0034

Attachment

Additional Comments on the Draft Environmental Impact Statement

A. EXECUTIVE SUMMARY

Page S-27: The first full paragraph sets forth the assumption that existing facilities such as pipelines and processing facilities will be used to handle any production resulting from new leases. Please clarify which laws or regulations ensures shared use of such facilities if owned and operated by parties different that the new lessees.

Page S-26: As noted in other comments below, the DEIS reflects a serious misunderstanding about the California crude oil market. See, in particular, our comments for subsection 3.3.6, below.

Chapter 1: Purpose and Need

SECTION 1.2: GENERAL BACKGROUND: LEGISLATION AND POLICY

Please expand the description to better describe the actions that would be taken by the U.S. Department of the Interior's Bureau of Land Management. As currently written, the reader only learns about USFS's role.

SECTION 1.5: PROPOSED ACTIONS – DECISIONS TO BE MADE

The first paragraph on page 1-11 states, among other things, that the pending decision by the USFS cannot preserve oil and gas deposits for the future. As currently written, this sentence suggests that the USFS cannot legally choose alternative 1 (the no leasing alternative). Please elaborate on the legal parameters of the decision and explain if the law prohibits USFS from denying access to a particular area for purposes of oil and gas development should the adverse environmental impacts outweigh the benefit of oil and gas development.

Additionally, this paragraph notes that the federal government has a financial interest in leasing that might be jeopardized should drainage of federal deposits occur from wells drilled on private lands. Please elaborate which policies guide the decision in choosing a drill-site should the environmentally superior location be on private lands, but would result in drainage of federal deposits.

SECTION 1.6: REASONABLE FORESEEABLE DEVELOPMENT (RFD) SCENARIO

The first full paragraph on page 1-15 outlines, but does not explain, the basis for determining the RFD; that is, historic oil and gas information, geologic information, and projected market trends. However, we find the DEIS to carry some critical errors in determining the RFD. For instance, the consultant misunderstands the current technological capability of extended reach drilling, instead using assumptions based on technological capabilities 20 or more years old. We also find that the projection of market trends is seriously flawed. Consequently, we request considerable expansion of this section to provide a more detailed explanation of the information and assumptions used to develop the RFD. We also believe that use of more accurate information and assumptions may lead to a notably different RFD.

SECTION 1.7: FEDERAL MANAGEMENT OF LEASES AND DEVELOPMENT

Subsection 1.7.3.3 (page 1-19) states that this EIS and associated Record of Decision do not authorize any ground-disturbing activities. It further states that the FS cannot conduct adequate NEPA analysis to make decisions regarding specific operations on a leasehold. We strongly disagree with this assumption, for it implies that leasing, and the monetary investment made thereof, does not provide a reasonable expectation of development and associated ground-disturbing activities. As our first comment under Chapter 4 (below) illustrates, leasing is perceived to be tantamount to development, and the Record of Decision to make lands

available for leasing does, therefore, result in ground-disturbing activities because it provides sufficient expectation of development by virtue of exchanging large sums of money for the purchase of a lease. While this DEIS cannot address project-specific activities in detail, it could and should go much further in recognizing the importance of the decision at hand and the environmental impacts that would likely result. This DEIS should also explore under what realistic circumstances the Forest Supervisor might disapprove development of an area altogether at the SUPO decision, and under what realistic circumstances the lessee would be entitled to compensation if an area were disapproved for development.

Chapter 2:Alternatives

SECTION 2.2: SCOPING

Thank you for a very informative description of the scoping process.

SECTION 2.3: ISSUES

Thank you for a very informative description about the comments received during he scoping process.

SECTION 2.4: ALTERNATIVES

Please restructure the alternatives to provide more flexibility. As they stand now, alternative 1 is the only alternative that allows for the elimination of any High Oil and Gas Potential Area (HOGPA) from consideration. This "all-or-nothing" approach does a disservice to the decision-maker because some HOGPAs may be suitable for leasing while others may not be due to unmitigable environmental impacts. Please adjust the DEIS so that it provides sufficient flexibility, backed by adequate environmental information, to identify and eliminate certain HOGPAs if the adverse environmental impacts outweigh the benefits of development. We believe the Figueroa Mountain and La Brea HOGPAs would qualify, provided that adequate environmental information is made available.

Regarding Table 2-1 on page 2-15, we offer the following considerations. First, the burial depth of pipelines should take into consideration the rate of surface erosion so that burial depths would be deeper in highly erosive areas. Otherwise, unplanned exposure of pipelines would likely occur during operations. Also, please adjust this assumption to explain if USFS policy requires removal of buried pipelines after their use has terminated. If abandonment in-place is permitted, then burial depth should be sufficiently deep in highly erosive areas (such as stream beds) to avoid daylighting and subsequent environmental damage (e.g., destruction of stream banks, damming and subsequent flooding). We also recommend that construction of pipelines be assumed to occur in a manner that maximizes shared use of pipeline corridors and maximizes pipeline transportation of all gas and liquid products (i.e., natural gas, natural gas liquids, and crude oil). Lastly, we believe the last row of this table substantially underestimates the time and effort typically involved in land reclamation, which based on our experience, typically includes remediation of contaminated soils and, occasionally contaminated water.

Subsection 2.4.6.4 provides an inadequate explanation for dismissing a "no new access" alternative from further consideration in the DEIS and appears to dismiss alternatives 4a and 5a altogether from further consideration. First, we again request the DEIS be organized in a manner that does not unduly reduce the flexibility of the Forest Supervisor to make a decision that is fully informed by environmental information. The "all-or-nothing" organization of the DEIS with regard to HOGPAs does a disservice to the decision-making process. Do not eliminate the option for the Forest Supervisor to remove one or more HOGPAs from

further consideration for leasing due to extenuating environmental circumstances, while allowing other HOGPAs to be open to leasing.

Second, the current explanation inaccurately implies that, if new development without new access could result in unmitigable significant impacts to scenic and recreational resources since it would be directly visible from the transportation system, then new development with new access would avoid such unmitigable significant impacts. A more accurate explanation would recognize that:

(1) New development in some areas could occur without new access and not result in unmitigable significant impacts to scenic and recreational resources where the existing access is not used by the public to access scenic and recreational resources; and
(2) Providing new access does not remedy the issue. Rather, in some or all cases, new access also results in unmitigable significant impacts to scenic and recreational resources because (a) it also relies, in part, on existing roads (e.g., Figueroa Mountain Area) and (b) it expands the transportation system, bringing to the new oil and gas development, both of which also could result in unmitigable significant impacts to scenic and recreational resources.

We request that this section be re-written with more supportable analysis and that the option of eliminating certain HOGPAs from consideration for new leasing be carried forward should new access result in unmitigable significant impacts that outweigh the benefits of developing the area.

SECTION 2.4: MODELING OF ALTERNATIVES CONSIDERED IN DETAIL

We request deletion of the BOE, since it has already been inappropriately used in workshops to imply that both oil and gas production from Los Padres National Forest can be used to provide electricity to California. The gas could be used to generate electricity in California only if developed and shipped to a public utility's transmission system, which is unlikely given the high cost of building the pipeline compared to the small amount of reserves (and therefore return on investment) projected for most HOGPAs. The oil, which is more likely to be developed and marketed, is not used to generate electricity, but rather to refine into gasoline and other byproducts or into asphalt.

Additionally, we request revision of the models because the current modelling is based on the incorrect and gravely outdated assumptions that extended reach technology is limited to a distance of ½ mile from the drill-site. Rather, current capabilities can reach as far as 5 miles from the drill-site (see the attached figure). The Department of the Interior's Minerals Management Service frequently explains how this technology substantially reduces environmental impacts by reducing the number of drill-sites required to develop oil and gas reserves. Fewer drill-sites would reasonably result in fewer miles of new roads and pipelines, further reducing unnecessary disturbance to the surface of forest lands. Moreover, current technology allows larger buffer zones between environmentally sensitive resources such as anadromous fish streams and drilling activities, including service roads. Several examples of the use of such technology exist locally. Both Unocal and ExxonMobil have been able to reduce the number of drill-sites originally projected to develop offshore reserves. Several other offshore lessees are now proposing to develop undeveloped fields from existing platforms, situated over producing fields because extended reach technology now allows such development from a distance up to five miles.

Decisions about leasing based need a broader base of supporting information rather than reliance on outdated oil and gas technologies that are considerably more damaging to the environment. This oversight alone provides sufficient justification to revise and re-circulate the DEIS.

Chapter 3: Affected Environment

SECTION 3.1: PHYSICAL ENVIRONMENT

1. As noted in other comments, the decision and act of leasing entails investment-backed expectations by lessees due to the large sums of money they pay to the federal government. Therefore, there is a clear expectation that leasing will result in development, provided that commercial quantities of oil are discovered. The probability of such discoveries are heightened in this decision document because it identifies HOGPAs.

   Given this context, we question the conclusion drawn in the second full paragraph on page 3-16 that air emissions cannot be predicted at this time and, as a result, a conformity determination lies beyond the scope of the DEIS. In fact, the DEIS does predict air emissions (see Table 4-3, for example). We request you revise this section and rely on the best predictions available.

2. We question the treatment of oil and gas development as being a short-term impact, as it is classified in several subsections (e.g., subsection 4.3.2.5.5) that compare short term impacts to long-term impacts. Other sections of this DEIS seemingly contradict this representation, instead showing oil and gas development in Los Padres National Forest to be a long-term activity that dates back over a century. This long-term use may preclude other uses such as expanded recreational use of a particular area, resulting in a long-term impact.

3. Subsection 3.3.2, Socioeconomics/Growth, inappropriately ignores data for Kern County even though the largest projected development resulting from leasing HOGPAs would result in the South Cuyama area, and the Traffic/Access analysis (subsection 3.3.4) indicates all commuter and commercial traffic serving South Cuyama field development to originate and terminate in Kern County. It stands to reason that, given the proximity of the Suoth Cuyama field to support services in Kern County, as well as proximity to experienced oil and gas workers, socioeconomics and growth is more attributable to Kern County than Santa Barbara County. Please re-write this section, giving appropriate attention to socioeconomic characteristics of Kern County.

4. Subsection 3.3.2, Socioeconomics/Growth. The DEIS was issued in late 2001; however, the most current data used in this subsection 1995, over six years old. Please update this section with relevant, current data, including use of 2000 census data.

5. Subsection 3.3.6, Oil and Gas Development. The first paragraph of subsection 3.3.6.4 (Industrial Infrastructure) is substantially inaccurate, thereby providing a very inaccurate assessment of the costs and benefits of opening new forest lands to oil and gas development. We have verified with staff of the California Coastal Commission that no refineries in California have been idled for lack of crude oil. Refineries are temporarily idled for two reasons: (1) planned maintenance (called turnarounds), and (2) unplanned repairs, largely due to unexpected accidents that have damaged key equipment and plants. We have also confirmed that there is no excess capacity that results in unfilled demand. Such circumstances would result in investigations by the Attorney General's office and clearly be prevalent in the media (i.e., market manipulation to raise the price of crude oil products).

   Rather, the California oil market, and the heavy crude market in particular, has been characterized by low and unstable oil prices since 1986, when Saudi Arabia terminated its role as a swing supplier.[5]

[5] See. for example. U.S. Department of Energy, Energy Information Agency, *Oil Market Basics*. section titled "Global Oil Supply by Region (eia.doe.gov). "The higher oil prices of the 1970s and early 1980s afforded a strong economic incentive to explore for

This situated was further exasperated for California producers when Congress repealed the Windfall Profits Tax as part of the Omnibus Trade and Competitiveness Act of 1988. This action resulted in increased delivered of Alaska North Slope (ANS) crude oil to the West Coast, instead of more distant markets, including the Virgin Islands and Puerto Rico, and the Gulf of Mexico and East Coast.[6]

The ANS crude displaced California producers to some extent, many of which either plugged and abandoned several wells prematurely (in the sense that more oil could have been extracted under better economic circumstances) or shut them in while awaiting oil priced to recover and stabilize for a period of time. Although oil prices have spiked occasionally, as in 2001, they have not stabilized at a higher price for any substantial amount of time to re-instill confidence in California's domestic upstream market. The California Department of Conservation, Division of Oil, Gas, and Geothermal Resources reports 21,989 shut-in wells statewide during 2001, 9,034 of which have been shut-in for 5-10 years, 5,477 of which have been shut-in for 10-15 years, and 7,478 of which have been shut-in for more than 15 years.

Former Governor Pete Wilson, with support from the state legislature and California Energy Commission, sought to lift the export ban on ANS oil so that it would flow to markets in East Asia rather than California, thereby re-generating more demand for California's domestic production. The ban was lifted in 1996.[7] As shown in the table below, however, the anticipated benefit to California producers did not materialize. Instead, the decrease in ANS crude oil to California was filled with imports from foreign sources, as crude oil prices remained low and unstable.

The data presented in the following table does not support the assumption presented in subsection 3.3.6.4 that new production from Los Padres National Forest would displace feedstock from foreign markets. The increase in foreign sources of oil, rather than California's domestic sources, likely results from both price and quality of oil factors. At this point, there is no apparent evidence that opening new onshore areas of California to oil development will reverse this trend. Any assumption to the contrary in the DEIS requires adequate supporting data and analysis.

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and produce oil, and production rose in many areas. At the same time, oil demand declined – the expected response to the high prices. Saudi Arabia became the "swing supplier," reducing its production as necessary to balance supply and demand. Its rejection of that role in mid-1985 – its output had fallen to about 25 percent of its 1980 peak – brought the full force of the supply/demand imbalance onto markets and resulted in the price collapse of 1986. Prices did not return to the pre-1986 level until the Persian Gulf conflict of 1990-91, and then only briefly. When, in 1998, Asian demand faltered with the region's economies, and northern hemisphere demand faltered with the warm winter, the high production levels resulted in another price collapse. The market reaction in 1998, however, was not the same as in 1986 – demand did not recover as quickly and supply did not fall as quickly. Hence, the low price period lasted longer and showed lower prices in 1998 than in 1986. In early 2000, oil prices exceeded the levels of the Persian Gulf conflict in nominal terms. Sharp as the price increases were in early 2000, however, crude oil prices remained less than half of the early 1980s peak in terms of real buying power." Prices subsequently collapsed again, showing the volatility of the market and serving as additional disincentive for California producers to bring wells back into production. Also see Rognvaldur Hannesson, *Petroleum Economics* (Westport, Conn: Quorum Books, 1998), page 8-9.

[6] See, for example, U.S. Department of Commerce, Bureau of Export Administration, *Report to Congress on U.S. Crude Oil Exports*, August 1989, page III-22: "While in effect, the Windfall Profits Tax allowed the integrated firms (Exxon and Sohio) to deduct the incremental cost of shipping ANS crude to the Gulf Coast from the federal and state tax liabilities. This resulted in a substantial reduction in transportation charges. However, once the WPT subsidy became ineffective because of substantially lower oil prices in 1986, the integrated firms had a reduced incentive to sell ANS crude on the Gulf Coast. The result is that today the integrated firms prefer to sell ANS crude on the West Coast because of the lower transportation charges."

[7] The ban was eliminated in April 1996, and shipments began one month later with the first (a 1.3 million barrel contract) sent by British Petroleum to the Chinese Petroleum Corporation of Taiwan. Additional contracted shipments to two South Korean firms followed with ANS exports averaging 70,000 barrels per day from July 1996 to June 1997 (The Oil Daily 9-24-97, p.3). BP also completed an agreement with China's petroleum company (SINOPEC) for 7.2 million barrels through 1998 (an average of 15,000 barrels/day) and is currently exporting 80,000 barrels per day, or 15 percent of its Alaska production to Taiwan and Korea (NEWS IN BRIEF, North America, Petroleum Economist, London, UK, *Petroleum Economist* Jan. 1998, p. 51).

SOURCES OF OIL SUPPLIED TO CALIFORNIA REFINERIES Source (millions of barrels)							
Year	**Alaska**	**California**	**Foreign**	**TOTAL**	**% Alaska**	**% California**	**% Foreign**
1982	196,462	365,962	33,553	595,977	33	61	6
1983	189,538	377,068	47,991	614,597	31	61	8
1984	210,450	369,225	53,262	632,937	33	58	8
1985	210,647	398,280	35,408	644,335	33	62	5
1986	237,508	403,477	36,877	677,862	35	60	5
1987	260,843	386,676	33,395	680,914	38	57	5
1988	306,247	365,354	37,217	708,818	43	52	5
1989	328,407	337,489	46,707	712,603	46	47	7
1990	320,873	336,083	39,454	696,410	46	48	6
1991	316,115	336,620	30,723	683,458	46	49	4
1992	299,652	331,638	33,056	664,346	45	50	5
1993	285,565	342,762	43,359	671,686	43	51	6
1994	297,017	319,193	49,192	665,402	45	48	7
1995	264,520	320,824	56,864	642,208	41	50	9
1996	268,804	316,203	63,996	649,003	41	49	10
1997	244,444	322,198	78,108	644,750	38	50	12
1998	221,983	317,817	104,653	644,453	35	49	16
1999	188,743	306,856	140,599	636,198	29.7	48.2	22.1
2000	163,233	326,371	169,105	658,709	24.8	49.6	25.7

6. Subsection 3.3.8, Safety and Hazards, does not appear to consider risks of transporting natural gas liquids by road/highway. Nor does it touch upon potential hazards of hydrogen sulfide. Please address such hazards.

Chapter 4: Environmental Consequences:

We strongly disagree with the premise proffered in the first paragraph of this section, particularly the supposition that *"... no ground-disturbing activities would result from the leasing decisions that this document addresses."* (Page 4-5.) Essentially, a decision to lease is tantamount to an approval for oil and gas development. We offer opinions of the U.S. Supreme Court and the National Research Council as evidence. These opinions were rendered in consideration of the adequacy of environmental information for OCS oil and gas decisions, but are equally applicable to oil and gas decisions in Los Padres National Forest.

We refer you to the National Research Council's report, titled *The Adequacy of Environmental Information for Outer Continental Shelf Oil and Gas Decisions: Florida and California*, 1989. Pages 6-7. We quote at length from a critical analysis about the separation of leasing from development and production:

One matter of underlying concern to the committee and panels involves the phasing of OCS leasing, exploration, development, and production as currently practiced. Studies by MMS's Environmental Studies Program and the assessment found in DOI's environmental impact statements have focused almost entirely on the lease sale stage. Two fundamental problems result from this practice. First, the exact location of oil and gas reservoirs is unknown at the prelease state. As a result, it is impossible to identify the specific future location of facilities and to predict specific environmental impacts of development. Equally important, the uncertainty about actual oil and gas reserves at the prelease state makes it difficult to balance the national benefits of production against the environmental risks. Second, by the time producing reservoirs are identified, the industrial lessor typically has committed enormous amounts of money to the lease. DOI [Department of the Interior] *has never implemented the procedures provided in the OCS Lands Act Amendments of 1978 (OCSLAA) for lease cancellation, and so a decision to lease is generally perceived as*

tantamount to a decision to develop and produce, provided that commercial reserves are found in a lease area. ... As DOI's EISs point out, it is often not possible to do adequate assessment before leasing. However, once it does become possible to generate the needed information and analysis, a decision not to proceed with development has already been effectively precluded.

*The perception is widespread that leasing implies development and production if commercial quantities of hydrocarbon resources are found. In a 1984 Supreme Court decision (*Secretary of the Interior vs. California, *104 S. Ct. 656), the majority wrote: "... a lease sale is a crucial step. Large sums of money change hands, and the sale may therefore generate momentum that makes eventual exploration, development, and production inevitable." The minority wrote: "Approval for exploration and development by the lessee is obviously the expected and intended result of leasing; if it were not, the Secretary would not bother to lease and the lessees would not bother to bid." In spite of provisions for a "focusing of analysis and review [that] will occur at later stages in lease sale planning in most states doubt that adequate analysis will be performed, and that decision alternatives will be preserved through the process" (Hershman et. Al., 1988). Many local, state, and federal government officials have expressed similar points of view to the OCS committee and panels. Furthermore, several MMS officials have informed the committee that out of hundreds of OCS development and production plans submitted by industry since 1978, although modifications have been required, none has ever been denied by the Department of the Interior. ...*

Unless you can show the phases decision-making process can and does promote denial of development after an areas is leased should the significant environmental impacts outweigh the benefits of oil and gas development from the area, then the premise of this section is incorrect, and misinforms the decision-making process.

SECTION 4.3.2: AIR QUALITY

Table 4-6 does not provide sufficient information to distinguish one alternative from another. Rather, it has the reverse affect – its over-simplification suggests no substantial difference in alternative, including the no-leasing option. Please revise to include more details, including amount of estimated emissions, as provided in previous tables of this section so that this table, which concludes the section with a comparison of alternatives, provides adequate information.

SECTION 4.4.2: BIOLOGICAL RESOURCES

1. Sensitive Species Impacts: The DEIS should analyze the impacts of the proposed project on sensitive species within the project area. Of particular concern are the areas surrounding Cuyama, New Cuyama and Figueroa Mountain. Two U.S. Forest Service documents indicate that there are clusters of endangered, threatened and sensitive species of flora and fauna within those areas. The EIS should review these sources, noted below, and assess any potential threats to sensitive species posed by the project. The sources are:

   "Southern California mountains and foothills assessment: Habitat and species conservation issues." , J.R. Stephenson and G. M. Calcarone, General Technical Report GTR-PSW-172. Pacific Southwest Research Station, Forest Service, USDA: Albany, CA.

   "Southern California Conservation Strategy Province Consultation Package", United States Department of Agriculture. 2000. USFS, Southern California Province: San Diego, California.

2. Road Widening Impacts: Please note that the impacts of any road widening necessary for construction, production and maintenance of the Project should be analyzed in the EIS. In particular, this analysis should assess the loss of habitat, impacts to sensitive species, slope stability, erosion, introduction of hazardous materials, increased runoff of toxic materials (oil and fuel) into soil and waterways, noise, and loss of aesthetic/visual resources associated with the use of Figueroa Mountain

Road by large trucks. This road is narrow, winding and for many sections has canopies of mature native trees which could be degraded or altered as a result of large truck traffic.

SECTION 4.5.2: SOCIOECONOMICS / GROWTH

This section inappropriately ignores consideration of socioeconomics and growth in Kern County. Although no HOGPAs are located in Kern County *per se*, the South Cuyama HOGPA has a much more significant socioeconomic affect on Kern County than Santa Barbara County, given South Cuyama's proximity to housing, oil and gas workforce, and supporting industries located in Kern County. In fact, Section 4.5.4, Traffic/Access, correctly connects both industrial and workforce traffic associated with South Cuyama oil and gas development to locations in Kern County, not Santa Barbara County. This error is particular prominent in Table 4-29, which incorrectly allocates benefits to Santa Barbara County (e.g., personal income, employee compensation, indirect business taxes, and employment) that more likely accrue to neighboring Kern County, as the analysis in section 4.5.4 suggests. Please revise the DEIS to attribute more discussion to Kern County socioeconomics, rather than Santa Barbara County.

SECTION 4.5.3: SOCIAL IMPACTS

Please address the extent to which extended reach drilling technology, which can reach as far as 5 miles from the drill-site, can reduce impacts.

SECTION 4.5.4: ACCESS / TRAFFIC

Mr. Court Eilertson, Senior Transportation Planner, of the County's Public Works Department, Roads Division, provides the following comments.

1) The potential mixing of recreational and oil & gas related tanker truck traffic in the regions described in the DEIS is an issue that is not desirable from a traffic engineering/transportation planning standpoint. This point should be further elaborated upon in the DEIS to better inform the decision-making process. Additionally, if specific sites are to be pursued in terms of development, a more detailed analysis should be prepared to account for specific conditions, in addition to mitigation measures for each.

2) The traffic index (TI) of many of these roads (i.e. Happy Mountain Road, Tepusquet Road, etc.) may not be able to handle the types of vehicles associated with these type of heavy tanker and other vehicles. This constraint would be an issue that would require that our department's review and comment accordingly if any of these sites were to be considered for development.

3) The width of the roads discussed in the document are typically sub-standard, and would need to have significant improvements made to them to be able to accommodate the mix of recreational and oil & gas related traffic. Such improvements at many of these locations are infeasible due to steep grades, drainage, and other issues.

Please contact Mr. Eilertson at (805) 568-3042 if you wish to discuss these points further.

SECTION 4.5.5: LAND AND RESOURCE MANAGEMENT PLANS

Road Widening Impacts: Please note that the impacts of any road widening necessary for construction, production and maintenance of the Project should be analyzed in the EIS. In particular, this analysis should assess the loss of habitat, impacts to sensitive species, slope stability, erosion, introduction of hazardous materials, increased runoff of toxic materials (oil and fuel) into soil and waterways, noise, and loss of

aesthetic/visual resources associated with the use of Figueroa Mountain Road by large trucks. This road is narrow, winding and for many sections has canopies of mature native trees which could be degraded or altered as a result of large truck traffic.

SECTION 4.5.6: OIL AND GAS DEVELOPMENT

See comments expressed above regarding subsection 3.6.6.

SECTION 4.5.7: SCENIC RESOURCES

Please address the extent to which extended reach drilling technology, which can reach as far as 5 miles from the drill-site, can reduce impacts on scenic resources. Also address removal of the Figueroa Mountain Area from consideration as a mitigation.

SECTION 4.5.8: SAFETY AND HAZARDS

Please address onsite and offsite hazards of transporting natural gas liquids (which quality as hazardous materials) via county roads and highways. Also address any risk associated with sour gas operations. Additionally, with regard to fire hazards, the DEIS should analyze the potential fire hazards associated with any new human activity, especially those introducing new combustible materials and any incendiary devices (including internal combustion engines) into areas with native species and their habitat. Any new fire hazard to the area should be fully mitigated. Any such mitigation involving removal of vegetation for fuel management purposes should consider the concomitant effects of habitat loss, erosion and visual impacts.

SECTION 4.5.9: RECREATION

Please address the extent to which extended reach drilling technology, which can reach as far as 5 miles from the drill-site, can reduce impacts on scenic resources. Also address removal of the Figueroa Mountain Area from consideration as a mitigation.

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TABLE C-1 (cont.)
Graph of Industry Extended Reach Wells Including Proposed Holly Extension