream analytical schedule is given in Chart 4.4. Notifications are to be made according to the information shown in this chart.

### **3.5 ALLOCATION**

Allocations are calculated using the attached spreadsheet, Chart 4.10. Calculation methodology is explained on Chart 4.11. The Gas Injection Imbalance Statement is included herewith as Chart 4.12. Tidelands and Pt Ped royalty allocation basis is outlined on Chart 4.13.

### **3.6 FLARE GAS**

Gas sent to flare on Platform Irene will be identified as to the source (ie: Tidelands, Pt Ped, Combined) and reported on the Daily Report. Gas from a vessel or well prior to FE-221 will be reported as Pt Ped gas, gas prior to FE-200 will be reported as Tidelands gas, and gas flared after FE-221 and FE-200 will be reported as Combined flare. Combined flare gas will be allocated in the same manner as sold gas, prorated based on FE-221 and FE-200. The Daily Report volumes will be summarized each month for allocation and reporting.

### **3.7 GAS LIFT GAS**

Gas used for gas lift will be metered before injection via meters FE-101GL ("Pt Ped Gas Lift Gas") and FE-201GL ("Tidelands Gas Lift Gas"). This gas will be recovered at the separators on Platform Irene. Gas Lift Gas is treated as a closed loop and assumed to be the first gas recovered from wells on

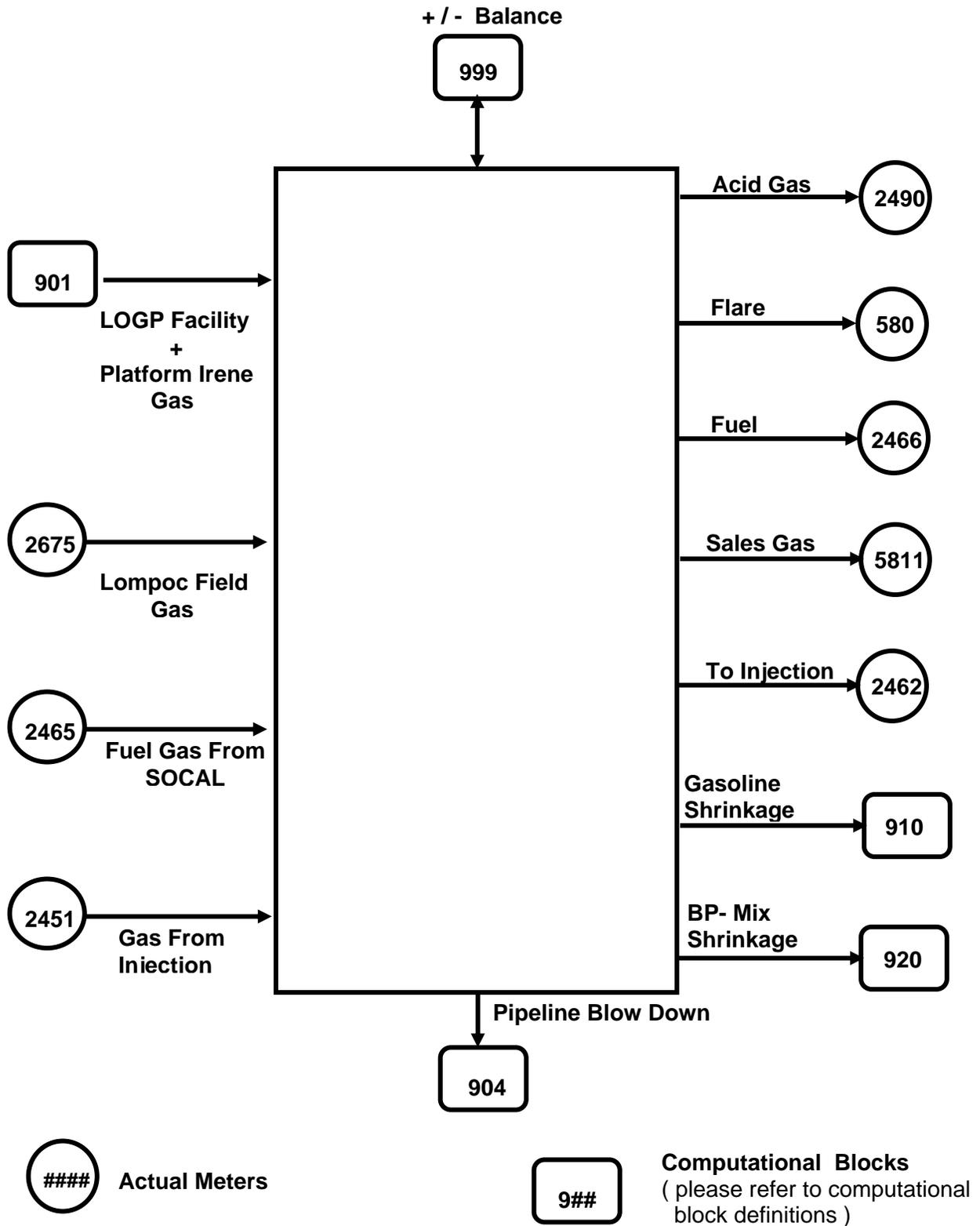
Gas Lift. Metered volumes at FE-221 and FE-200 are adjusted for Gas Lift volumes along with gas metered during well test of wells on Gas Lift.

### **3.8 IRENE GAS INJECTION**

Gas injected at platform Irene will be allocated in the same manner as gas sold, prorated based on FE-221 and FE-200. No royalty will be calculated on Pt Ped gas that is injected since it still remains within the boundaries of Pt Ped except as noted below. Royalty will be calculated only on Tidelands gas that is injected at Irene. Gas injection at platform Irene is typically for operational upset conditions. The operator will notify the MMS District Office when gas is injected similar to the flare notice. Should it be necessary to inject on a more frequent basis the operator will contact the MMS to obtain a Gas Storage Agreement and royalties will be paid to the MMS on gas injected under the Gas Storage Agreement.

## 4.0 CHARTS

LOGP - Gas Plant Balance



Computational Block Definitions:

1. Computational Block 901 Irene + Facility Gas Computation:  

$$M \#901 = M \#2450 + M \#2464 - M \#4292 - M \#4200$$
2. Computational Block 902 Total Combined Inlet Gas Computation:  

$$M \#902 = M \#901 + M \#2675 + M \#2451$$
3. Computational Block 903 Total Combined Fuel Gas Computation:  

$$M \# 903 = M \# 2466 + M \# 2465$$
4. Computational Block 904 Pipeline Blow down Computation:  

$$M \# 904 = \text{Computed from table B} - 1.$$
5. Computational Block 910 Gasoline Shrinkage Computation:  

$$M \# 910 = ( M \# 2470 + M \# 2468 + \text{Storage Inventory difference} ) X ( \text{Flash volume} )$$
  - Flash volume is determined by chromatograph in cu. ft. / gal.
  - M # 910 results are computed in Mcf.
6. Computational Block 920 BP-Mix Shrinkage Computation:  

$$M \# 920 = ( M \# 2471 + \text{Storage Inventory difference} ) X ( \text{Flash volume} )$$
  - Flash volume is determined by chromatograph in cu. ft. / gal.
  - M # 920 results are computed in Mcf.
7. Computational Block 999 Gas Plant Balance Computation:  
**Plant Outlets are subtracted from Plant Inlets as follows:**  

$$M \# 999 = ( M \# 901 + M \# 2675 + M \# 2451 ) - ( M \# 2490 + M \# 580 + M \# 2466 + M \# 5811 + M \# 2462 + M \# 910 + M \# 920 )$$

Imbalance causes and consequences

There are many causes of gas plant imbalances. Some of these include:

1. Orifice meter accuracy problems which have an inaccuracy of +/- 1% per pen.
2. Inventory gauging problems.
3. Unmeasured BP-Mix recycled Truck vapor returns.
4. Unmeasured recycled Gas Plant vapors.
5. Water shrinkage.

If gas plant imbalance exceeds 10%, meter calibration frequency should be increased.

904

**Computational Block 904: Pipeline Blowdown**

If off spec gas enters the sales gas pipeline, the line must be blown down. The blow down volume is determined by the following table. Table values are computed from the relationship:  $P_1V_1 = P_2V_2$ , and the pipeline dimensions of 7.39 miles of 12" pipe.

**Table B – 1.**

<b>Pipeline Pressure ( PSIG )</b>	<b>Pipeline Capacity ( MSCFD )</b>
900	1907.18
875	1855.05
850	1802.93
825	1750.80
800	1698.68
775	1646.55
750	1594.43
725	1542.30
700	1490.17
675	1438.05
650	1385.92
625	1333.80
600	1281.67
575	1229.54
550	1177.42
525	1125.29
500	1073.17
475	1021.04
450	968.92
425	916.79
400	864.66
375	812.54
350	760.41
325	708.29
300	656.16
275	604.03
250	551.91
225	499.78
200	447.66
175	395.53
150	343.41
125	291.28
100	239.15
75	187.03
50	134.90
25	82.78
0	30.65

Locate the initial and final pressures in the table at the left. Subtract the final volume from the initial volume to find the blow down volume.

**Example:**

Initial Pressure = 700 psig

Final Pressure = 25 psig

$$( 1490.17 - 82.78 ) = 1407.39$$

@ 700 psig    @ 25 psig

**NOT PART OF DOCUMENT**

Note:

For **page 10 A-D** see Chart 4.1 Metering Flow Diagram under separate PDF file from Autocad.

## NOT PART OF DOCUMENT

Note:

For **page 14** see 'Gas Plant Balance Computation' saved under separate file.

For **page 15** see Chart 4.2 Meter Calibration Frequency Table under separate file.

For **page 16** see Chart 4.3 Annual Schedule under separate file.

For **page 17** see 'Gas Gravity & Coefficient Update Chart' saved under separate file.

All above pages contained in file:

- Pt. Ped & LOGP Metering Plan Charts (excel file)

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**Blank for formatting**

**BLANK SCHEDULE FORMS**

Included herein are 8½-by-11 blank meter calibration schedule originals.

**NOT PART OF DOCUMENT**

4-21-05

Note:

For **page 19** see Chart 4.3 Annual Schedule (blanks) under separate file.

File name is:

- Pt. Ped & LOGP Metering Plan Charts (excel file)

## CHART 4.4

## CHROMATOGRAPHY FREQUENCY

SAMPLE POINT	PERIOD
Lompoc Compressor Suction Tidelands Sales Gas at Irene Pt Ped Sales Gas at Irene	Quarterly Quarterly (1) Quarterly (1)
meter 2450 meter 2451 meter 2452 meter 2453 meter 2461 meter 2462 meter 2468 meter 2675 meter A28-1 meter A28-2	Monthly Monthly Monthly Monthly Monthly Monthly Monthly Monthly Monthly Monthly

(1) Sample monthly during initial start-up of Tidelands

**NOT PART OF DOCUMENT**

4-21-05

Note:

For **page 21** see Chart 4.5 FMP Legal Locations & Meter Counts under separate file.

For **page 22** see Chart 4.6 Basic Meter Data under separate file.

All above pages contained in file:

- Pt. Ped & LOGP Metering Plan Charts (excel file)

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**4.7 METER PROVERS**

Meter proving is currently done by either Century Calibrating Company or Calib/Tech. Basic data on the prover instruments used by these contractors is available for review at PXP's Orcutt office during normal business hours.

## NOT PART OF DOCUMENT

4-21-05

### Note:

For **page 24** see Chart 4.8 Location Plat under separate file.  
LOGP Meter Locations.pdf

For **page 25** see Chart 4.9 Meter & Tank Status under separate file.

For **pages 26 - 31** see Chart 4.10 LOGP – Gas Plant Statement under separate file.

For **page 32** see Chart 4.11 Allocation Methodology under separate file.

For **page 33** see Chart 4.12 LOGP – Gas Plant Gas Injection Imbalance Statement under separate file.

For **page 34** see Chart 4.13 under separate file.

All above pages (except page 23) contained in file:

- Pt. Ped & LOGP Metering Plan Charts (excel file)

## 4.14 Oil Allocation Methodology & Basic Royalty Valuation

1. Pt Ped and Tidelands Oil Production Calculation
  - a. Gross Oil Sales to Tidelands & Pt Ped areas: volume from FT-220 and FT-221 for Pt Ped; volume from FT-250 and FT-251 for Tidelands  
  
Times
  - b. Oil percentage net of S&W from OWD-220 for Pt Ped; Oil percentage net of S&W from OWD-250 for Tidelands  
  
Adjusted for
  - c. Temperature correction factor: TA-220 for Pt Ped; TA-250 for Tidelands  
  
Equals
  - d. Theoretical Tidelands Oil Production volume for Tidelands and Theoretical Pt Ped Oil Production for Pt Ped areas: FT-220 and FT-221 adjusted for PT PED; FT-250 and FT-251 adjusted for Tidelands
  
2. Net Oil Sales Calculation
  - a. Current monthly LACT sales: Sum of LACT A&B adjusted for temperature, gravity and S&W to arrive at Net Total Sales volume  
  
Minus
  - b. Current blended gasoline {C5+} sales: Meter 2468  
  
Minus
  - c. Current blended Condensate sales: Meter 2469  
  
Equals
  - d. Net Oil Sales volume
  
3. Total Oil Production
  - a. Ending Inventory (Exhibit F)  
  
Minus
  - b. Beginning Inventory (Exhibit F)  
  
Plus
  - c. Net Oil Sales (from 2.d. above)  
  
Equals
  - d. Total Oil Production  
  
Prorated based on

- e. Theoretical Tidelands Oil Production and Theoretical Pt Ped Oil Production (from 1.d. above) plus any other metered oil delivers (net of S&W and adjusted for temperature)  
Equals
  - f. Actual Oil Production for each area, respectively
4. Oil Sales: calculated on First-in-First-out basis (Beginning Inventory for all areas is deemed to be sold first)
- a. Net Oil Sales volume  
Minus
  - b. Beginning Inventory for each area respectively  
Equals
  - c. Oil Sales from Production  
Prorated based on
  - d. Oil Production from each area, respectively (3.f.)  
Equals
  - e. Current Produced Oil Sold for each area, respectively  
Plus
  - f. Beginning Inventory for each area, respectively  
Equals
  - g. Total Current Month Sales for each area, respectively  
Times
  - h. Current month sales price adjusted for oil gravity prior to C5+ blending  
Equals
  - i. Current month Oil Sales Value for each area, respectively  
Times
  - j. The royalty interest for each area, respectively  
Equals
  - k. Current month Oil Royalty Value for each area, respectively

## **5.0 BP-MIX SALES MEASUREMENT METHODOLOGY**

### **TRUCK SHIPMENT OF BP-MIX**

Trucks are loaded through a Daniel Instruments hydrocarbon liquid loading system (hereinafter “Danload System”). This system measures the volume of the liquid loaded in the truck and records the volume in gallons. The DanLoad System is temperature corrected. Meters **2470** and **2471** are used as inputs to the DanLoad System.

## **6.0 SULFUR MEASUREMENT METHODOLOGY**

### **TRUCK SHIPMENT OF SULFUR**

The sulfur produced from the gas plant is a waste product of very low quality. Of the total volume shipped, 80% is solids and 20% is water. Of the 80% solids, 80% is sulfur and the rest is other impurities. The solids/water cake is sold on a weight basis. The Trucks are weighed at State of California Certified public scales and the payment is based on the difference between truck weight empty and truck weight full. The value received for sulfur sales is significantly less than the costs to recover and deliver due to the low quality. The value received is recorded as a credit to processing expense since the removal and transportation costs are greater than the value due to the sulfur’s low quality.

IN WITNESS WHEREOF, The State of California, State Lands Commission; the Department of the Interior, Minerals Management Service; and Plains Exploration & Production Company have caused this MOA to be executed as of the dates set forth next to their respective signatures below, but effective for all purposes on the date of production of oil and gas from state Tidelands.

By: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

(State of California)

By: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

(Minerals Management Service)

By: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

(Plains Exploration & Production Company)

**EXHIBIT E**

W 40807

**MEMORANDUM OF AGREEMENT**

**ON**

**REGULATORY AND INSPECTION PROTOCOLS**

**BETWEEN**

**THE MINERALS MANAGEMENT SERVICE,**

**THE STATE OF CALIFORNIA,  
STATE LANDS COMMISSION**

**AND**

**THE STATE OF CALIFORNIA,  
DEPARTMENT OF CONSERVATION,  
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES**

THIS MEMORANDUM OF UNDERSTANDING (“MOU”) is hereby executed by and among the California State Lands Commission (“CSLC”); the California Division of Oil, Gas, and Geothermal Resources (“DOGGR”); and the Minerals Management Service (“MMS”) and is made effective as of the \_\_\_\_\_ (the “Effective Date”).

### **RECITALS**

WHEREAS, CSLC, DOGGR and MMS desire to outline a framework for a viable working relationship among CSLC, DOGGR and MMS for the enforcement of their respective regulations and inspection programs in a manner that will provide the highest level of protection available for the geologic and engineering conditions present at the site for the development of certain state acreage within the Tranquillon Ridge Field from Platform Irene;

WHEREAS, Platform Irene is physically located within federal waters and as such, comes under the jurisdiction and regulations of the MMS; and

WHEREAS, the parties to this MOU desire to establish that during the development and production of the Tranquillon Ridge Field when such development and production activities occurs on lands to be leased by the State of California that certain aspects of the CSLC and DOGGR regulations may also apply to Platform Irene.

## **UNDERSTANDINGS AND STIPULATIONS**

NOW THEREFORE, CSLC, DOGGR and MMS agree to the greatest extent practicable to the exercise the enforcement of the applicable rules and regulations and to act in good faith when engaged in dealings with each agency and agree to coordinate all platform testing and equipment inspections that may be required by CSLC, DOGGR and MMS.

1.     Contacts and Documents.     Within 30 days following the issuance of the State lease(s), each agency will establish a primary contact and member of a joint committee to discuss and resolve specific regulatory compliance and operations related issues. Each party shall provide copies of documents requested by any party concerning such proposed plans.
  
2.     Regulatory Protocols.     All operations on Platform Irene associated with the development and production of the Tranquillon Ridge Field shall be in compliance with all applicable Federal and State requirements, including but not limited to: 30 Code of Federal Regulations (CFR) 250; 30 CFR 254; California Code of Regulations (CCR) Title 2, Division 3, Chapter 1, Article 3; and CCR Title 14, Division 2, Chapter 4, Subchapter 1.1.
  
3.     Inspection Protocols.     The MMS, SLC, and DOGGR will coordinate inspection activities to optimize the use of agency resources and to minimize any duplication by the agencies

4. Annual Performance Reviews. The MMS, CSLC, and DOGGR will coordinate annual performance reviews, seeking to ensure all three agencies are present to discuss with the operator of the full spectrum of performance-related issues.

5. Notices. All parties agree that any notices sent pursuant to this MOU from any party to any other party may be sent via certified; regular mail or facsimile to the particular parties at the addresses as listed hereinbelow.

Minerals Management Service  
770 Paseo Camarillo, Camarillo CA 93010  
Attn: Chief, Office of Reservoir Evaluation and Production  
Phone:  
Facsimile:  
Email:

California State Lands Commission  
200 Oceangate, 12<sup>th</sup> Floor  
Long Beach, CA 90802  
Attn: Chief, Mineral Resources Management Division  
Phone:  
Facsimile:  
Email:

California Division of Oil, Gas, and Geothermal  
\_\_\_\_\_  
\_\_\_\_\_, CA \_\_\_\_\_

Attn: \_\_\_\_\_  
Phone:  
Facsimile:  
Email:

6. Amendments. Any Amendments to this MOU shall be executed in writing by all parties to this MOU and filed of record with the agencies, in order to take effect.

**IN WITNESS WHEREOF**, California State Lands Commission; the California Division of Oil, Gas, and Geothermal Resources and the Minerals Management Service has caused this MOU to be executed as of the date of hereof, but effective as of the Effective Date.

Minerals Management Service

Dated: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

State of California  
California State Lands Commission

Dated: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

California Division of Oil, Gas and Geothermal  
Resources

Dated: \_\_\_\_\_

By: \_\_\_\_\_

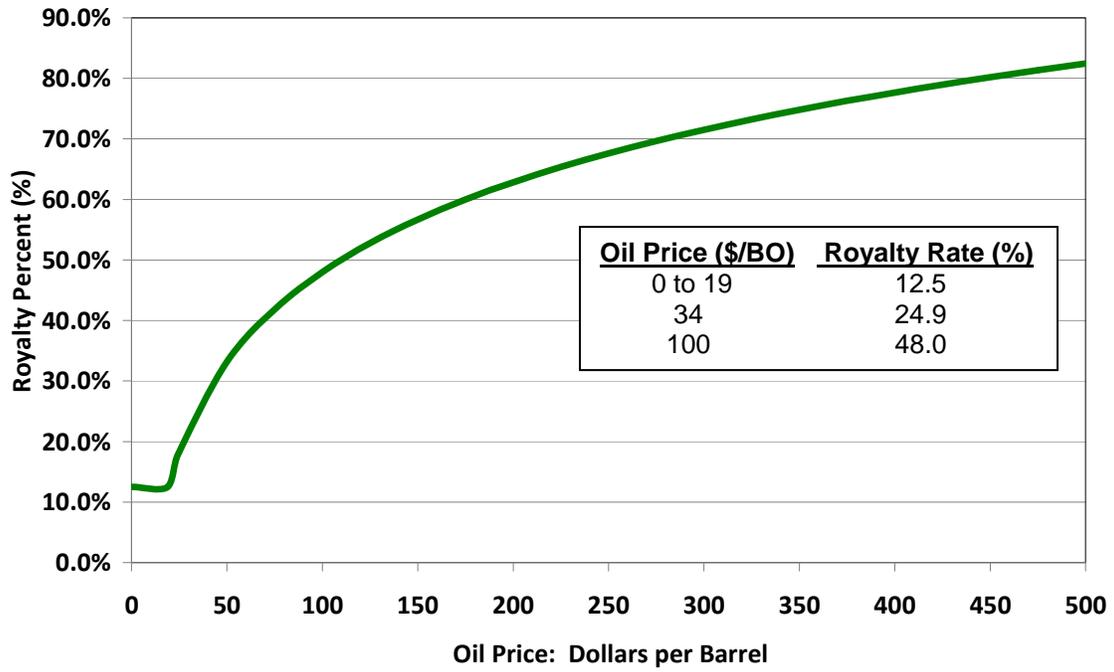
Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EXHIBIT F**

W 40807

**Royalty Schedule  
Chart**



**EXHIBIT G**

**ALTERNATIVE COMMISSION FINDINGS FOR APPROVING LEASES TO PXP**

FIND AND DETERMINE, PURSUANT TO CALIFORNIA PUBLIC RESOURCES CODE SECTION 6244, THAT DRAINAGE OF STATE OIL AND GAS RESOURCES IS OCCURRING FROM OIL AND GAS DEVELOPMENT IN FEDERAL WATERS AND THAT THE PROPOSAL TO LEASE STATE-OWNED SUBMERGED LANDS IN THE CALIFORNIA COASTAL SANCTUARY IS IN THE STATE'S BEST INTEREST; AND APPROVE THE APPLICATION BY PLAINS EXPLORATION AND PRODUCTION COMPANY FOR THE LEASING OF STATE-OWNED SUBMERGED LANDS.

**CEQA FINDING:**

FIND THAT AN EIR SCH# 2006021055 WAS PREPARED FOR THIS PROJECT BY THE COUNTY OF SANTA BARBARA AND CERTIFIED BY THE COUNTY BOARD OF SUPERVISORS ON OCTOBER 7, 2008, AND THAT THE COMMISSION STAFF HAD PARTICIPATED IN THE PREPARATION OF THE EIR AND HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

ADOPT THE FINDINGS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTIONS 15091 AND 15096 (h), AS PROVIDED IN EXHIBIT G-1.

ADOPT THE MITIGATION MONITORING PROGRAM, AS PROVIDED IN EXHIBIT G-2 AND ADDITIONAL MITIGATION MEASURES AS PROVIDED IN EXHIBIT F.

ADOPT THE STATEMENT OF OVERRIDING CONSIDERATIONS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15093, AS PROVIDED IN EXHIBIT G-3.

**SIGNIFICANT LANDS INVENTORY FINDING:**

FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION (CLASS B: LIMITED USE) DESIGNATED BY THE

CALENDAR ITEM NO. C (CONT'D)

COMMISSION FOR THE LAND PURSUANT TO PUBLIC RESOURCES CODE SECTIONS 6370, ET SEQ.

**OTHER FINDINGS:**

DETERMINE THAT DRAINAGE OF STATE RESOURCES IS OCCURRING FROM OIL AND GAS OPERATIONS IN THE FEDERAL OFFSHORE AREA KNOWN AS THE POINT PEDERNALES FIELD, ADJACENT TO THE PROPOSED LEASES, PURSUANT TO PUBLIC RESOURCES CODE SECTION 6244.

DETERMINE THAT THE CRITERIA OF PUBLIC RESOURCES CODE SECTION 6815(a) HAVE BEEN MET, THAT THE NEGOTIATED SUBSURFACE (NO SURFACE USE) OIL AND GAS LEASES ARE THE BEST INSTRUMENT TO DEVELOP AND PROTECT OIL AND GAS RESOURCES THAT MAY UNDERLIE THE STATE LAND DESCRIBED IN EXHIBIT A, ATTACHED HERETO, AND THAT THE PROPOSED TERMS AND CONDITIONS OF THE PROPOSED LEASES ARE IN THE BEST INTEREST OF THE STATE.

**AUTHORIZATION**

1. PURSUANT TO PUBLIC RESOURCES CODE SECTION 6244, THE COMMISSION FINDS AND DECLARES THAT THE LOSS OF VALUABLE STATE RESOURCES IS OCCURRING, AND WILL CONTINUE TO OCCUR, AS A RESULT OF DRAINAGE BY THE ONGOING OIL AND GAS OPERATIONS IN ADJACENT FEDERAL LANDS, SPECIFICALLY BY MEANS OF PRODUCING WELLS IN THE POINT PEDERNALES FIELD, OFFSHORE NORTHERN SANTA BARBARA COUNTY, AND THAT THE PROPOSED LEASES ARE IN THE BEST INTERESTS OF THE STATE.
2. PURSUANT TO PUBLIC RESOURCES CODE SECTION 6815(a) ENTER INTO NEGOTIATED SUBSURFACE (NO SURFACE USE) OIL AND GAS LEASES WITH PLAINS EXPLORATION & PRODUCTION COMPANY (PXP) IN THE FORM ATTACHED AS EXHIBIT "C". THE LEASES WILL CONTAIN:
  - a. THE STATE LAND DESCRIBED IN EXHIBIT A, ATTACHED HERETO, (APPROXIMATELY 4964.34

CALENDAR ITEM NO. C (CONT'D)

- b. ACRES AND 5261.89 ACRES);
  - b. A REQUIREMENT THAT A MINIMUM OF THREE WELLS BE DRILLED WITHIN THE FIRST TWO YEARS AFTER APPROVAL OF THE LEASE;
  - c. AN INITIAL ANNUAL RENTAL OF \$100.00 PER ACRE (A COMBINED \$1,022,500.00 FOR APPROXIMATELY 10,225 ACRES IN THE TWO LEASES), REDUCING TO \$10.00 PER ACRE (\$102,225.00) AFTER OIL OR GAS PRODUCTION BEGINS;
  - d. ROYALTY AS A PERCENTAGE OF ALL PRODUCED OIL AND GAS SUBSTANCES PURSUANT TO A SLIDING SCALE BASED ON THE PRICE OF OIL AS SHOWN IN EXHIBIT "D " OF THE LEASE;
  - e. AN INITIAL PERFORMANCE BOND OR OTHER SECURITY IN THE SUM OF \$6 MILLION DOLLARS, TO BE INCREASED TO \$\_\_\_\_\_ AFTER RECOVERY OF THE PRE-PAID ROYALTY;
  - f. A CONDITION REQUIRING ALL DRILLING & OIL AND GAS PRODUCTION OPERATIONS ON THIS LEASE TO CEASE ON OR BEFORE DECEMBER 31, 2022;
  - g. A CONDITION INCLUDING BY REFERENCE THE MITIGATION MEASURES ADOPTED BY SANTA BARBARA COUNTY AS PART OF THE CERTIFIED ENVIRONMENTAL DOCUMENT PREPARED FOR THE PROJECT (ENVIRONMENTAL IMPACT REPORT 06EIR-00000-00005; SCH #2006021055);
  - h. A CONDITION ADOPTING THOSE ADDITIONAL MITIGATION MEASURES AND ADDITIONAL CONDITIONS INCLUDED IN EXHIBIT "G" ATTACHED HEREWITH.
3. AUTHORIZE THE EXECUTIVE OFFICER OR HIS DESIGNEE TO ENTER INTO MEMORANDA OF AGREEMENTS FOR:
- a. THE MEASUREMENT AND ALLOCATION OF PRODUCTION WITH THE FEDERAL MINERALS MANAGEMENT SERVICE AND PXP, ATTACHED HERETO AS EXHIBIT "E"; AND
  - b. INSPECTION AND REGULATORY PROTOCOLS WITH THE FEDERAL MINERALS MANAGEMENT SERVICE AND THE DEPARTMENT OF CONSERVATION'S

CALENDAR ITEM NO. C (CONT'D)

DIVISION OF OIL, GAS, AND GEOTHERMAL  
RESOURCES, ATTACHED HERETO AS EXHIBIT "F".

4. AUTHORIZE THE EXECUTIVE OFFICER OR HIS DESIGNEE TO EXECUTE ANY DOCUMENT NECESSARY TO IMPLEMENT THE COMMISSION'S ACTION.

## **EXHIBIT G-1**

### **Tranquillon Ridge Oil and Gas Development Project**

(06RVP-00000-00001)

Adopted by the County Board of Supervisors on October 7, 2008

### **CEQA FINDINGS**

(Pursuant to PRC §21081 and the CEQA Guidelines §§15090 and 15091)

**CONSIDERATION OF THE EIR:** The Santa Barbara County Board of Supervisors (Board) has considered the Environmental Impact Report (06-EIR-00005; SCH #2006021055) together with comments received and considered during the public review process. The Environmental Impact Report reflects the independent judgment of the Board, has been completed in compliance with CEQA, and is adequate for the Tranquillon Ridge project.

**FULL DISCLOSURE:** Pursuant to Public Resources Code §21081, the Board finds that, through implementation of feasible conditions placed on the Tranquillon Ridge project, the significant impacts on the environment will be avoided or substantially lessened, and mitigated to the maximum extent feasible.

**LOCATION OF RECORD OF PROCEEDINGS:** The documents and other materials that constitute the record of proceedings upon which this decision is based are in the custody of the Clerk of the Board of Supervisors and the Secretary to the Santa Barbara County Planning Commission, County Planning and Development Department located at 123 E. Anapamu Street, Santa Barbara, CA 93101.

**UNAVOIDABLE IMPACTS ARE MITIGATED TO THE MAXIMUM EXTENT FEASIBLE:** The Final EIR for the Tranquillon Ridge project identified 13 significant project-related impacts that cannot be fully mitigated and which are therefore considered unavoidable (Class I) impacts for the originally proposed Tranquillon Ridge project. Eleven of these significant impacts would occur for the reduced-life project. These impacts result from the increased volumes of oil and gas over current production levels and are primarily related to marine oil spills or trucking of hazardous materials on local roadways. These impacts were identified as significant, unavoidable impacts when the original Point Pedernales project was approved by the County in 1986. Each of these Class I impacts is listed in Table 3 of the April 15, 2008 Planning Commission staff report and is provided in Attachment A below. Several mitigation measures have been adopted to address these impacts, as referenced in Table 3 of the April 15, 2008 Planning Commission staff report, as adopted by the Board at the October 7, 2008 public hearing, and through other mitigation measures in the purview of other responsible agencies. The Board finds that these are feasible mitigation measures that will reduce these adverse impacts but not to levels of insignificance and that there are no other feasible mitigation measures that could be required that would further reduce these impacts. Thus, the Board finds that the unavoidable impacts associated with the Tranquillon Ridge project are mitigated to the maximum extent feasible. The discussion under Coastal Act §30260 (part 3) in Attachment D (*Policy Consistency Analysis*) to the April 15, 2008 staff report to the Planning Commission which enumerates the specific mitigation measures adopted as permit conditions of approval is incorporated herein by reference as further support for this finding.

**FEASIBLE MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL:** In addition to the 13 significant and unavoidable environmental impacts discussed above, the EIR identified 24 significant but mitigable (Class II) impacts that would result from the originally proposed Tranquillon Ridge project. These Class II impacts are identified in Table 4 and discussed in Section 6.1.1 of the April 15, 2008 Planning Commission

## **EXHIBIT G-1**

staff report (see Attachment A below), along with the adopted mitigation measures that will reduce these potentially significant impacts to less than significant levels. Therefore, the Board finds that feasible mitigation measures have been adopted as conditions of the approval for the Tranquillon Ridge project.

**NO FEASIBLE ALTERNATIVE IDENTIFIED:** The Final EIR considers several alternatives to the Tranquillon Ridge project in the impact analyses of Section 5.0. Section 6.0 of the EIR compares the various alternatives to the Tranquillon Ridge project and Table 6 in Section 6.1.1.5, *Alternatives*, of the April 15, 2008 Planning Commission staff report provides a summary comparison of the project to each alternative addressed in the EIR. Major alternatives evaluated are an onshore drilling and production site instead of using the existing offshore platform, a new oil and gas processing site located farther north within Santa Barbara County, and replacement of the oil emulsion pipeline from the platform to the LOGP. The Board has declined to adopt any of the alternatives, as discussed below.

VAFB Onshore Drilling and Production Site: The EIR analyses describe several significant impacts that could be avoided and several others that would occur with implementation of an alternative drilling and production site located onshore, within Vandenberg Air Force Base. The EIR did not reach a conclusion as to how this conceptual alternative compares overall to the Tranquillon Ridge project because the projects cannot be examined to the same level of detail and their associated impacts are not strictly comparable for every measure (see EIR Section 6.0). The staff report discusses the likely impacts of this alternative relative to the Tranquillon Ridge project (see Planning Commission Staff Report Table 6). The onshore alternative would result in increased risks to VAFB personnel and significant impacts to onshore biological and cultural resources from both construction and operations.

Potential impacts of an oil spill on the marine environment would be substantially less for this onshore alternative than for the Tranquillon Ridge project, particularly once the Point Pedernales project ceases operations. The potential consequences of a marine oil spill are a significant issue for the County and we have favored certain kinds of onshore development (oil transportation via overland pipeline) over offshore options to address these concerns. In this case, however, the Board finds that, on balance, a new onshore drilling and production site on VAFB is not preferable to use of the existing PXP facilities, with the marine oil spill safeguards adopted herein as conditions of approval, to develop the Tranquillon Ridge reserves.

The Tranquillon Ridge project will cease operations by December 31, 2022. This will avoid significant adverse impacts that would have resulted from extending the life of the existing facilities, as originally proposed and evaluated in the EIR. A new onshore drilling and production project would be expected to operate for approximately twice as long as the Tranquillon Ridge project (30 vs. 14 years). Most of the significant impacts related to extending the life of the Point Pedernales project would be incurred, to some degree, with implementation of an onshore alternative. Thus, the reduced-life Tranquillon Ridge project will result in fewer significant and unavoidable impacts than a new long-term onshore drilling and production project and is preferred to the VAFB Onshore Alternative.

Casmalia East Processing Site: The EIR analyses concluded that the alternative processing plant location would shift, rather than eliminate, most of the significant impacts associated with use of the LOGP and would result in construction-related impacts that would not occur with the project as proposed by PXP. The current potential for significant new oil and gas production that would benefit from locating a new oil and

## **EXHIBIT G-1**

gas processing plant in the North County does not appear to warrant the construction and operation of a new plant now or in the near future. However, the advantages and disadvantages of locating a new oil and gas processing plant in northern Santa Barbara County to provide for maximum consolidated use of such facilities in the future should be assessed if demand significantly increases. The Tranquillon Ridge project will cease operating by December 31, 2022, avoiding significant impacts associated with extending the life of the Point Pedernales facilities. Therefore, given that a new processing plant in northern Santa Barbara County would entail potentially significant impacts similar to those incurred with operation of the LOGP, though in a different location, and the potential for significant construction-related impacts to occur, the Board finds that continued use of the LOGP for the Tranquillon Ridge project until the project end-date of December 31, 2022, and as conditionally approved herein, is preferable to constructing and operating a new oil and gas processing plant and associated pipelines for this project.

**Emulsion Pipeline Replacement:** The Board finds that replacing the entire existing oil emulsion pipeline with a new one would not significantly reduce the potential for a pipeline-related oil spill and could result in several significant construction-related impacts, as discussed in the EIR. The existing pipeline is subject to specific inspection and maintenance requirements for which the County will provide oversight throughout the life of the project. Segments of the existing pipeline may need to be replaced during operation of the project, as is currently the case for the Point Pedernales project. However, the Tranquillon Ridge project will not extend operation of the pipeline beyond its currently expected lifetime, and operation of the pipeline will cease by the end of 2022. The Board finds that it is preferable to operate the existing pipeline, in accordance with the enhanced safeguards required by this approval, rather than incurring the construction and operational impacts of installing a completely new pipeline. This alternative would not substantially reduce significant impacts associated with either the originally proposed or the reduced-life Tranquillon Ridge project. Therefore, the Board finds that the emulsion pipeline replacement alternative is not preferable to the Tranquillon Ridge project as conditionally approved herein.

**Power Line Undergrounding:** Other alternatives discussed in the EIR and summarized in Table 6 of the April 15, 2008 Planning Commission staff report include power line options and drill muds and cuttings disposal methods. The Board has declined to adopt any of the power line alternatives. As discussed in Section 6.1.1.5 of the Planning Commission staff report, power line Option 2a would not reduce significant impacts; Option 2b would result in greater significant impacts; and the Terra Road undergrounding alternative would shift potentially significant (Class II) impacts from visual resources to cultural resources, air quality, and biological resources.

# EXHIBIT G-1

## ATTACHMENT A

### April 15, 2008 Planning Commission Staff Report

#### 6.1.1.1 Significant and Unavoidable Project Impacts (Class I)

The reduced-life Tranquillon Ridge project would result in 11 significant and unavoidable environmental impacts. Of these, 10 are related to oil or produced water spills and spill clean-up activities and one public safety impact would result from increased truck transport of gas liquids from the LOGP (Risk.3). The Class I impacts due to oil spills would occur for onshore and offshore biological resources and water quality, fishing, recreation and cultural resources. Potential oil spill volumes associated with the Tranquillon Ridge project would be larger than for existing operations due to the increased amount of oil that would be produced and transported to the LOGP in the oil emulsion pipeline.

Two Class I visual impacts (Visual.1 and Visual.4) resulting from the presence and visibility of the platform and electrical substation in the coastal zone, and the presence of the LOGP, would still occur during the life of the Tranquillon Ridge project, but would not be increased or extended beyond existing levels. These visual impacts exist for the Point Pedernales project and would continue until the project facilities are removed, whether or not the Tranquillon Ridge project is approved.

All of the Class I impacts identified for the Tranquillon Ridge project were previously identified in earlier environmental documents related to the original Point Pedernales project or subsequent modifications. Although feasible mitigation measures have been identified for these Class I impacts, these measures will not fully mitigate the impacts which will remain significant and unavoidable throughout the project lifetime. If the Tranquillon Ridge project is not approved, these Class I impacts will continue at their current levels until the Point Pedernales project is decommissioned, its facilities properly abandoned, and the project facility sites restored.

The Class I impacts and recommended mitigation measures identified in the EIR are summarized in Table 3 and the paragraphs that follow the table. Please refer to Table ES.3a of the EIR Executive Summary and the issue area discussions in the EIR for additional details regarding potential impacts and mitigation measures. Table 3 also includes references to relevant existing Final Development Plan conditions that incorporate the recommended mitigation measures, either as currently written or with the recommended modifications shown in Attachment B (Conditions of Approval) to this staff report.

**Table 3: Class I Impacts** (from EIR Table ES.3a)

Issue Area	Impacts (EIR number)	Mitigation Measures	FDP
<b>Risk</b>	<u>Risk.3</u> : Increase in <b>truck transport</b> of liquid petroleum gas and natural gas liquids.	Risk-3 (TRMPP update)	P-2 P-23
<b>Marine Biological Resources</b>	<u>MB.1</u> : Increase in <b>oil spill</b> impacts to marine biota.	MB-1a (contingency planning) MB-1b (coastal baseline) MB-1c (fund)	P-13 G-4 (new) G-5 (new)

## EXHIBIT G-1

**Table 3: Class I Impacts** (from EIR Table ES.3a)

Issue Area	Impacts (EIR number)	Mitigation Measures	FDP
<b>Onshore Biological Resources</b>	<u>TB.6, TB.7</u> and <u>TB.8</u> : Increase in potential for impacts to terrestrial biota and habitats, including individuals and habitats of protected or sensitive species, as a result of an <b>oil spill and spill clean-up</b> .	TB-5 (sedimentation) TB-6 (restoration) TB-7 (restoration) TB-11 (spill containment) TB-12 (restoration) TB-13 (clean-up techniques) TB-14 (clean-up training) OWR-2 (berm) OWR-3 (OSRP update) OWR-4 (catch basins) OWR-5 (scour protection)	H-1 H-9 H-15 P-13
<b>Marine Water Quality</b>	<u>MWQ.1</u> : Increase in <b>oil spill</b> impacts to marine water quality.	MWQ-1 (pipeline inspection)	P-2
<b>Onshore Water Resources</b>	<u>OWR.2</u> : Increase in potential for impacts to surface and groundwater quality as a result of an <b>oil or produced water spill and spill clean-up</b> .	Risk-1 (leak detection) OWR-2 (berm) OWR-3 (OSRP update) OWR-4 (catch basins) OWR-5 (scour protection)	P-2 P-13 P-16 F-5 H-0 H-9 H-15
<b>Fishing</b>	<u>CRF/KH.2</u> : Increase in <b>oil spill</b> impacts to commercial and recreational fishing.	MB-1a (contingency planning) MB-1b (tar baseline)	P-13
<b>Traffic</b>	<u>T.4</u> : Increase in potential for disruption of onshore and offshore traffic due to an <b>oil spill and spill clean-up</b> .	MB-1a (contingency planning) MWQ-1 (pipeline inspections) MWQ-2* (equip. inspections) MWQ-3* (waste disposal)	P-2 P-13
<b>Cultural Resources</b>	<u>CR.3</u> : Increase in potential for impacts to cultural resources as a result of ground disturbance due to an <b>oil spill and spill clean-up</b> .	CR-5 (OSRP update)	P-13
<b>Recreation</b>	<u>Rec.1</u> : Increase in potential for impacts to public access to recreational resources as a result of an <b>oil spill and spill clean-up</b> .	MB-1a (contingency planning) MWQ-1 (pipeline inspections)	P-2 P-13
<b>Visual Resources*</b>	<u>Visual.1*</u> : Visual impacts due to <b>presence of Platform Irene and substation</b> . <u>Visual.4*</u> : Visual impacts due to <b>presence of LOGP</b> .	Visual-1 (substation screening) Visual-4 (lighting/glare plan)	H-1 H-5 L-2 L-3 L-8

*\*These Class I impacts apply to the existing Point Pedernales project and would not be affected by the reduced-life Tranquillon Ridge proposal.*

**RISK** (Impact Risk.3). The Tranquillon Ridge project poses a number of potential safety impacts (injuries and deaths) due to a variety of potential upset conditions. These upset conditions include leaks or ruptures of the crude oil emulsion pipeline, onshore or offshore; leaks or rupture of the offshore-to-onshore sour gas pipeline; and, transportation of natural gas liquids from the LOGP. These impacts are currently associated with the Point Pedernales project but the severity of the impacts would increase due to the increase in oil and gas production levels with the reduced-life Tranquillon Ridge proposal. Of these potential impacts, only the transportation of gas liquids (natural gas liquids [NGLs] or liquid petroleum gas [LPG]) represents a significant,

## **EXHIBIT G-1**

unavoidable impact to public safety. The remaining impacts are classified as adverse but less than significant with PXP's continued implementation of existing permit requirements.

To minimize potential safety impacts, EIR Mitigation Measure Risk-3 requires that PXP implement the measures identified in County policies regarding gas liquid transport for the Tranquillon Ridge project. These measures include blending natural gas liquids to the extent feasible into the processed crude oil stream and transporting remaining gas liquids in accordance with the requirements of Board of Supervisors Resolution 93-480. These measures are currently implemented for the Point Pedernales project through Final Development Plan Conditions P-2 and P-23 and would apply to the Tranquillon Ridge project if it is approved. The Transportation Risk Management and Prevention Program (Condition P-23) for the LOGP will be updated as necessary and is required to be fully implemented during operation of the Tranquillon Ridge project. All other system safety measures that apply to the Point Pedernales project also would apply to use of the Point Pedernales facilities for the Tranquillon Ridge project. No other feasible mitigation measures have been identified to further reduce this significant, unavoidable impact.

**MARINE BIOLOGICAL RESOURCES (Impact MB.1).** Oil spills from the Tranquillon Ridge project would adversely affect sensitive marine species, including benthic and intertidal organisms, fish, marine mammals, marine birds, and marine turtles. These impacts are potentially significant, depending on the size and location of an offshore oil spill. The potential worst-case oil spill size would increase with the Tranquillon Ridge project. The potential spill volume for an offshore spill would increase by 5,016 barrels, from 2,913 barrels to 7,929 barrels (EIR Table 5.1.29). The probability of a rupture would increase from 0.6 percent to 9.7 percent. The combined lifetime probability of oil leaks, ruptures, blowouts, and spills from Platform Irene and the offshore portion of the emulsion pipeline would increase from 5.4 percent to 22.1 percent for the 30-year Tranquillon Ridge project (EIR Table 5.1.28). The reduced-life Tranquillon Ridge project would increase the lifetime probability of spills from 5.4 percent to about 11 percent because it would operate for roughly half as long as the project analyzed in the EIR.

Mitigation Measures MB-1a, MB-1b, and MB-1c would reduce, but not eliminate, potentially significant oil spill impacts to marine resources. These measures include updating the PXP's Oil Spill Response Plan (FDP Condition P-13) to specifically address the increased volumes of oil that could be spilled to the ocean due to the increased amount of oil being produced and transported to shore and annual funding of programs to document existing coastline conditions and facilitate real-time spill tracking in the event of a spill (FDP Condition G-4). As recommended in EIR Mitigation Measure MB-4, PXP should implement measures to further reduce impacts on marine biology, particularly to marine mammals and seabirds. This is within the purview of the California Coastal Commission. Those measures identified are as follows:

- A. An assessment of the feasibility of injecting drill muds and cuttings into a reservoir from Platform Irene. This assessment shall include MMS input and shall conform to MMS requirements for such assessment. If the assessment concludes that injection is feasible, PXP shall inject muds and cuttings used for drilling new or extended existing wells from Platform Irene, pursuant to MMS approval. If injection is not feasible, PXP shall ensure that muds and cuttings are properly disposed of at Platform Irene in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit for the platform and shall provide copies of all discharge

## **EXHIBIT G-1**

monitoring reports prepared pursuant to the NPDES permit to Planning and Development, once Tranquillon Ridge production has begun.

- B. Provisions for a dedicated marine mammal observer on each vessel servicing Platform Irene during drilling and production of Tranquillon Ridge reserves, including:
1. placement of a dedicated marine mammal observer on all support vessels during the spring and fall gray whale migration periods and during periods or seasons of high concentrations of marine mammals in the area.
  2. requirements that restrict the duties and responsibilities of the observer to only marine mammal observations during periods when the vessel is in transit.
  3. training for observers focusing on identification of marine mammal species, specific behavior of species common to the project area, and awareness of seasonal concentrations of marine mammals.
  4. unobstructed views onboard each vessel.
  5. a contingency plan that focuses on avoidance procedures when marine mammals are encountered at sea. At a minimum, this plan shall include the following components:
    - 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 shall 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 shall operate at a constant speed that is not faster than the whales.
    - d. Support vessels shall not separate female whales from their calves.
    - e. Vessel operators shall not herd or drive whales.
    - f. If a whale engages in evasive or defensive action, support vessels shall drop back until the animal moves out of the area.
  6. Prompt reporting of any collisions with marine wildlife to the California Coastal Commission, California Fish & Game Department, and the U.S. Fish & Wildlife Service pursuant to each agency's reporting requirements and procedures.
- C. A contribution toward establishing a marine mammal and seabird impact mitigation fund to be use for either facilities construction or operating costs associated with the rescue and rehabilitation of injured marine mammals and seabirds.

In addition, FDP Condition G-1 (*Oil Spill Clean-up and Restoration*) requires that PXP clean up any oil spills associated with its onshore or offshore facilities and restore affected coastal and onshore resources and areas to pre-spill conditions. This FDP condition would continue to apply to operation of these facilities for the Tranquillon Ridge project. However, even with implementation of these mitigation measures, the potential impacts of an offshore oil spill to marine biological resources would remain significant. No other feasible mitigation measures have been identified to further reduce these significant, unavoidable impacts.

**ONSHORE BIOLOGICAL RESOURCES** (Impacts TB.6, TB.7, and TB.8). A pipeline leak or rupture could result in an oil spill and subsequent significant and unavoidable impacts to upland, riparian, and aquatic habitats and injury to plants and terrestrial and aquatic wildlife through direct toxicity, smothering, and entrapment, as well as from spill clean-up efforts. Under the

## **EXHIBIT G-1**

worst case, onshore oil spill volumes would increase by 688 barrels (about 11%, from 6,318 to 7,006 barrels; EIR Table 5.1.25), with an increase in the probability of a rupture from 0.9 percent to 11.2 percent and an increase in the probability of a leak from 3.6 percent to 100 percent (EIR Table 5.1.24) due primarily to the addition of pumping capabilities at Valve Site #2.

An oil spill and subsequent clean-up efforts could 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, Gaviota tarplant, and possibly Pismo clarkia and Lompoc yerba santa. Spills and spill clean-up could also directly or indirectly cause the loss of individuals or habitat for listed wildlife species, including steelhead, western snowy plover, California tiger salamander, California red-legged frog, and El Segundo blue butterfly.

Mitigation Measures TB-5, TB-6, TB-7, TB-11, TB-12, TB-13, TB-14, OWR-2, OWR-3, OWR-4, and OWR-5 would reduce, but not eliminate, potentially significant impacts of oil spills to onshore biological resources. These measures require site-specific spill containment and clean-up techniques and training, maintenance of catch basins along the pipeline route, control of sedimentation into aquatic habitats, restoration of disturbed habitat, and an update to PXP's Oil Spill Response Plan to ensure that containment and clean-up equipment is readily available close to areas with the greatest vulnerability in the event of a spill, such as the mouth of the Santa Ynez River. These mitigation measures have been incorporated into FDP Conditions H-1 (*Northern Mitigated Pipeline Route and Catch Basins*), H-9 (*Restoration and Revegetation Section of OSRP*), H-15 (*Installation of Block Valves and Check Valves*), and P-13 (*Oil Spill Response Plan*). No other feasible mitigation measures have been identified to further reduce these significant, unavoidable impacts.

**MARINE WATER QUALITY** (Impact MWQ.1). Accidental discharge of hydrocarbons into marine waters would significantly affect marine water quality. The Tranquillon Ridge project would cause an increased risk of oil spill due to the larger volume of crude oil in the pipeline and an increase in the potential for a well blow out if the new wells encounter a pressurized reservoir. The combined probability of oil leaks, ruptures, blowouts, and spills from Platform Irene and the offshore portion of the emulsion pipeline would increase from 5.4 percent to about 11 percent with implementation of the reduced-life Tranquillon Ridge project.

Mitigation Measure MWQ-1 requires that PXP conduct regular inspections of the offshore oil emulsion pipeline to identify unsupported spans or structural anomalies that compromise the integrity of the pipeline and promptly effect repairs. This measure also requires that if the leak detection system causes a shutdown of the pipeline, the oil emulsion flow through the pipeline shall not be resumed until the entire length of the pipeline has been inspected and cleared or repaired as necessary. This measure has been explicitly incorporated into FDP Condition P-2 (*Safety, Inspection, Maintenance, and Quality Assurance Program [SIMQAP]*). No other feasible mitigation measures have been identified to further reduce this significant, unavoidable impact.

Staff recommends that PXP investigate the potential for injecting the waste muds and cuttings at the platform and implement that option if it is feasible (see discussion in Section 6.1.1.5, below). This alternative would eliminate Class III adverse impacts associated with disposing of the muds

## **EXHIBIT G-1**

and cuttings in the ocean, as proposed, and would not create other Class III impacts, as would the onshore disposal option. Staff does not recommend the onshore disposal option as it would only result in different Class III impacts, rather than elimination of impacts. However, if the Planning Commission chooses to adopt the onshore disposal alternative for drilling muds and cuttings, EIR Mitigation Measures MWQ-2 and MWQ-3 should also be adopted as new conditions of the FDP. These measures would require inspections of the equipment used to transfer the muds and cuttings to the vessels and boat cleaning procedures to reduce the potential for spills to the marine environment of the muds and cuttings during transport operations.

**ONSHORE WATER RESOURCES** (Impact OWR.2). A rupture or leak from the oil emulsion or produced water pipelines could substantially degrade surface and ground water quality and spill clean-up activities could cause erosion or siltation resulting in degradation of surface water quality. The Tranquillon Ridge project would increase the amount of oil that could be spilled from the pipeline over the life of the project.

Mitigation Measures Risk-1, OWR-2, OWR-3, OWR-4, and OWR-5 would reduce the likelihood or severity of these potential impacts, but not to less than significant levels. These measures are incorporated into the PXP FDP, as follows:

- Risk-1, upgraded leak detection system – FDP Condition P-16;
- OWR-2, berm at Valve Site #2 – FDP Condition H-0;
- OWR-4, catch basins – FDP Condition H-0;
- OWR-3, Oil Spill Response Plan update – FDP Condition P-13; and,
- OWR-5, scour protection – FDP Conditions D-2 and F-5.

**COMMERCIAL AND RECREATIONAL FISHING** (Impact CRF/KH.2). Oil spills potentially could affect commercial and recreational fishing in the project area by damaging fish populations (e.g., sea urchins and lobster). This impact could be significant and unavoidable, particularly with respect to species harvested in the intertidal zone where they are vulnerable to marine oil spills. Access to fishing areas also could be restricted by a spill and by boat traffic related to spill clean-up.

Mitigation Measures MB-1a and MB-1b would help reduce potential impacts to commercial and recreational fishing, but because there are limitations to thorough containment and clean-up of an offshore oil spill, and because commercial fishing areas would be at least temporarily lost to fishing while clean-up operations are underway, this remains a significant and unavoidable impact for fisheries in the intertidal zone. These mitigation measures are included in FDP Conditions G-4 (*Oil Spill Damage Assessment Funding*), M-3 (*Local Fishermen's Contingency Fund*), and P-13 (*OSRP*). No other mitigation measures have been identified to further reduce this significant impact.

**TRAFFIC** (Impact T.4). An oil spill and related clean-up activities could result in the disruption of commercial shipping, fishing, and recreational marine traffic and onshore transportation infrastructure. An offshore oil spill could result in closure of the Coast Guard's marine traffic corridors and restricted boating along 70 miles of coastline. Offshore traffic could be disrupted for days, depending on the size and extent of the spill, due to clean-up activities. An oil spill

## **EXHIBIT G-1**

could also preclude fishing from areas around the spill until clean-up activities are complete. If a spill reaches the shoreline, onshore traffic could be affected by response-related activities and traffic. Although mitigation measures are required to reduce the likelihood of a spill (inspection, monitoring, and maintenance requirements; FDP Condition P-2) and to enhance spill response (contingency planning; FDP Condition P-13), the risk cannot be reduced to zero. The consequences of an oil spill, including traffic-related impacts, remain significant and unavoidable. No other mitigation measures have been identified to further reduce this significant impact.

**CULTURAL RESOURCES** (Impact CR.3). Containment and clean-up activities associated with an accidental oil spill could result in ground disturbance and potential impacts to cultural resources. A pipeline leak or rupture could result in an oil spill anywhere along the pipeline corridor. Several archaeological sites are known to occur within and near the pipelines. Spill containment activities that could disturb cultural resources include use of heavy earth-moving equipment and manual excavations to remove oil-contaminated material. Soil removal by manual or mechanized means can cause significant impacts on any cultural resource in the area. Other clean-up techniques and staging containment and clean-up equipment can also result in disturbance. New Condition I-9 (*Oil Spill Clean-up*) incorporates EIR mitigation measure CR-5 into PXP's Final Development Plan and requires PXP to update its Oil Spill Response Plan to specify spill containment and clean-up measures that would minimize impacts to cultural resources in the event of an oil spill. No other mitigation measures were identified that would further reduce this potential significant impact.

**RECREATION** (Impact Rec.1). The increased oil throughput between Platform Irene and the LOGP for the Tranquillon Ridge project would increase the probability and volume of an oil spill. An offshore oil 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 clean-up, as well as a lingering perception that recreational resources are polluted, even after clean-up is completed. These effects could result in impacts to local and regional tourism, particularly as they relate to coastal resources and attractions. Facility safety (FDP Condition P-2), spill contingency planning and response (FDP Condition P-13), and restoration requirements (FDP Condition H-9) adopted for the project will serve to reduce the likelihood of a spill and the magnitude of the resulting impacts if one does occur, but this risk cannot be reduced to zero. Therefore, this remains a significant and unavoidable impact of the Tranquillon Ridge project. No additional mitigation measures have been identified to further reduce this impact.

**VISUAL RESOURCES** (Impacts Visual.1 and Visual.4). These significant visual resource impacts are associated with the presence of Platform Irene and the electrical substation at Surf (Visual.1) in the coastal zone, and nighttime glare from the LOGP (Visual.4) in a rural area. These impacts were identified in previous environmental reviews as Class I impacts for the existing Point Pedernales project. The Tranquillon Ridge EIR identified these impacts as significant and unavoidable for the 30-year Tranquillon Ridge project because they would have been extended into the future until the end of the Tranquillon Ridge project operations. These extension of significant impacts would not occur with the reduced-life Tranquillon Ridge project as it is proposed to end December 2022, the same time as the outer estimates of remaining Point Pedernales project life. Although the facilities would continue to create these significant

## EXHIBIT G-1

impacts, they would not be intensified or extended beyond baseline levels by the Tranquillon Ridge project. Nevertheless, FDP Conditions L-2 (*Lighting Plan*) and L-8 (*Facility Screening*) require renewed efforts to reduce lighting at the LOGP and screen the Surf substation to the extent feasible. This will ensure PXP's continued efforts to reduce these significant impacts and provide consistency with certain County policies.

### 6.1.1.2 Significant and Mitigable Project Impacts (Class II)

Fifteen Class II impacts would result from the proposed Tranquillon Ridge project. These impacts are associated with oil or produced water spills and spill clean-up, or with the modifications at Valve Site #2. These significant impacts would be mitigated to less than significant levels (per County thresholds) with implementation of specific mitigation measures. Nine Class II impacts identified in the EIR would have resulted from extending the life of the existing facilities and are associated primarily with routine operations of both onshore and offshore facilities. These impacts would not increase in severity or be extended as a result of the reduced-life Tranquillon Ridge proposal.

Class II impacts and associated mitigation measures are summarized in Table 4 below. This table also includes references to relevant FDP conditions that address these impacts. Additional details regarding potential impacts and mitigation measures are provided in the issue area discussions in the EIR and Table ES.3b of the EIR Executive Summary.

**Table 4: Class II Impacts** (from EIR Table ES.3b)

Issue Area	EIR Impact	Mitigation Measures	FDP
<b>Onshore Biological Resources</b>	<p><b>TB.1:</b> Ground disturbance for modifications at <b>Valve Site #2</b> and power pole installation could cause loss of native vegetation, wildlife habitat.</p> <p><b>TB.2:</b> Ground disturbance for modifications at <b>Valve Site #2</b> and power pole installation could cause impacts to aquatic habitats due to erosion and sedimentation.</p> <p><b>TB.3*:</b> Pipeline maintenance and repair would result in disturbance and removal of native vegetation and habitat.</p> <p><b>TB.4*:</b> Pipeline maintenance and repair could harm listed plant species.</p> <p><b>TB.5*:</b> Pipeline maintenance and repair could harm listed wildlife/fish species.</p>	<p>TB-1 (survey)</p> <p>TB-2 (use bridge, pole design)</p> <p>TB-3 (pre-constr. wildlife relocation)</p> <p>TB-4 (dry season construction)</p> <p>TB-5 (sedimentation)</p> <p>TB-6 (construction restrictions)</p> <p>TB-7 (site-specific measures)</p> <p>TB-8 (pre-construction plant survey)</p> <p>TB-9 (site-specific restoration)</p> <p>TB-10 (avoid breeding season)</p> <p>TB-11 (update OSRP)</p> <p>OWR-1 (SWPPP)</p> <p>GR-1 (BMPs)</p>	<p>F-1</p> <p>H-1</p> <p>H-9</p> <p>H-19</p> <p>H-24</p> <p>P-13</p>

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**Table 4: Class II Impacts** (from EIR Table ES.3b)

Issue Area	EIR Impact	Mitigation Measures	FDP
<b>Geological Resources</b>	<u>GR.1</u> , <u>GR.2</u> , <u>GR.4</u> *: <b>Ground disturbance</b> for construction, maintenance, or remediation activities associated with a pipeline spill could cause slope failure, gulying, erosion, sedimentation. <u>GR.3</u> : Continued or accelerated <b>ground settlement at LOGP</b> due to modifications and upgrades. <u>GR.5</u> *: <b>Scouring</b> along drainage areas could result in impacts to the pipeline and increase the chances of a pipeline failure.	GR-1 (BMPs) GR-2 (grouting) GR-3 (scour mitigation plan)	D-1 D-2 D-3 D-5 H-1 H-9 P-1 P-13
<b>Onshore Water Quality</b>	<u>OWR.1</u> , <u>OWR.3</u> *, and <u>OWR.4</u> : <b>Ground disturbance</b> associated with construction, maintenance, or spill remediation activities associated with a pipeline spill could cause erosion and siltation which could result in degraded surface water quality.	OWR-1 (SWPPP) OWR-6 (streambed restoration) GR-1 (BMPs)	D-5 F-5 H-1
<b>Marine Biological Resources</b>	<u>MB.5</u> : <b>Increased vessel traffic</b> may impact marine mammals and marine turtles.	MB-1c (fund) MB-4 (observers)	**
<b>Marine Water Quality</b>	<u>MWQ.2</u> , <u>MWQ.3</u> , and <u>MWQ.4</u> : Reduced marine water quality would result from discharges of drilling fluids, produced water, and additional <b>discharges at Platform Irene</b> .	MB-3 (shunt depth) NPDES (US EPA permit)	G-2 G-3
<b>Air Quality</b>	<u>Air.2</u> : <b>Increased emissions</b> from drilling.	Air-2 (emission reductions)	E-6 E-9 E-10
<b>Cultural Resources</b>	<u>CR.1</u> *, <u>CR.2</u> and <u>CR.4</u> *: <b>Ground disturbance</b> for pipeline maintenance, modifications at Valve Site #2 and power pole installation, or produced water spill could cause impacts to cultural resources.	CR-1 (200-ft monitoring zone) CR-2 (mitigation plan) CR-3 (archaeological survey)	I-2
<b>Visual Resources</b>	<u>Visual.3</u> : Visual impacts could result from presence of <b>new transformer station and power poles</b> for Valve Site #2.	Visual-3 (bridge feasibility)	L-10 L-11
<b>Agricultural Resources</b>	<u>AG.3</u> and <u>AG.4</u> *: <b>Pipeline repair and maintenance or spill-related activities</b> could result in degradation and reduced productivity of agricultural land.	AG-1 (update OSRP) AG-2 (replanting)	P-13

\*The reduced-life Tranquillon Ridge project would not extend impact or increase severity of impact over baseline levels.

\*\*Within the perview of the California Coastal Commission. See Marine Biological Resources discussion in staff report section 6.1.1.1 for additional information.

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### Tranquillon Ridge Oil and Gas Development Project

(06RVP-00000-00001)

Adopted by the County Board of Supervisors on October 7, 2008

#### MITIGATION MONITORING AND REPORTING

Public Resources Code §21081.6 requires that the County adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of approval in order to mitigate or avoid significant effects on the environment. The approved project description and conditions of approval, with their corresponding permit monitoring requirements, are hereby adopted as the mitigation monitoring program for the Tranquillon Ridge project. The monitoring program is designed to ensure compliance during all phases of project implementation. The attached tables provide the Mitigation Monitoring Plan as provided in the Final EIR.

### 5.1 Risk of Upset/Hazardous Materials

#### 5.1.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
Risk-1	<u>The applicant shall install an upgraded state-of-the-art leak detection system on the existing emulsion line and on the sour gas line. The upgraded system shall use the Best Available Technology (BAT) for detection of small leaks in the emulsion pipeline. The applicant shall provide the County with a comparative analysis of available technologies that have been used in applications similar to this project and the demonstrated effectiveness and reliability of those systems. The County shall review and approve of the leak detection technology prior to its installation. Review and approval of the comparative analysis and installation of the approved leak detection system shall occur prior to land use permit approval. The applicant shall install an upgraded SCADA system on the existing emulsion line and a new system on the produced sour gas line. The new system shall have improved sensitivity to detect leaks, similar to the upgrade installed on PXP's Point Arguello facility. The new SCADA system should be able to detect 0.08 percent of flow leaks in less than 48 minutes and be able to detect leaks as small as 1/16 inch in diameter in less than two minutes.</u>	SCADA system review.	<del>Before operation of the Tranquillon Ridge project.</del> <u>Prior to land use permit approval.</u>	SBC P&D, SSRRC
Risk-2	<del>The applicant operator shall ensure that sour gas pipeline operation does not exceed 600 pounds per square inch (psig) and 8,000 parts per million (ppm) hydrogen sulfide throughout the life of the project. If any increase in</del>	Monthly reports to the SBP&D to include operating pressure of the	Before operation of the Tranquillon Ridge project.	SBC P&D, SSRRC

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Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
	<u>pipeline operating pressure and/or hydrogen sulfide concentration is proposed, the operator shall conduct a risk assessment to demonstrate to the County's satisfaction that such increase would not expand the existing hazard footprint associated with the sour gas pipeline. If such demonstration cannot be made, the proposed increase in pressure/concentration shall not be approved or implemented.</u>	gas pipeline.		
Risk-3	The applicant shall implement all of the measures identified in SBC 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 Final Development Plan (FDP) permit conditions P-2 and P-23). The applicant shall submit a plan to SBC for review and approval indicating maximum blending levels that are achievable with the proposed operations prior to land use clearance	The plan shall be approved prior to land use clearance and implemented prior to operation of the facilities with Tranquillon Ridge Wells.	Monthly P&D reports. Blending levels shall be documented in the monthly production reports.	SBC P&D, SSRRC

## 5.2 Terrestrial and Freshwater Biology

### 5.2.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible for Verification
TB-1	Prior to construction, a survey of the power line corridor shall be conducted to verify the locations of sensitive plants, including Gaviota tarplant, La Purisima manzanita, sand mesa manzanita, and dune vegetation that includes coast buckwheat ( <i>Eriogonum parvifolium</i> ), and thus may support El Segundo blue butterfly. Power poles shall be sited to avoid impacting these resources.	Site inspection prior to construction.	Prior to construction or ground disturbing activities.	SBC/CCC-qualified biologist working as part of EQAP or under direction of SBC Permit Compliance (hereafter: SBC EQAP Biologist)
TB-2	Prior to constructing the power line to Valve Site #2, the applicant/operator shall enter into discussions with VAFB to determine the feasibility of placing the power line on the 13 <sup>th</sup> 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	Review of documentation from VAFB.  Review plans and	Prior to land use clearance for construction of power line.  Prior to construction or	SBC P&D and EQAP Biologist

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Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible for Verification
	<p>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, 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. <u>If the pole lines are of a type that raptors might nest on, investigate the feasibility of Pole designs will either discourage raptor nesting or be made suitable for nesting by 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 the California Department of Fish and Game (CDFG). CDFG and the U.S. Fish and Wildlife Service (USFWS) will be contacted for review and approval of pole design at the time the power line to Valve #2 is deemed necessary.</u></p>	<p>specifications  Onsite verification.</p>	<p>ground breaking.  During construction.</p>	
TB-3	<p><u>Immediately (within 48 hours) prior to each critical pole placement activity, including excavation, foundation installation, pole placement, and stringing, construction</u>-applicant-funded surveys within the disturbance area shall be conducted by a SBC- <u>and VAFB</u>-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 construction area <del>should</del> <u>shall</u> be regularly monitored to ensure that wildlife species do not enter areas where they would be exposed to hazards.</p>	<p>Periodic site visits by qualified biologist prior to and during construction activities.</p>	<p>Prior to and during construction and ground disturbance activities.</p>	SBC EQAP Biologist
TB-4	<p>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 <u>and CCC (if required)</u> approved erosion and sediment control plan is in place. Applicant shall submit construction plans and schedule to SBC <u>and CCC (if required)</u> for review and approval prior to land use clearance.</p>	<p>Site inspection prior to construction.</p>	<p>Prior to construction or ground disturbing activities.</p>	SBC EQAP Biologist

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Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible for Verification
TB-5	<p>Site-specific measures consistent with the <u>Restoration, Erosion Control, and Revegetation Plan (RECRP) approved under Point Pedernales FDP Condition H-1 shall be updated and implemented as applicable to new areas of ground disturbance along the existing ROW.</u> Erosion and sediment control measures (e.g., <u>water bars</u>, silt fencing, dust control, and/or 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 control measures shall be installed prior to ground disturbance and maintained until after the rainy season or until vegetation has become re-established in the disturbed areas. The applicant shall submit erosion and sediment control plans and specifications to SBC for approval prior to land use clearance.</p>	<p>Periodic site inspections during construction on areas being disturbed.</p>	<p>Prior to and during construction during the rainy season and maintained until after the rainy season or until vegetation has become re-established in the disturbed areas.</p>	<p>SBC EQAP Biologist</p>
TB-6	<p>Applicant shall prepare and submit <u>as an update to the RECRP (FDP Condition H-1 and applicable CDP conditions approved under PXP), a Standard Maintenance and Repair Plan that will include</u> plans for restricting work areas, delineating construction zones, biological surveys of disturbance areas, and impact minimization efforts, including scheduling. Where ground disturbances are required, the Plan would specifically include:</p> <ul style="list-style-type: none"> <li>• Restrict construction activities, equipment and personnel to existing disturbed areas (such as roads, pads, or otherwise disturbed areas) to the maximum extent feasible.</li> <li>• 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.</li> <li>• Biologically sensitive resources, such as occurrences of sensitive plant species including sand mesa manzanita, La Purisima manzanita, Gaviota tarplant, coast buckwheat (which may support El Segundo blue butterfly) 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.</li> <li>• 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).</li> </ul>	<p>Plan approval by SBC P&amp;D Department (EQAP) and periodic inspections during construction.</p>	<p>Prior to issuance of the coastal development permit and any future land use clearances for grading.</p>	<p>SBC EQAP Biologist</p>
TB-7	<p>Site-specific measures listed in the approved RECRP (FDP Condition H-1 and applicable CDP conditions) shall be updated and implemented as applicable for new areas of ground disturbance along the existing pipeline right-of-way. Prior to the issuance of a Land Use Permit, <u>an updated RECRP a Habitat Revegetation, Restoration, and Monitoring Plan (HRRMP)</u> shall be submitted to SBC Planning and</p>	<p>Plan approval by SBC P&amp;D Department (EQAP) and periodic site inspections during construction.</p>	<p>Prior to the issuance of the coastal development permit and any future land use clearances for grading. Prior</p>	<p>SBC EQAP Biologist</p>

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Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible for Verification
	<p>Development for approval. SBC Planning and Development shall consult with responsible resource agencies (including, but not limited to: CDFG, CCC, U.S. Army Corps of Engineers) to obtain their concurrence or identify any necessary modifications to the proposed plan. Once approved, the plan shall be implemented by PXP and monitored by SBC 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:</p> <ul style="list-style-type: none"> <li>• 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 <del>should</del> <u>shall</u> be made for recontouring to approximate the original topography. Excess fill shall be disposed of offsite 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. <u>Stockpiles shall not be placed in biologically sensitive areas.</u></li> <li>• 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. Plans 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. Plans shall identify areas with high erosion potential and the specific control measures for these sites.</li> <li>• Procedures for containing sediment and allowing continued downstream flow at stream or biologically significant drainage crossings (identified in the Point Pedernales 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 to start of construction. Existing water levels in all streams shall be maintained at all times during construction.</li> <li>• Procedures for timely re-establishment of vegetation that replicates indigenous and naturalized communities</li> </ul>		to and during construction or ground disturbing activities.	

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Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible for Verification
	<p>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. <u>RECRP performance criteria for weed invasion shall be updated to require action to control any and all invasive noxious weeds (listed as of 2007 by the California Invasive Plant "Council) that could interfere with revegetation efforts. Examples include, but are not limited to, Cape ivy (<i>Delairea odorate</i>) and onion weed (<i>Asphodelus fistulosus</i>).</u></p> <ul style="list-style-type: none"> <li>• 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 (ROW); providing for onsite monitoring of construction by a qualified independent local biologist; and flagging significant species and areas that should be avoided.</li> <li>• 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.</li> <li>• Monitoring procedures and minimum performance criteria to be satisfied for revegetation and erosion control are specified in Table 5 of the existing RECRP. <u>These criteria shall be updated as necessary the performance criteria for each vegetation type, including percent coverage that must be achieved, monitoring methods and frequencies, and quantitative thresholds for success, reevaluation, or remedial action. Updates to the existing RECRP shall should consider the current level of disturbance and the condition of adjacent habitats. Consistent with the RECRP, monitoring shall 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, using the existing RECRP as a guideline, and implemented if it is determined that performance criteria are not being met.</u></li> </ul>			
TB-8	<p>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 and for coast buckwheat, which may support El Segundo blue butterfly. 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.</p>	<p>Review of reports and on site inspections prior to and during construction for avoidance of listed plant species.</p>	<p>Prior to and during construction or ground disturbing activities.</p>	<p>SBC EQAP Biologist (with special botanical qualifications)</p>
TB-9	<p>Where impacts to these species are unavoidable, the applicant shall develop and implement a <u>site- and species-specific</u> salvage, propagation, replanting, and monitoring <u>program plan</u> consistent with the requirements of the RECRP that would utilize both</p>	<p>Program plan approval by USFWS and CDFG; field verification by</p>	<p>Prior to construction or ground disturbing activities.</p>	<p>SBC EQAP Biologist (with special botanical qualifications)</p>

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Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible for Verification
	<p>seed and salvaged (excavated) plants constituting an ample and representative sample of each colony of the species that would be impacted. The <del>program</del> 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 <del>program</del> plan shall be approved by the <u>County, CCC, U.S. Fish and Wildlife Service-USFWS and CDFG</u> 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.</p> <p>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.</p>	EQAP biologist.		
TB-10	<p>All routine pipeline repair and maintenance activities occurring within the beach and foredune habitats at landfall (Wall/Surf 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 U.S. Fish and Wildlife Service (USFWS). This may require Section 7 consultation.</p> <p>Schedule and timing restrictions for this shall be included in <del>updated RECRP Standard Maintenance and Repair Plan</del> (Mitigation Measure TB-6) to be submitted for SBC review and approval prior to land use clearance. The plan shall include impact avoidance measures to be implemented in the event that emergency repairs cannot be scheduled to avoid the breeding season.</p>	Standard Maintenance and Repair Plan will include timing restrictions. Plan approval by SBC P&D Department (EQAP).	Prior to construction or ground disturbing activities.	SBC P&D and EQAP Biologist
TB-11	<p>The November 2004 Core Oil Spill Response Plan and July 2005 Supplement 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 shall include <u>updated</u>, 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</p>	Plan approval by SBC P&D	Prior to construction	SBC P&D

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	<p>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. <del>The Access points shall be reviewed and, if necessary, additional access points shall be need to be identified</del> 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. <del>These updates</del> This plan shall be reviewed and approved by SBC the P&amp;D Department prior to <u>land use permit approval.</u> <del>construction.</del></p>			
TB-12	<p><del>The Core Oil Spill Response Plan and its Supplement include species- and site-specific procedures for collection, transportation, and treatment of all potentially affected native wildlife, including sensitive species, for topsoil salvage and replacement, and procedures to minimize the loss of native seedbanks and prevent the spread of non-native weeds. Where disturbance to any habitats</del> disturbance cannot be avoided as determined by a P&amp;D-approved biologist, these stipulations for development and implementation of these site-specific habitat restoration plans and other site- and species-specific measures for mitigating impacts on local populations of all sensitive wildlife species and to restore native plant and animal communities to prespill conditions shall be implemented. <del>November 2004 Core Oil Spill Response Plan and July 2005 Supplement shall be updated to 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.</del> Access and egress points, staging areas, and material stockpile areas that avoid sensitive habitats shall be identified prior to ground disturbance. <del>The Core Oil Spill Response Plan and its Supplement shall include species- and site-specific procedures for collection, transportation, and treatment of all potentially affected native wildlife, including sensitive species, and for topsoil salvage and replacement. The plan shall be reviewed by the federal, state, and local agencies identified in Measure TB-11 prior to approval by the lead agencies.</del></p>	<p>The plan review by the same federal, state, and local agencies as in Measure TB-6a (above) prior to approval by the lead agencies.</p>	<p>Prior to construction or ground disturbing activities.</p>	SBC P&D
TB-13	<p><del>Prior to construction or any ground disturbance activity, the applicant shall develop</del> identify low impact clean up procedures <del>from the for inclusion in the Core Oil Spill Response Plan, and/or updated measures, to be implemented.</del> Where feasible, low-impact site-specific clean up techniques such as hand cutting contaminated vegetation and using low-pressure water flushing from boats shall be specified <del>in the Oil Spill Response Plan</del> to remove spilled material from particularly sensitive wildlife habitats</p>	<p>The plan review by the same federal, state, and local agencies as in Measure TB-6a (above) prior to approval by the lead</p>	<p>Prior to construction or ground disturbing activities.</p>	SBC P&D

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	(e.g., coastal estuaries) because procedures such as shoveling, bulldozing, raking, and draglining can cause more damage to a sensitive habitat than the oil spill itself. <u>As described in the Oil Spill Response Plan, the applicant shall evaluate non-clean up option for all native and/or ecologically vulnerable habitats, such as coastal estuaries, shall be considered. Prior to approval of the Land Use Permit, the applicant shall revise the OSRP to update the low-impact clean up procedures consistent with current technology. These strategies shall be reviewed and revised during the required future Plan updates to include best available practices.</u>	agencies.		
TB-14	The applicant shall <del>develop and implement a spill response training program</del> update the OSRP to ensure that spill response personnel <del>shall be</del> adequately trained for response in terrestrial environments and spill containment and recovery equipment shall be inspected at least annually and maintained at full readiness. 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.	Program adequacy shall be determined by the lead and responsible agencies.	Prior construction or ground disturbing activities and subsequently on an annual basis.	SBC P&D

### 5.3 Geological Resources

#### 5.3.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
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 drainages. The BMPs shall be 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-rainy periods, as well as revegetation of impacted areas. Revegetation shall address plant type as well as monitoring to ensure appropriate coverage of exposed areas and shall be consistent with existing project revegetation plans.	Review of OSRP. Site inspections during remediation activities	Prior to issuance of coastal development permit or land use clearance for grading.	SBC P&D <u>CCC</u>

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<b>Mitigation Measure</b>	<b>Mitigation Requirements and Timing</b>	<b>Method of Verification</b>	<b>Timing of Verification</b>	<b>Party Responsible For Verification</b>
GR-2	<p><u>The 2007 grouting program shall be completed prior to any equipment additions/modifications at the LOGP. If deemed necessary by the County System Safety and Reliability Review Committee (SSRRC), based on equipment weights and foundation requirements, an elevation survey shall be conducted before and during the equipment recommissioning additions/modification period followed by routine post-construction monitoring as deemed appropriate by the SSRRC. The elevation survey should use existing benchmarks to continue the subsidence monitoring currently being conducted at LOGP and a pre- and post-recommissioning monitoring plan shall be developed. The plan shall require a baseline survey 30 days prior to construction and once per month during LOGP equipment recommissioning/modifications. Post-commissioning survey frequency shall be based on the settlement results measured during recommissioning. The plan shall include contingencies for soil grouting or other ground stabilization measures to prevent damage to the facility.</u></p>	Annual erosion control survey reports	Annually	SBC P&D
GR-3	<p>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 right-of-way. 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.</p>	<p>Review of creek and drainage maintenance program</p> <p>Annual surveys following construction</p>	Annually	SBC P&D <u>CCC</u>

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Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
GR-4	The applicant shall conduct a study to determine the probable maximum tsunami and evaluate potential flooding and scour in the Santa Ynez River valley and at project facilities, as appropriate. The scour analysis shall determine a minimum burial depth to protect the pipe. In addition, the Applicant shall include in the Project Safety Plan a discussion of tsunami hazards, training and ensure that work crews receive tsunami-warning notifications from the Pacific Tsunami Warning Center (operated by NOAA) in accordance with the safety plan. If no such Project Safety Plan is prepared, a tsunami safety plan is herein required and shall include a protocol for workers to follow in the event of a tsunami. The tsunami plan shall be submitted to SBC P&D for review and approval prior to land use clearance.	Review of tsunami probability and scour analysis	Prior to land use clearance	SBC P&D <u>CCC</u>

### 5.4 Onshore Water Resources

#### 5.4.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
OWR-1	Prepare a Stormwater Pollution Prevention Plan (SWPPP) that describes <u>Best Management Practices (BMPs)</u> to be implemented for the purpose of minimizing soil loss and other construction-related sources of water pollution for any new construction associated with the project. <u>The SWPPP will be prepared in accordance with RWQCB guidelines and will designate BMPs that will be followed during construction activities. Erosion-minimizing efforts may include measures such as avoiding excessive disturbance of steep slopes; using drainage control structures (e.g., coir rolls or silt fences) to direct surface runoff away from disturbed areas; strictly controlling soil stockpiling and vehicular traffic; implementing a dust-control program during construction; restricting access to sensitive areas; using vehicle mats in wet areas; and revegetating disturbed areas following construction. Erosion-control measures will be installed before extensive clearing and grading begins, and before the onset of winter rains. The SWPPP BMPs shall specify that the staging of construction materials, equipment, and excavation spoils, and refueling of equipment will be performed at least 100 feet outside of drainage channels and intermittent</u>	Review and approval of plans. Inspection of BMPs	Prior to construction	SBC P&D <u>CCC</u>

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Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
	<p><u>streams, where these receive overland runoff. Mulching, seeding, or other suitable stabilization measures will be used to protect exposed areas during and after construction activities. If required, concrete washout stations will be established to avoid direct release to surface water or to areas where groundwater could become contaminated.</u> The SWPPP shall be submitted to <u>SBC/CCC</u> for review and approval prior to construction.</p>			
OWR-2	<p>The applicant shall construct a berm around Valve Site #2 with sufficient capacity to retain 150 percent of the maximum spill volume associated with this portion of the onshore pipeline (see Section 5.1, Risk of Upset). The applicant shall submit specific plans for the catchment basin at Valve Site #2 to <u>SBC/CCC</u> for review and approval prior to land use clearance. The berm shall be installed prior to operations.</p>	<p>Plan review prior to land use clearance.</p>	<p>Site inspections before construction sign-off. Berm installation before operation of facilities.</p>	<p>SBC P&amp;D B&amp;S <u>CCC</u></p>
OWR-3	<p>Update the Oil Spill Contingency Plan and the November 2004 Oil Spill Response Plan and July 2005 Supplement to address the SCADA system and GR.1-related requirements for the proposed project and conduct annual readiness exercises and audits to ensure that containment and cleanup equipment is readily available close to areas with greatest vulnerability to spills (e.g., along the lower sections of the Santa Ynez River).</p>	<p>Review of OSCP and attendance at training drills.</p>	<p>Annual readiness exercises and spill prevention and cleanup equipment audits.</p>	<p>SBC P&amp;D <u>CCC</u></p>
OWR-4	<p>PXP shall 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 percent of the associated release volume from nearby pipeline segments. Prior to land use clearance, PXP shall provide volume calculations to SBC for each of the catchment basins for the following leak scenarios: (1) 11 minutes of pumping time for a worst case leak in accordance with the MMS Oil Spill Response Plan, Volume 2, worst case scenario, and (2) 20 minutes of pumping time for a small leak as detected by the PXP leak detection system. The total pipeline emulsion fluids, including produced water, shall be included in the calculations. If it is determined that the volume of any of the catchment basins is insufficient to fully contain the leak scenarios analyzed, the catchment basin(s) shall be expanded. Plans for catchment basin(s) expansion shall be submitted to SBC for review and approval prior to land use clearance.</p>	<p>Review and approval of calculations and expansion plans. Inspection of basins.</p>	<p>Calculation and plan review prior to land use clearance. Periodic inspection of pipeline route.</p>	<p>SBC P&amp;D <u>CCC</u></p>

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Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
OWR-5	Ensure that any pipeline replacement within stream beds is engineered such that the replacement pipeline and any pipeline support structures are protected from scour and erosion effects of a 100-year flood discharge. Plans demonstrating these requirements shall be submitted to <u>SBC/CCC</u> for review and approval prior to land use clearance.	Review and approval of plans.	Prior to land use clearance	SBC <u>CCC</u>
OWR-6	If soil excavation is needed to expose buried pipeline or cleanup a spill within a stream bed, the area shall be restored to the maximum extent feasible to pre-spill conditions after excavation is completed.	Construction drawings. Part of spill report..	Immediately after spill occurrence.	SBC P&D

## 5.5 Marine Biology

### 5.5.7 Mitigation Monitoring Plan

Mitigation Measure	Plan Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
MB-1a	The November 2004 Core OSRP and July 2005 Supplement shall be updated to incorporate changes in platform 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. <u>The updated OSRP shall specifically detail methods to reduce impacts to sea otters and pinniped colonies should a spill occur. This discussion shall include methods for preventing oil from reaching pinniped colonies and places where otters congregate, and detailed protocols for handling and rehabilitation of oiled otters and pinnipeds. Specific methods to avoid disturbing pinniped colonies during cleanup activities shall be identified. The updated OSRP shall also re-evaluate the toxicity of Corexit 9527 and its</u>	Review of OSRP and annual training logs.	Prior to drilling followed by annual audits of the OSRP and training logs and manuals	SBC P&D, CSLC, CCC, CDFG, MMS

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Mitigation Measure	Plan Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
	<p><u>inclusion as a potential dispersant for the Tranquillon Ridge project, based on current information.</u></p> <p>The personnel and training sections of the OSRP shall be updated to identify training requirements for all personnel who would 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 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.</p>			
MB-1b	<p>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.</p> <p>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</p>	Receive funding	Prior to production	SBC P&D, CSLC, CCC, CDFG, MMS

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Mitigation Measure	Plan Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
	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			
<u>MB-1c</u>	<u>PXP shall make a yearly contribution not to exceed \$90,000 (in 2007 dollars) toward establishing a marine mammal and sea bird impact mitigation fund. The funding shall be used for either facilities construction or operating costs associated with the rescue and rehabilitation of injured marine mammals and sea birds. This yearly contribution shall be credited toward PXP's annual Coastal Resource Enhancement Fund (CREF) assessment for environmentally sensitive resource impacts, as currently required by Condition N-1 of PXP's Final Development Plan for the Point Pedernales Project.</u>	<u>Annual payment.</u>	<u>Annual</u>	<u>SBC</u>
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. The shunt depth shall be stated in the development plan that is submitted to MMS prior to drilling.	Site inspection	Prior to drilling activities	MMS
MB-3	The shunt depth (180 feet (55 m) below the sea surface) for the discharge of produced water shall be continued for the proposed project. The shunt depth shall be stated in the development plan that is submitted to MMS prior to drilling.	Site inspection	Prior to production	MMS
MB-4	A marine mammal observer shall be employed on each vessel servicing Platform Irene as described herein. The observer shall be provided training, which focuses 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. The 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, <u>such as the early summer blue whale migration.</u> The	Review of training plans and annual training logs	Prior to drilling activities	MMS

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Mitigation Measure	Plan Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
	<p>observer shall have no other responsibilities during periods when the vessels are in transit.</p> <p>The observer shall have unobstructed views onboard each vessel and serve as lookout so that collisions with marine mammals can be avoided. Additionally, vessel operators or the applicant shall develop, submit for approval, and implement a contingency plan that focuses on avoidance procedures when marine mammals are encountered at sea. Minimum components of the plan include:</p> <p>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.</p> <p>b) <del>Support vessels will not cross directly in front of migrating whales or any other threatened or endangered marine mammals or marine turtles.</del> <u>Vessel operators shall avoid travelling through blue whale feeding grounds and shall adjust transit routes to avoid large-scale krill populations during the annual blue whale migration period in the Santa Barbara Channel.</u></p> <p>c) When paralleling whales, support vessels will operate at a constant speed that is not faster than the whales.</p> <p>e) Female whales will not be separated from their calves.</p> <p>f) Vessel operators will not herd or drive whales.</p> <p>g) If a whale engages in evasive or defensive action, support vessels will drop back until the animal moves out of the area.</p> <p>Any collisions with marine wildlife will be reported promptly to the Federal and State agencies pursuant to each agency's reporting procedures.</p>			
<p><b>MB-5</b></p>	<p><del>PXP shall make a yearly contribution of \$90,000 toward establishing a marine mammal and sea bird impact mitigation fund. The funding shall be used for either facilities construction or operating costs associated with the rescue and rehabilitation of injured marine mammals and sea birds. This yearly contribution shall be in lieu of the applicant's annual three (3) point Coastal Resource Enhancement Fund (CREF) assessment for biological resource impacts, as currently required by Condition N-1 of PXP's Final Development Plan for the Point Pedernales Project.</del></p>	<p><del>Annual payment.</del></p>	<p><del>Annual</del></p>	<p><del>SBC</del></p>

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### 5.6 Oceanography and Marine Water Quality

#### 5.6.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
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 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 shall cease until repairs can be effected, spans can be supported, or problematic pipeline components can be replaced. If the leak detection system causes an unexplained shutdown of flow through the offshore pipeline, flow shall remain shutdown until the entire length of pipe is inspected. The applicant shall submit annual inspection reports the parties responsible for verification. These requirements shall be referenced in the project's Safety, Inspection, Maintenance, and Quality Assurance Program (SIMQAP).	Review of inspection and repair records.	During Operations	MMS CSLC SBC P&D SBC B&S

### 5.7 Commercial and Recreational Fishing

#### 5.7.7 Mitigation Monitoring Plan

Mitigation Measure	Plan Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
CRF/KH-1	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.	Review of dispute resolution documentation	During Operations	CSLC SBC
CRF/KH-2	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	Abandonment EIR/EIS Process	During preparation of the abandonment EIR/EIS	MMS and all responsible agencies

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	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 <u>and shall be implemented.</u>			

### 5.8 Air Quality

#### 5.8.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
Air-1	<p>PXP shall prepare and submit Dust Control and Reduction Plan to SBCAPCD prior to land use clearance. PXP shall implement dust reduction measures during construction. The following APCD Standard Dust Mitigation Measures shall be implemented:</p> <ol style="list-style-type: none"> <li>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.               <ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> </ol> </li> <li>2. Importation, exportation and stockpiling of fill material:               <ol style="list-style-type: none"> <li>a. Soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation.</li> <li>b. Trucks transporting fill material to and from the site shall be tarped from the point of origin.</li> </ol> </li> </ol>	<p>Review and approval of the Dust Control Plan.</p> <p>Compliance with the Plan shall be verified by construction site visits.</p>	<p>Prior to land use clearance</p> <p>Periodically during construction</p>	<p>SBCAPCD SBC P&amp;D</p>

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Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
	<p>c. If the construction site is greater than five acres, gravel pads must be installed at all access points to minimize tracking of mud onto public roads.</p> <p>3. Activation of increased dust control measures:</p> <p>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.</p>			
Air-2	<p>PXP shall ensure that emission reductions are provided to fully mitigate increases in operational <u>criteria pollutant</u> emissions associated with the proposed project consistent with SBCAPCD Rules and Regulations. The documentation supporting the available emission mitigations for operations shall be submitted to the SBCAPCD prior to land use clearance. No operations shall occur until the applicable project Permits to Operate are modified.</p>	<p>Review of the supporting documentation for the mitigations</p>	<p>Prior to land use clearance</p>	<p>SBCAPCD SBC P&amp;D</p>

## 5.9 Traffic

### 5.9.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
T-1	<p>The applicant shall include a restriction on delivery of equipment and supplies to non-rush hour periods (rush hour periods are considered to be 7a.m. to 9a.m. and 4p.m. to 6p.m.) in the project construction plans that are sent out in the contractor bid packages. The construction plans shall be submitted to SBC Planning and Development for approval prior to land use clearance.</p>	<p>EQAP inspections during construction.</p>	<p>During Construction</p>	<p>SBC P&amp;D</p>
T-2	<p>The applicant shall include a restriction on LPG/NGL and sulfur truck traffic at the LOGP to non-rush hour periods (rush hour period are considered to be 7a.m. to 9a.m. and 4p.m. to 6p.m.) in their contracts with vendors. The applicant shall also document arrival and departure times for these trucks. This requirement shall be include in the Traffic Management Plan (TMP). The revised TMP shall be submitted to SBC Planning and Development for approval prior to land use clearance.</p>	<p>Annual audit of shipping records.</p>	<p>During Operations</p>	<p>SBC P&amp;D</p>
T-3	<p>Require supply boats from Port Hueneme to use the Coast Guard's recommended marine traffic corridors to the maximum extent feasible.</p>	<p>Annual audit of marine vessel contracts</p>	<p>During Operations</p>	<p>SBC P&amp;D</p>

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### **5.10 Noise**

#### **5.10.7 Mitigation Monitoring Plan**

<b>Mitigation Measure</b>	<b>Mitigation Requirements and Timing</b>	<b>Method of Verification</b>	<b>Timing of Verification</b>	<b>Party Responsible For Verification</b>
N-1	PXP shall <del>establish</del> <u>adhere to</u> overland flight height minimums of 1,000 feet, when feasible with the approval of the FAA, and shall not fly over Oso Flaco Lake.	Flight records shall be maintained for six months and shall be provided to P&D upon request.	Operations	SBC P&D
N-2	Construction activities 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 note appropriate contact information for a complaint to be filed. Signs shall be in place prior to issuance of Land Use Permit and throughout grading and construction activities. All complaints received shall be forwarded by the applicant to SBC within 24 hours of their receipt.	Periodic inspection and response to complaints	Prior to and during construction	SBC P&D

### **5.11 Fire Protection and Emergency Response**

#### **5.11.7 Mitigation Monitoring Plan**

<b>Mitigation Measure</b>	<b>Mitigation Requirements and Timing</b>	<b>Method of Verification</b>	<b>Timing of Verification</b>	<b>Party Responsible For Verification</b>
Fire-1	PXP shall review and revise the Fire Protection Plan, Emergency Response Plan and Oil Spill Response Plan that apply to all the facilities which will have equipment or operations modifications due to the proposed project. The plans shall be submitted to the SBC Fire Department and P&D for review and approval prior to land use clearance.	The plans shall be reviewed prior to Land Use clearance.	Compliance with the plans shall be verified by annual drill and audit.	SBCFD

## EXHIBIT G-2

Final EIR MMP

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
Fire-2	The applicant shall update the LOGP Fire Protection Plan ( <u>FDP condition P-10</u> ) to include the power line, in particular, the Flammable Vegetation Management Plan, and Fire Prevention and Inspection Program parts of the plan to minimize possibility of a brush fire. The applicant shall submit the updated Fire Protection Plan to SBC Fire Department for review and approval prior to land use clearance.	Prior to Land Use clearance.	Compliance with the Fire Protection Plan shall be verified through regular drills.	SBCFD

## 5.12 Cultural Resources

### 5.12.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
CR-1	PXP shall prepare and submit grading plans showing all ground disturbances within 200 feet of a recorded archaeological site. The grading plans shall be submitted to P&D prior to issuance of coastal development permit or land use clearance for grading. All ground disturbance within 200 feet of a recorded archaeological site shall be 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.	Grading Plan review. EQAP monitoring.	Throughout ground disturbance activities.	SBC P&D
CR-2	PXP shall revise grading plans to include note for protocols to follow during unexpected discovery of archaeological resources. The grading plans shall be submitted to P&D prior to issuance of coastal development permit or land use clearance for grading. Prior to construction all crew members shall receive training on unanticipated cultural resource discovery protocols. 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	Grading Plan review. Crew Training sign-in log. EQAP monitoring.	Prior to (crew training) and throughout ground disturbance activities.	SBC P&D

## EXHIBIT G-2

Final EIR MMP

<b>Mitigation Measure</b>	<b>Mitigation Requirements and Timing</b>	<b>Method of Verification</b>	<b>Timing of Verification</b>	<b>Party Responsible For Verification</b>
	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 a Phase 1 archaeological surface survey shall be conducted prior to land use clearance for grading 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.	PXP shall submit results of Phase 1 survey to P&D.	Plan review. Any recommendations resulting from Phase 1 report to apply throughout ground disturbance activities.	SBC P&D
CR-4	A Phase 1 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 land use clearance to identify any cultural resources that may be affected during construction. If a cultural resource is encountered during the survey, it 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 <u>Guidelines</u> 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.	PXP shall submit results of Phase 1 surveys to P&D.	Plan review. Any recommendations resulting from Phase 1 report to apply throughout ground disturbance activities.	SBC P&D

## EXHIBIT G-2

Final EIR MMP

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
CR-5	The Oil Spill Response Plan (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. The revised OSRP shall be submitted to P&D prior to issuance of coastal development permit or land use clearance for grading.	Revised OSRP review. EQAP monitoring during spill clean up	Revised OSRP review. During spill clean-up	SBC P&D

### 5.13 Aesthetics/Visual Resources

#### 5.13.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
Visual-1	The applicant shall prepare and implement a visual mitigation plan for the Surf Substation that provides for better screening of the facility. The plan shall address measures to reduce the visual impact of the facility including, but not limited to, painting of substation substructures and re-landscaping. The plan shall be submitted to SBC P&D for approval prior to land use clearance.	Review of the plans.  Review of implementation efforts.	Prior to land use clearance.  Annually during operations.	SBC P&D
Visual-2	To minimize visual effects, all new equipment shall be painted in colors that are compatible with the surroundings. The applicant shall submit the painting plans for the new facilities to SBC P&D before land use clearance. In addition, future painting plans for any existing portions of the LOGP shall be submitted to SBC for review and approval prior to commencing with painting.	Review of the plans.  Review of the finished facilities.	Prior to land use clearance.  After completion of painting implementation.	SBC P&D

## EXHIBIT G-2

Final EIR MMP

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
Visual-3	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. The applicant shall also use existing poles to the maximum extent feasible for approaching the existing pipeline corridor's dirt road. The applicant shall utilize one of these options if they are allowed by VAFB. The applicant shall submit documentation to the SBC P&D from VAFB detailing their position on using the 13th Street bridge or the existing power poles for crossing the Santa Ynez River by the power line to Valve Site #2. This documentation shall be submitted to SBC P&D prior to land use clearance for construction of the power line to Valve Site #2.	Review of documentation from VAFB.	Prior to land use clearance approval for construction of power line to Valve Site #2.	SBC P&D
Visual-4	The applicant shall implement a lighting plan that would minimize nighttime glare. The applicant shall submit the plan to SBC P&D for review and approval prior to land use clearance. The plan shall include the facility lighting placement and design.	Review of plan	Prior to land use clearance	SBC P&D

### 5.15 Agricultural Resources

#### 5.15.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
AG-1	PXP shall revise the Oil Spill Response Plan (OSRP) and submit for review and approval. Plan shall include specific cleanup techniques for agricultural lands focusing on minimizing removal of top soil. <del>OSRP shall include compensation plan for the purchase of agricultural crops lost/damaged and replacement of removed top soil with equivalent imported soils.</del>	Revised OSRP shall be reviewed and approved.	PCDP/LUP	SBC P&D Fire
AG-2	<del>Monetary Payment for Lost Agricultural Productivity. Landowners shall receive compensation for the loss of any crops directly resulting from pipeline replacement activities. Compensation will take into account the duration of lost agricultural productivity.</del>	<del>Crop compensation plan shall be reviewed and approved.</del>	<del>Prior to issuance of coastal development permits or grading permits.</del>	SBC P&D
AG-23	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 <u>restored in accordance with land owner</u>	Plan shall be reviewed and approved	Plan prior to land use clearance during restoration.	SBC P&D

## EXHIBIT G-2

Final EIR MMP

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
	<p>agreements, replanted at a 1:1 ratio. Applicant shall prepare and submit for review and approval, a soil preservation plan that describes activities, including soil replacement, soil enrichment, and replanting (at a 1:1 ratio) to take place after pipeline replacement activities.</p>			

## 5.16 Energy and Mineral Resources

### 5.16.7 Mitigation Monitoring Plan

Mitigation Measure	Mitigation Requirements and Timing	Method of Verification	Timing of Verification	Party Responsible For Verification
Energy-1	<p>PXP The applicant shall prepare energy efficiency Study to be reviewed and approved by SBC and then implemented by PXP. The Study shall address future energy consumption by function (i.e., heater treaters, etc.) and assess available options to optimize energy efficiency utilizing existing equipment and operations. The Study shall also include a cost-benefit analysis for cogeneration. The Study shall be submitted to SBC for review and approval prior to land use clearance for the Tranquillon Ridge Project modifications at the LOGP facility. Energy efficiency measures deemed feasible by the County shall be incorporated into the LOGP modifications.</p>	<p>Plan review and approval. Inspection of facility modifications and operations.</p>	<p>Plan review prior to land use clearance. Facility &amp; operation modifications during operations.</p>	SBC

## **EXHIBIT G-3**

### **Tranquillon Ridge Oil and Gas Development Project (06RVP-00000-00001)**

Adopted by the County Board of Supervisors on October 7, 2008

#### **STATEMENT OF OVERRIDING CONSIDERATIONS**

The Final EIR for the Tranquillon Ridge project identifies significant, unavoidable impacts to marine and terrestrial biological resources and water quality, fishing, recreational, and cultural resources due to oil spills and spill clean-up efforts, and significant public safety risks associated with truck transport of gas liquids from the Lompoc Oil and Gas Plant. Several mitigation measures have been adopted to reduce these impacts, but not all significant impacts can be mitigated to less than significant levels. The benefits listed below warrant approval of the project notwithstanding that all identified significant adverse impacts are not fully mitigated.

The Tranquillon Ridge project now proposed by PXP offers unique benefits. Having balanced these benefits, based upon the best available information, against the significant and unavoidable adverse impacts of the project, the Board hereby determines that these significant and unavoidable impacts are acceptable in light of the project's benefits described below. Pursuant to CEQA Section 15043, 15092, and 15093, any remaining significant effects on the environment are acceptable due to these overriding considerations. This statement is supported by substantial evidence in the record that includes the certified EIR, staff report and analyses, and oral and written testimony.

#### **Use of Existing Coastal-Dependent Infrastructure without Extending Its Life**

The proposed project, as revised, offers the best alternative to access Tranquillon Ridge oil and gas reserves, utilizing existing coastal-dependent and coastal-related infrastructure over the next 14 years with a definitive early termination date that reduces risk of mishap generally associated with aging infrastructure. The recovered reserves, in turn, provide an interim source of domestic oil and gas production, while California implements strategies to reduce the State's dependence on fossil fuels and associated greenhouse gas emissions. Recovery of these reserves from an alternative location, such as onshore Vandenberg Air Force Base, would result in operation of two individual production projects at the same time where one will suffice.

**Termination Date:** PXP has revised its proposal so that operation of the Tranquillon Ridge project will permanently cease by December 31, 2022. This project revision is reflected in Final Development Plan Condition A-6 of the staff-recommended revised permit attached to the August 19, 2008 Board agenda letter. As of December 31, 2022, PXP will cease operations of the Tranquillon Ridge project. This project end-date coincides with the outer range of the estimated remaining project life for the existing Point Pedernales project. By limiting the Tranquillon Ridge operations to the same project life as the Point Pedernales project, PXP will avoid extending significant environmental impacts beyond the life of the existing operations. Importantly, this specific end-date identifies a clearly defined limit to increased oil and gas production and transportation due to the Tranquillon Ridge project and its associated impacts, and is unprecedented for this kind of project in Santa Barbara County.

In adopting the December 31, 2022 end date, the Board has relied on PXP's written request dated April 14, 2008 to incorporate this end date into the Tranquillon Ridge project, information in the Tranquillon Ridge EIR (specifically regarding "extension of life" impacts associated with the originally proposed Tranquillon Ridge project), and the Planning

### **EXHIBIT G-3**

Commission's deliberations and findings. The Board has not relied on any private, undisclosed agreements PXP may have executed with other parties, notwithstanding the publicity such agreements may have received in the media and in comments made to the Planning Commission and to the Board in written or oral testimony in the public hearings on the project.

**Continued Use of an Existing Coastal-Dependent Industrial Facility:** The current Point Pedernales project, that would provide the physical infrastructure to produce the Tranquillon Ridge field, is consistent with all but one applicable Coastal Act and County policies, the exception being Coastal Act Policy 30232. However, the Coastal Act provides leeway as regards this exception via Policy 30260 as discussed below. Platform Irene and associated pipelines are considered a coastal-dependent use that "requires a site on, or adjacent to, the sea to be able to function at all" (Coastal Act Section 30101). Section 30260 of the Coastal Act guides the Coastal Commission and local coastal jurisdictions as to the benefits of limiting coastal-dependent development to existing sites, such as Platform Irene, as follows:

*Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.*

The EIR did not draw a conclusion as to whether the conceptual "VAFB Onshore Alternative" or the Tranquillon Ridge project would be environmentally preferable overall because significant impacts would occur in both similar and different issue areas when compared to the Tranquillon Ridge project. We acknowledge that a significant impact associated with the Tranquillon Ridge project related to marine oil spills would be reduced if the resource were to be developed from an onshore site. However, other Class I impacts would still occur and construction-related impacts would be greater for a new onshore facility and the onshore alternative still results in significant adverse impacts from oil spills, thereby resulting in greater environmental impacts to the environment. A new onshore drilling and production facility clearly would involve more construction-related impacts, some of them significant and potentially unavoidable, than the Tranquillon Ridge project. With an onshore drilling and production site, significant impacts from an oil spill originating offshore would be eliminated, but some impacts to marine biota and water quality would still be likely in the event an onshore spill reached the ocean. Other significant impacts from both construction and operation would be likely to occur with an onshore production site. The Board found (Finding 1.6, above) that potentially feasible alternative locations for the facilities necessary to develop the Tranquillon Ridge Field reserves would not be less environmentally damaging than the Tranquillon Ridge project, primarily due to the type and amount of new construction that would be needed to implement the alternatives.

If the Tranquillon Ridge project were not approved (the "No Project Alternative" in the EIR), the resource could still be developed in the future. If this development occurred after Platform Irene is decommissioned, new construction potentially would result in significant impacts. Operational impacts would be similar to those for the Tranquillon Ridge project, several of them significant and unavoidable. In addition, as approved, the Tranquillon Ridge project will operate for, at most, 15 years. The price of crude oil recently was at all time highs, but has since been lowered significantly. The price, however, could fluctuate and return to higher levels in the foreseeable future. Given these market conditions, it is reasonable to assume that any new facilities built to develop the Tranquillon Ridge resources

### **EXHIBIT G-3**

would remain in operation for substantially longer than 15 years, perhaps 30 years or more. Significant and unavoidable impacts that would occur from such development would thus be extended well into the future. For these reasons, the Board finds that the public welfare is better served by developing the Tranquillon Ridge reserves using the existing facilities for a defined period of time, as approved herein.

**Continued Use of Existing Coastal-Related Facilities:** The LOGP is zoned M-CR, Coastal-Related Industry, and is contained within the boundaries of the onshore Lompoc Oil Field, inland of the Coastal Zone. Coastal-related development refers to uses that are “dependent on a coastal-dependent development or use” (Coastal Act Section 30101.3). This Coastal Act policy is not applicable to the LOGP due to the facility’s location outside of the Coastal Zone, however, the pipelines connecting Platform Irene and the LOGP traverse lands both within and outside of the Coastal Zone. The LOGP is not designated as Coastal-Dependent, nor is it a Consolidated Oil and Gas Processing Facility, but it does serve offshore oil and gas development and is the only existing facility in northern Santa Barbara County that is approved for this purpose. It has operated since 1987 as an oil processing facility, and since 1997 as a gas processing facility as well. All of these existing facilities will be used to implement the Tranquillon Ridge project. New project components associated with the Tranquillon Ridge project are limited to the potential addition of booster pumps at Valve Site #2, which is at the eastern boundary of the Coastal Zone, and installation of additional power lines and poles and possibly a new substation to operate the new pumps. The substation and many of the power poles would be located outside of the Coastal Zone.

The County has long-standing policies encouraging consolidation of industrial facilities within the County where possible. The project adjustments PXP has made will allow it to develop the Tranquillon Ridge oil and gas reserves without extending the life of its existing facilities and without incurring environmental impacts associated with significant new construction. As approved, the Tranquillon Ridge project will use existing facilities almost entirely and only minor new construction would occur. No other existing facilities in the region could develop the Tranquillon Ridge reserves with fewer impacts. Production of the Tranquillon Ridge reserves from any other site would require construction of a new platform or onshore drilling and production facility, new pipelines, and potentially a new gas processing plant. The Tranquillon Ridge EIR assessed the relative impacts of (1) constructing a new oil and gas drilling and production site and using the existing LOGP for processing, and of (2) constructing a new onshore oil and gas processing plant in the Casmalia Oil Field and new pipelines from the LOGP site to this plant. The EIR concluded that this “Casmalia East Alternative” would not reduce significant impacts of the proposed project and would result in additional environmental damage, primarily from construction.

**Interim Source of Domestically Produced Oil and Gas:** California is undertaking serious efforts to reduce its greenhouse gas emissions to 1990 levels by the year 2020, as enacted in the California Global Warming Solutions Act of 2006 (Health and Safety Code §§ 38500 *et. seq.*). Reducing the State’s dependence on fossil fuels is part-and-parcel of this effort, and will be accomplished through several strategies, including promotion of clean-energy alternatives to fossil fuels, energy conservation, and more efficient use of energy. In the interim, development of the Tranquillon Ridge oil and gas reserves between now and the year 2022 helps California to meet short-term demand for fossil fuels from domestic supplies as the State implements strategies to reduce its carbon footprint by reducing dependence on fossil fuels. In doing so, the Tranquillon Ridge project has the potential to avoid some greenhouse gas emissions into the atmosphere should this oil and gas reduce demand for imported crude oil and natural gas, or reduce demand for domestic production that that relies on high CO<sub>2</sub>-emitting enhanced oil recovery methods to extract heavy crude oil.

**EXHIBIT G-3**

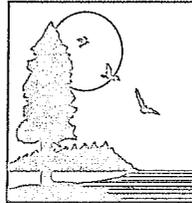
## **EXHIBIT G - 4**

### **Supplemental Greenhouse Gas Mitigation Measures**

- a) PXP shall mitigate all direct greenhouse gas emissions from Platform Irene attributable to drilling, production and closure of the Tranquillon leases. Mitigation shall occur through reduction of emissions or the purchase of offsets.
- b) PXP shall mitigate all indirect emissions attributable to electricity use caused by the drilling production and closure of the Tranquillon leases. PXP may utilize reduction credits generated by the purchase of lower emission buses as specified in the EDC-PXP Tranquillon Ridge agreement to help meet this requirement.
- c) Starting January 1, 2010 and on January 1 annually thereafter until the Tranquillon Ridge leases have been abandoned to the satisfaction of the Commission and the Commission has accepted a quitclaim of the leases, PXP shall submit a report to the Commission, describing in detail the compliance with this section.

**CALIFORNIA STATE  
LANDS COMMISSION**

CRUZ M. BUSTAMANTE, *Lieutenant Governor*  
STEVE WESTLY, *Controller*  
MICHAEL C. GENEST, *Director of Finance*



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**RESOLUTION BY THE CALIFORNIA STATE LANDS COMMISSION  
SUPPORTING THE FEDERAL AND STATE PROHIBITIONS AGAINST NEW  
OFFSHORE OIL AND GAS LEASES AND OPPOSING LEGISLATION INTRODUCED  
IN THE 2005-2006 SESSION OF CONGRESS TO WEAKEN THESE PROHIBITIONS**

**WHEREAS**, The 1969 oil spill in federal waters off California spilled 3,200,000 gallons of crude oil, resulted in long lasting environmental and economic harm to California's coast and became a rallying event for Californians and all Americans who cared about protecting the environment; and

**WHEREAS**, California took the lead in protecting America's coast by enacting new prohibitions on offshore oil and gas leasing in 1969, 1970, and 1971; and

**WHEREAS**, In 1994, the California Coastal Sanctuary Act of 1994 (Chapter 3.4 (commencing with Section 6240) of Part 1 of Division 6 of the Public Resources Code), was enacted, creating a permanent, statewide coastal sanctuary that prohibits new oil and gas leasing in state waters, from Mexico to the Oregon border; and

**WHEREAS**, The California State Lands Commission, California's land manager for the offshore waters, had already adopted an administrative moratorium (1988 and 1989) on entering into any new leases for offshore oil and gas development and, since 2000, has encouraged current lessees to quitclaim leases back to the state adding those lands to the state sanctuary; and

**WHEREAS**, A bipartisan consensus in Congress has protected the California and other American coasts from expanded offshore drilling for the past 25 years, renewing this protection each year in the form of a legislative moratorium contained in the appropriations bill for the Department of the Interior; and

**WHEREAS**, President George W. Bush's current White House budget for fiscal year 2007, released in January 2006, supports a continuation of this congressional offshore leasing moratorium; and

**WHEREAS**, Executive action in 1991 by former President George H.W. Bush protects the same areas through enactment of the "Presidential Offshore Leasing Deferrals," which President William J. Clinton subsequently extended until 2012 to ensure that protected coastal areas would not be threatened by offshore drilling impacts; and

**WHEREAS**, For the past several years, the U.S. Congress has discussed numerous measures that would have opened California's coast and the whole Outer Continental Shelf (OCS) to increased oil and gas drilling; and

**WHEREAS**, Since August of 2003, the State Lands Commission has adopted four different resolutions opposing these measures and any attempt to weaken the prohibitions against new oil and gas leasing in federal or state waters; and

**WHEREAS**, In 2006, an attempt to authorize new offshore gas leases, contained in the Interior Department appropriations bill, was narrowly defeated in a House floor vote; and

**WHEREAS**, Other draft bills now undergoing discussion, including HR 4761, (Jindal), the Domestic Energy Production through offshore Exploration and Equitable Treatment of State Holdings Act of 2006, and HR 4318 (Peterson), the Outer Continental Shelf Natural Gas Relief Act, would, if adopted, end the bipartisan congressional offshore leasing moratorium and the longstanding presidential offshore drilling deferrals, while pressuring coastal jurisdictions to facilitate new federal offshore drilling by making a state's share of the federal revenues from these activities contingent on state approval of new and expanded federal offshore leasing; and

**WHEREAS**, In addition, the protection of California's spectacular 1,100-mile coastline is of the utmost importance to a number of our state's coastal and ocean dependent industries, including tourism and commercial fishing, which contributed over fifty billion dollars (\$50,000,000,000) to California's economy in 1999; and

**WHEREAS**, California's ocean waters are also home to four important federal sanctuaries, the Monterey Bay National Marine Sanctuary, the Gulf of the Farallones National Marine Sanctuary, the Cordell Bank National Marine Sanctuary, and the Channel Islands National Marine Sanctuary that are areas of special conservation, recreational, ecological, historical, cultural, archaeological, scientific, educational, and esthetic qualities and, are particularly sensitive to the impacts of oil development; and

**WHEREAS**, Additional offshore oil leasing and production would degrade the quality of California's coastal air and water, and adversely impact its marine resources, including severe impacts from seismic surveys on marine mammals, that could include threatened and endangered species; and

**WHEREAS**, Offshore oil development poses a serious risk of oil spills, especially with the introduction of deepwater drilling technologies and floating oil storage and processing vessels, thereby threatening marine ecosystems, and that would have devastating effects on the southern sea otter, listed as a threatened species since 1997, as well as onshore wildlife, birds, and their habitats in the ocean, in estuaries, and on beaches; and

**WHEREAS**, Offshore oil development also leads to the industrialization of the shoreline, creating land use conflicts with recreational, environmental, and other onshore coastal dependent uses, visual degradation of coastal areas, and potentially life threatening public safety risks; now, therefore, be it

**RESOLVED BY THE CALIFORNIA STATE LANDS COMMISSION,** That the Commission urges Congress to continue the federal offshore oil and gas leasing moratorium as a permanent prohibition on new oil and gas leases; and be it further

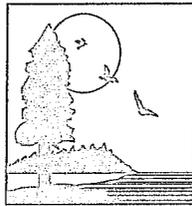
**RESOLVED,** That the Commission respectfully opposes the damaging coastal provisions of proposed federal energy policies, including, but not limited to, the adoption of HR 4761, (Jindal) and HR 4318 (Peterson), and any other coastal provisions, that weaken existing protection from new oil and gas leasing or California's legitimate role in energy siting decisions, due to the threat posed by such legislation to the economic integrity of California's coastal dependent tourism and fishing economies, and any consolidation of offshore authority with the federal government; and be it further

**RESOLVED,** That the Commission directs the Executive Officer of the Commission to transmit copies of this resolution to the President and Vice President of the United States, to the Speaker of the House of Representatives, and to each Senator and Representative from California in the Congress of the United States.

Adopted by the California State Lands Commission on June 26, 2006.

**CALIFORNIA STATE  
LANDS COMMISSION**

JOHN GARAMENDI, *Lieutenant Governor*  
JOHN CHIANG, *Controller*  
MICHAEL C. GENEST, *Director of Finance*



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**RESOLUTION BY THE CALIFORNIA STATE LANDS COMMISSION  
SUPPORTING SENATE BILL 151 (BOXER AND FEINSTEIN), WHICH  
PROHIBITS NEW OIL AND GAS LEASING IN FEDERAL WATERS OFF  
CALIFORNIA**

**WHEREAS**, U.S. Senators Boxer and Feinstein have introduced S. 151 to prohibit new oil and gas leasing in federal waters off California; and

**WHEREAS**, California's 1,100 mile coastline, with its beautiful beaches, wild cliffs, abundant fish stocks and fragile environment is a national treasure and a valuable state resource, which is at the heart of a tourist industry that generates nearly five billion dollars in state and local taxes each year; and is the heart of the state's \$43 billion ocean economy; and

**WHEREAS**, The citizens of California have long opposed new oil and gas drilling off their coastline and support protecting the fragile and valuable coastal environment over development of the relatively small amounts of oil and gas offshore California; and

**WHEREAS**, California initiated protection of its coast from oil and gas development when the California Legislature in 1955 and 1963, prohibited oil and gas leasing in the State waters off Monterey and Santa Cruz counties and portions of Los Angeles, Santa Barbara, San Luis Obispo, Humboldt, and Mendocino Counties; and

**WHEREAS**, The California State Lands Commission has not issued any offshore oil and gas lease for new areas since the 1969 spill from a well in Federal waters off Santa Barbara that released over three million gallons of crude oil, coating Santa Barbara County's ocean beaches; and

**WHEREAS**, The California Legislature continued the State's efforts to restrict oil and gas development in its own waters by enacting the California Coastal Sanctuary Act in 1994, which codified the Commission's earlier administrative prohibition of new offshore leases and created a statutory statewide coastal sanctuary that prohibits future oil and gas leasing in all State coastal waters, from Mexico to the Oregon border, in perpetuity; and

**WHEREAS**, The U.S. Congress has protected California coastline from expanded offshore drilling for more than twenty years, renewing this protection in the form of a legislative moratorium contained in the annual appropriations bill for the Department of the Interior; and

**WHEREAS**, The need for new oil development can be reduced by improving automobile fuel efficiency and energy efficiency, utilizing and further researching renewable energy and alternative fuels, and fully funding energy conservation and efficiency programs, including solar and renewables, weatherization, and other initiatives; thus increasing energy independence and reducing the reliance on foreign oil; and

**WHEREAS**, In spite of the steady opposition to new oil and gas leasing off California, various proposals have been made in the last five years to end the federal moratorium or to take steps, such as oil and gas inventories, that are intended to lead to new leasing; and

**WHEREAS**, The Commission has adopted six resolutions since 2001 supporting the existing moratorium on new federal leases and opposing the new initiatives to open the California coast to new oil and gas development and leases; and

**WHEREAS**, S. 151, recently introduced by Senators Boxer and Feinstein would permanently ban new oil and gas leasing in federal waters, consistent with the state's own prohibition of new leasing in state waters; now, therefore, be it

**RESOLVED BY THE CALIFORNIA STATE LANDS COMMISSION**, That it supports S. 151 and the prohibition it proposes for new oil and gas leases in federal waters off California and urges Congress to adopt this measure; and be it further

**RESOLVED**, That the Congress of the United States and the Federal government be encouraged to explore options to increase energy independence and reduce reliance on foreign oil, such as incentives to improve energy efficiency, requirements to improve automobile fuel efficiency, provide funding for research into renewable energy and alternative fuels, and fully funding energy conservation and efficiency; and be it further

**RESOLVED**, That the Commission's Executive Officer transmit copies of this resolution to the President and Vice President of the United States, to the Governor of California, to the Majority and Minority Leaders of the United States Senate, to the Speaker and Minority Leader of the United States House of Representatives, to the Chairs and Ranking Minority Members of the House Committee on Natural Resources, the House Committee on Energy and Commerce, the Senate Committee on Energy and Natural Resources, and the Senate Committee on Environment and Public Works and to each Senator and Representative from California in the Congress of the United States.

Adopted by the California State Lands Commission on February 5, 2007.

## **EXHIBIT I**

### **SLC LEASE AND LAND CONSERVATION AGREEMENT TRANQUILLON RIDGE PROJECT**

A. **The Land Conservation Agreement has three main features.**

i) **Establishes End Dates for federal Pt. Pedernales Project, state Tranquillon Ridge Project, onshore Lompoc Oil Field Project, and federal Pt. Arguello Project.**

As sole owner and operator of all three Lompoc projects, PXP can accept a lease condition requiring PXP to cease operations and pursue abandonment at all three Lompoc projects by 12/31/2022.

PXP has partners in the Pt. Arguello Project and third parties are responsible for most of the project's heavy abandonment obligations, i.e. the three OCS platforms, pipelines and other facilities. It would be inappropriate to condition the cessation and abandonment of Pt. Arguello operations in the SLC lease for the T. Ridge Project. There is no nexus between the two projects and third parties are involved.

ii) **Provides for Green House Gas Mitigations.**

This mitigates T. Ridge Project impacts. These are appropriate and workable provisions to include in the lease.

iii) **Provides for Clean-up and Preservation of Lands in the Lompoc and Gaviota Coast Areas.**

The conveyance of fee title (or conservation easements) to these lands will occur in phases. While most of the lands are owned and controlled by PXP, some are owned by third-party partnerships. The ultimate conveyance of these lands is subject to a number of contingencies. These include the Environmental Parties' performance of their own obligations, commercial production of T. Ridge, title issues, and the

willingness of private and public grantees to accept title to the various parcels of land involved.

Some of these lands will not be conveyed for years after the SLC lease terminates, i.e. once facilities have been abandoned and any contamination has been cleaned-up. It may be that some of the lands are accepted by the grantees, while others are rejected due to such things as insurmountable title issues. In the final analysis, that decision will be made by the grantee(s), whether they are conservation organizations or public entities.

It would be inappropriate, unnecessary and probably infeasible for SLC to become a beneficiary of or a party to these land contracts. There is no nexus between the lease and the donation of these lands. The NGOs involved have strong “mission” reasons and financial incentives to see that these lands are cleaned-up and preserved in perpetuity. At the end of the day, there is plenty of structural assurance that the conveyances will actually take place.

**B. Suggested Approach to Lease.**

- i) Incorporate the Lompoc End Date provisions in the lease.
- ii) Incorporate the GHG mitigation provisions in the lease.
- iii) Provide that promptly after the Lompoc End Date, PXP shall commence and promptly pursue abandonment and restoration of the Lompoc Oil Field Project, the Pt. Pedernales Project (including the T. Ridge Project), Platform Irene, the LOGP and associated pipelines and facilities. Note, that decommissioning of the LOGP will preclude any further handling of production from Platform Irene, even if the platform were to stay for some reason. PXP owns the platform and the other facilities. The federal government would have to “federalize” Platform Irene, the pipelines and the LOGP, and would have to successfully attract another operator willing to take on all of the responsibilities of an operation that is by all reasonable estimates projected to have outlived its economic life by that time.

iv) The Staff Report can explain that PXP and the NGOs have entered into contracts which provide, subject to certain conditions, that Pt. Arguello Project operations will terminate within nine years, and that approximately 4,000 acres of Lompoc area and Gaviota coastal lands will be cleaned-up and preserved in perpetuity for open space preservation, management and restoration of the natural resources, passive recreation, education and research. While SLC has no authority over these matters, the operator and these well-respected NGOs have expressed their conviction that these additional public benefits will in all likelihood occur if the T. Ridge Project goes forward.

C. **PRC 6244 Finding (the lease is in the best interests of the state).**

Factual bases for the finding include the following:

- Economic benefits.
- Existing infrastructure used. This means immediate cash flow to the state and minimal new impacts.
- CEQA and Coastal Consistency findings which show that this project is consistent with the Coastal Act and involves few new impacts as compared to existing Pt. Pedernales operations (the baseline).
- T. Ridge production will end within the anticipated life of existing Pt. Pedernales operations.

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**EXHIBIT J**

